

ELMARK HOLDING SE



CATALOGUE 2021



ELMARK®
The Brand of Electricity



CENTRAL WAREHOUSE

ELMARK
 PROFESSIONAL ELECTRICAL EQUIPMENT

 EUROPEAN
 MANUFACTURER

 DIVERSIFIED
 PORTFOLIO

 INTERNATIONAL
 INSURANCE

 CERTIFIED
 QUALITY

WHAT MAKES US DIFFERENT?

ELMARK is European trusted brand for LV electrical automation and supplies, indoor and outdoor luminaires. Our diversified portfolio offers an effective path to fast growth, we answer to our existing customers' needs and at the same time we have the opportunity to establish new markets. We have more than 20 years of experience in providing high performance solutions across a range of different sectors such as residential, hospitality and recreation, office, industry, road and cityscape.

Our well-balanced portfolio ensures excellent market coverage with outstanding quality. We have built trust and credibility with our partners as ELMARK enjoys the recognition of INTERTEK for safe and reliable products, manufactured in accordance with the European safety requirements and quality standards.

ELMARK showcases and maintains product safety and performance, we provide 7 years worldwide warranty as confidence in our production quality.

For more than 15 years partnership with ALLIANZ, Germany we do not have a single claim for the International insurance which guarantees coverage of damages that may occur as a result of any act or omission relating to ELMARK products. We always stay in tune with the environment, safety standards and comfort demand.

Our research and development department currently works on new features and technologies important for the future, that will generate benefits to all our partners, such as smart buildings solutions tailored to clients personal needs and comfort. We constantly develop our product portfolio into a meaningful, differentiated and winning asset. Thanks to continuous improvement and developments we successfully leverage our core competences of lighting and electrical under one roof.

 ELMARK
 Brand
 was
 born

 Dynamic
 expansion
 on Bulgarian
 market

 NEW
 company
 in
 ROMANIA

 Starts production
 of Low Voltage
 Electrical
 Equipment

2000

2002

2003

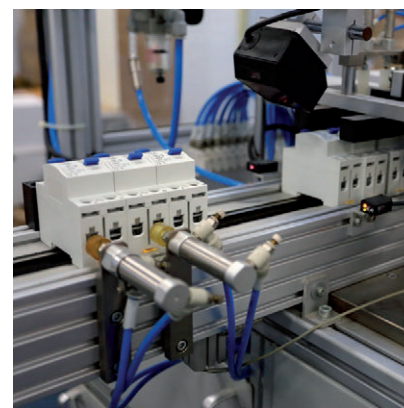
2004



PRODUCTION FACILITIES

ELMARK Production Complex consists of a manufacturing plant and testing centres for both low-voltage electrical and lighting solutions. We successfully combine automated technology with experience to meet quality highest standards, ensure high efficiency and add value to our clients.

The Complex together with the adjacent warehouse facilities occupy a total area of 10,000 m², strategically located in Bulgaria, nearby the Black Sea where it benefits from its proximity to major transport links and direct access to European market.



NEW
company
in
SERBIA

ELMARK
Holding AD
has been
established

Moves
to a new
Headquarter
of 3500 sq.m

NEW
Logistic
centre of
5000 sq.m

NEW
company
in
CROATIA

2005

2006

2007

2008

2009

HEADQUARTER



COMMERCIAL BENEFITS

ELMARK offers its customers unrivalled combination of products at competitive prices.

We are proud with our widespread international network of highly-valued business partners in over 50 countries. Understanding our clients' requirements stays at the centre of our business cooperation. We apply proven industry and market concepts and training for both business-to-business and business-to-consumer companies.

We focus to build strong and lasting relationships and maintain friendly communication with our partners. All of our customers are provided with a dedicated account manager to deliver the highest level of customer service.



PROFIT MIX



TRAINING

MARKETING
SUPPORTDEDICATED
ACCOUNT MANAGER

AFTERSALES SUPPORT



LONG TERM PARTNERSHIP

NEW
Production
line for LED
Lighting

NEW company
in GREECE and
BOSNIA AND
HERZEGOVINA

NEW
company
in
HUNGARY

Intertek: S Mark
NEW Automatic
Testing Equipment for
LV & Lighting Lab

NEW
company
in
SLOVENIA

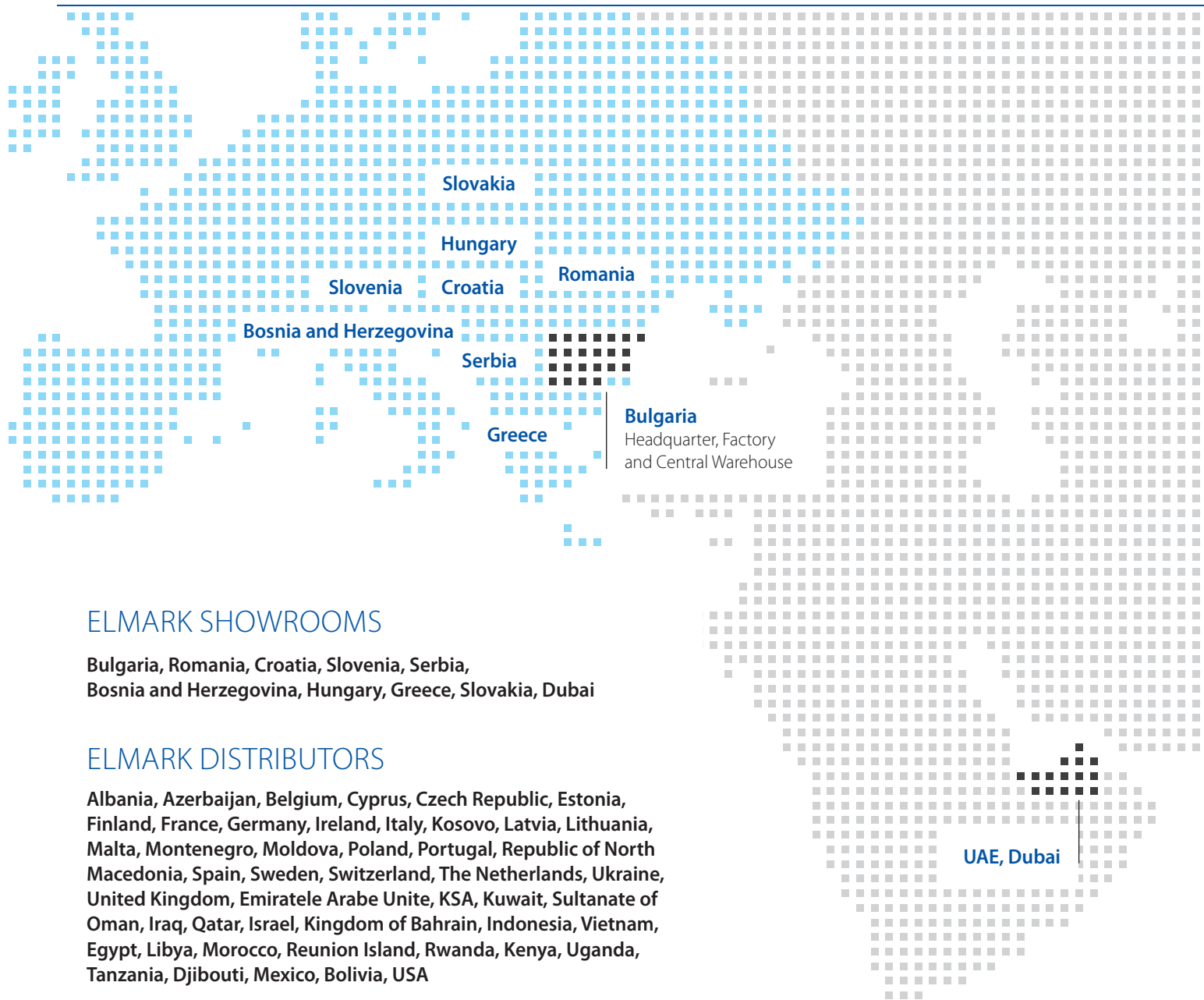
2010

2011

2012

2013

2014



ELMARK SHOWROOMS

Bulgaria, Romania, Croatia, Slovenia, Serbia, Bosnia and Herzegovina, Hungary, Greece, Slovakia, Dubai

ELMARK DISTRIBUTORS

Albania, Azerbaijan, Belgium, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Ireland, Italy, Kosovo, Latvia, Lithuania, Malta, Montenegro, Moldova, Poland, Portugal, Republic of North Macedonia, Spain, Sweden, Switzerland, The Netherlands, Ukraine, United Kingdom, Emiratele Arabe Unite, KSA, Kuwait, Sultanate of Oman, Iraq, Qatar, Israel, Kingdom of Bahrain, Indonesia, Vietnam, Egypt, Libya, Morocco, Reunion Island, Rwanda, Kenya, Uganda, Tanzania, Djibouti, Mexico, Bolivia, USA

OUR VISION

ELMARK aims to be your trusted partner that offers the balance of high quality, efficiency and comfort.

MISSION

ELMARK is focused to ensure high reliability and cost effective solutions to all consumers. We keep improving our components and products, productivity, quality control, added value, and cost reduction in order to offer market-aligned solutions worldwide.

OUR VALUES

Ethical / Respectful / Team Player / Dedicated / Caring / Sustainable / Flexible

Middle East-Sales and Logistics Branch and Test Centre in Dubai Silicon Oasis, UAE

NEW company in SLOVAKIA

NEW product line Decorative Lighting

Building Second Logistic Centre of 4000 sq.m, Retail Franchise

ELMARK DIGITAL, E-Business Platform, Mobile Application, Check & Order System

2015

2016

2017

2018

TECHNICAL SUPPORT AND CONSULTING

We operate from 10 different locations across the globe to ensure flexible approach to every project worldwide. Our experienced engineers and advisors have a proven ability to provide technical expertise on different projects from small private clients to large-scale market centres. We ensure viable and sustainable product solutions as well as clear and useful advice.

Our ELMARK library offers a variety of technical documents to provide guidance on standards, safety, usage and installation. Each product dossier contains certificates, Data Sheet with product specification, test reports, Photometric Data (IES) Files that help professionals select products and systems that are most appropriate for their requirements.



LOGISTICS AND SUPPLY CHAIN

Successful inventory management plays a key role for our growth strategy. ELMARK keeps in stock more than 10 000 finished products to answer customer demand and reduce the lead time. Our customized ERP, WMS and digital business solutions increase our organization productivity and visibility at all levels. Flexibility and cost-effective operations helps us increase speed, improve competitiveness and maintain customer satisfaction. ELMARK fleet of vehicles and trusted logistic partners provide fast and reliable delivery solutions.



FLEXIBLE
SUPPLY CHAIN



STOCK
AVAILABILITIES



MOBILE CHECK
& ORDER APP



ECOMMERCE
DATABASE

EXTENDED WARRANTY UP TO 7 YEARS

The production of ELMARK products is closely supervised by qualified engineers to guarantee high quality level. We warrant that our products are manufactured in accordance with all applicable European standards and are free from defects in materials and workmanship.

We are proud with **ALLIANZ GERMANY** recognition for the lack of claims for **15 consecutive years** in regard of insurance "Product liability" for **1 500 000 EUR**. ELMARK guarantees professional production and products durability and offers its clients the possibility to receive an Extended Warranty for all ELMARK products that have been purchased.

Extended warranty package:

- ▶ total **7 years full warranty** for products in **Automation**
- ▶ total **5 years full warranty** for products in **Electrical materials**
- ▶ total **5 years full warranty** for products in **LED Lighting**
- ▶ total **5 years full warranty** for products in **Decor lighting**



Register your purchase at www.elmarkholding.eu and get up to **7 years extended warranty** for ELMARK products.



For more information
read the General Terms
and Conditions

GENERAL INSURANCE

TO WHOM IT MAY CONCERN

CERTIFICATE OF COVER

This is to certify that we, "Allianz Bulgaria" Insurance Co., Ltd., Bulgaria, Sofia, IN 040638060, in our capacity as Insurers, have issued an insurance Policy No 13000210390000001 and effected Product Liability insurance as follows:

ASSURED: ELMARK INDUSTRIES AD, BULSTAT No. 124634156, Dobrich, Dobrudzha 2 Boul.

Interest: Production of Miniature Circuit Breakers (MCB), Molded Case Circuit Breakers (MCCB), Residual Current Devices (RCD) and Contactors, Thermomagnetic automatic breakers, Thermal overload relays and Devices for Control and Protection of Electrical Motors. Assembly and testing of Decorative, Luminescent, Industrial and LED lighting.

Limits: 1 500 000 EUR any one occurrence
1 500 000 EUR in aggregate for the insurance period

PERIOD: TWELVE MONTHS with effect from 01-01-2021

Territorial Scope: Worldwide except USA and Canada and the territories under their jurisdiction

Warranties, if any:

In the event that the Assured or anyone acting on his behalf uses the above information as evidence for insurance or evidence of financial responsibility under any applicable law relating to insolvency, or otherwise shows or offers it to any other party as evidence of insurance, it is hereby understood that this confirmation relates only to the dates set out above and is subject to General Conditions of "Allianz Bulgaria", attached clauses and conditions, limitations, exclusions and other provisions of the Insurance Policy issued.

December 30TH 2020

Bratya Miladinovi 68 Str., General representation 039, sigma.centred@allianz.bg tel: +35952668733

ALLIANZ BULGARIA INS Co., LTD.
Allianz Bulgaria Insurance Co. Ltd. 039 **Allianz** 

Allianz Bulgaria
Insurance Co. Ltd.

General Insurance

CERTIFICATE

This is to certify that we, "Allianz Bulgaria" Insurance Co., Ltd., Bulgaria, Sofia, in our capacity as Insurers, have issued Product Liability insurance policies for 13 (thirteen) consecutive years as follows:

ASSURED: ELMARK INDUSTRIES SC, BULSTAT No. 124634156, Dobrich, Dobrudzha 2 Boul., Bulgaria

Interest: Production of Miniature Circuit Breakers (MCB), Molded Case Circuit Breakers (MCCB), Residual Current Devices (RCD) and Contactors and Devices for Control and Protection of Electrical Motors. Assembly and testing of Decorative, Luminescent, Industrial and LED lighting.

Limits: 1 500 000 EUR any one occurrence
1 500 000 EUR in aggregate for the insurance period

We gladly declare that no claim has been raised against ELMARK INDUSTRIES SC and no indemnification has been paid.

Issued on January 30TH 2019

Place of issue: Sofia



Andrey Alexandrov,
Chief Executive Officer
"ALLIANZ BULGARIA" INS Co., LTD.

Allianz Bulgaria Insurance Co. Ltd. 039

Allianz 

Allianz Bulgaria Insurance Co. Ltd.
declares that no claim has been raised against ELMARK INDUSTRIES SC and no indemnification has been paid for 14 consecutive years.

BUREAU
VERITAS

Bureau Veritas Certification

ELMARK INDUSTRIES AD

2, Dobrudzha Str., 9300, Dobrich, Bulgaria

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

Production and trade of Miniature Circuit Breakers (MCB), Molded Case Circuit Breakers (MCCB), Residual Current Devices (RCD) and Contactors and Devices for Control and Protection of Electrical Motors. Assembly and testing of Industrial and LED lighting. Assembly and testing of decorative lighting.

Original cycle start date:	07-04-2009
Expiry Date of Previous Cycle:	16-03-2021
Certification / Recertification Audit date:	02-03-2021
Certification/Recertification Cycle Start Date:	17-03-2021
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on:	16-03-2024

Certificate No.:	BG001733	Version:	2	Issue Date:	26-03-2021
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Signed on behalf of BVCH SAS UK Branch

Certification Body Address: 5th Floor, 66 Prescott Street, London, E1 8HG, United Kingdom




Local Office: 81A, Bulgaria Blvd., 1404 Sofia, Bulgaria

Further clarifications regarding the scope and validity of this certificate, and the applicability of the management system requirements, please call: +359 (2) 983 60 00






0008



IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME		Ref. Certif. No. SE-91631
CB TEST CERTIFICATE		
Product	Circuit-breakers with overcurrent protection	
Name and address of the applicant	Elmark Industries SC 2 Dobrudzha blvd., Dobrich, BULGARIA	
Name and address of the manufacturer	Same as applicant	
Name and address of the factory <small>Note: When more than one factory, please report on page 2</small>	Same as applicant	
Ratings and principal characteristics	Ue= 230/400V~(1P), 400V~(2, 3, 4P) In= 1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 60, 80A	
Trademark (if any)		
Customer's Testing Facility (CTF) Stage used	-	
Model / Type Ref.	C61N, C62N, C63N, C64N	
Additional information (if necessary may also be reported on page 2)	See page 2	
A sample of the product was tested and found to be in conformity with	IEC 60898-1:2015	
As shown in the Test Report Ref. No. which forms part of this Certificate	18060007SSHA-001	
This CB Test Certificate is issued by the National Certification Body		
Intertek Semko AB Box 1103 SE-164 22 Kista, Sweden Int +46 8 780 00 00 Date: 16 August 2018	 Signature:  Bo Berglöf	

1/2

SSU

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME		Ref. Certif. No. SE-91897
CB TEST CERTIFICATE		
Product	Moulded Case Circuit-Breakers	
Name and address of the applicant	Elmark Industries SC 2 Dobrudzha blvd., Dobrich, BULGARIA	
Name and address of the manufacturer	Same as applicant	
Name and address of the factory <small>Note: When more than one factory, please report on page 2</small>	Same as applicant	
Ratings and principal characteristics	Ue=415V~(3P), In=400A, U=900V, Ulmp=8kV, 50/60Hz, Cat. B Icu=65kA, Ics=42kA, low-S&A's	
Trademark (if any)		
Customer's Testing Facility (CTF) Stage used	-	
Model / Type Ref.	DS 1	
Additional information (if necessary may also be reported on page 2)	-	
A sample of the product was tested and found to be in conformity with	IEC 60947-2:2016	
As shown in the Test Report Ref. No. which forms part of this Certificate	18060007SSHA-001	
This CB Test Certificate is issued by the National Certification Body		
Intertek Semko AB Box 1103 SE-164 22 Kista, Sweden Int +46 8 780 00 00 Date: 13 September 2018	 Signature:  Fredrik Wennersten	

1/1

SSU

Intertek

Certificate

 for European Product Safety

Reference No. 1814486

Circuit-breakers with overcurrent protection

Type designation C61N, C62N, C63N, C64N

Certificate holder Elmark Industries SC
2 Dobrudzha blvd., Dobrich,
BULGARIA


The product complies with the standard(s) EN 60898-1:2003+A1+A11+A12+A13

Date of expiry 16 August 2023

EU Directive information According to the principle of presumption of conformity, this certificate constitutes support for an EC Declaration of Conformity and CE marking according to the Low Voltage Directive 2014/35/EU.

Additional information in Appendix.

Certification Body Intertek Semko AB, Product Certification Place Kista - Stockholm

Signed  Date 16 August 2018
Bo Berglöf

This certificate is issued in accordance with the terms and conditions set out in the Appendix.

Intertek

Certificate

 for European Product Safety

Reference No. 1815647

Moulded Case Circuit-Breakers

Type designation DS 1

Certificate holder Elmark Industries SC
2 Dobrudzha blvd., Dobrich,
BULGARIA


The product complies with the standard(s) EN 60947-2:2017

Date of expiry 13 September 2023

EU Directive information According to the principle of presumption of conformity, this certificate constitutes support for an EC Declaration of Conformity and CE marking according to the Low Voltage Directive 2014/35/EU.

Additional information in Appendix.

Certification Body Intertek Semko AB, Product Certification Place Kista - Stockholm

Signed  Date 13 September 2018
Fredrik Wennersten

This certificate is issued in accordance with the terms and conditions set out in the Appendix.

IEC CB SCHEME		Ref. Certif. No. SE-92201
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME		
CB TEST CERTIFICATE		
Product	AC Contactor	
Name and address of the applicant	Elmark Industries SC 2 Dobrudzha Blvd., Dobrich, Bulgaria	
Name and address of the manufacturer	Same as applicant	
Name and address of the factory <small>Note: When more than one factory, please report on page 2</small>	Same as applicant	
Rating and principal characteristics	See page 2	
Trademark (if any)	EL-MARK	
Customer's Testing Facility (CTF) Stage used	-	
Model / Type Ref.	LT1-D4011, LT1-D5011, LT1-D6511, LT1-D8011, LT1-D9511	
Additional information (if necessary may also be reported on page 2)	-	
A sample of the product was tested and found to be in conformity with	IEC 60947-4-1:2009+A1 IEC 60947-5-1:2016	
As shown in the Test Report Ref. No. which forms part of this Certificate	180600074SHA-001, 180600074SHA-002, 180600074SHA-003	
This CB Test Certificate is issued by the National Certification Body		
Intertek Semko AB Box 1103 SE-164 22 Kista, Sweden Int +46 8 760 00 00 Date: 15 October 2018		intertek Signature: Bo Berglöf

1/2

EHG

IEC CB SCHEME		Ref. Certif. No. SE-92359
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME		
CB TEST CERTIFICATE		
Product	Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)	
Name and address of the applicant	Elmark Industries SC 2 Dobrudzha Blvd., Dobrich, BULGARIA	
Name and address of the manufacturer	Same as applicant	
Name and address of the factory <small>Note: When more than one factory, please report on page 2</small>	Same as applicant	
Rating and principal characteristics	Un= 240V~(1P+N), 415V~(3P+N), 50/60Hz, switched neutral pole In= 10, 16, 20, 25, 32, 40, 63A; -25~40°C IΔn= 0.03, 0.1, 0.3A, type AC & type A Icn= IΔn/6000A, IP20	
Trademark (if any)	EL-MARK	
Customer's Testing Facility (CTF) Stage used	-	
Model / Type Ref.	JEL 1	
Additional information (if necessary may also be reported on page 2)	-	
A sample of the product was tested and found to be in conformity with	IEC 61008-1:2010+A1+A2 IEC 61008-2-1:1990	
As shown in the Test Report Ref. No. which forms part of this Certificate	180600072SHA-001	
This CB Test Certificate is issued by the National Certification Body		
Intertek Semko AB Box 1103 SE-164 22 Kista, Sweden Int +46 8 760 00 00 Date: 31 October 2018		intertek Signature: Paul Klemets

1/1

EHG

intertek
Total Quality Assured.

Certificate



for European Product Safety

Reference No. 1817119

AC Contactor

Type designation LT1-D4011, LT1-D5011, LT1-D6511, LT1-D8011, LT1-D9511

Certificate holder Elmark Industries SC
2 Dobrudzha Blvd., Dobrich,
BULGARIAThe product complies with the standard(s) EN 60947-4-1:2010+A1
EN 60947-5-1:2017

Date of expiry 15 October 2023

EU Directive information According to the principle of presumption of conformity, this certificate constitutes support for an EC Declaration of Conformity and CE marking according to the Low Voltage Directive 2014/35/EU.

Additional information in Appendix.

Certification Body Intertek Semko AB, Product Certification Place Kista - Stockholm

Signed Date 15 October 2018
Bo Berglöf Page 1 of 3

This certificate is issued in accordance with the terms and conditions set out in the Appendix.

intertek
Total Quality Assured.

Certificate



for European Product Safety

Reference No. 1817803

Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)

Type designation JEL 1

Certificate holder Elmark Industries SC
2 Dobrudzha Blvd., Dobrich,
BULGARIAThe product complies with the standard(s) EN 61008-2-1:1994+A11
EN 61008-1:2012+A1+A2+A11+A12

Date of expiry 31 October 2023

EU Directive information According to the principle of presumption of conformity, this certificate constitutes support for an EC Declaration of Conformity and CE marking according to the Low Voltage Directive 2014/35/EU.

Additional information in Appendix.

Certification Body Intertek Semko AB, Product Certification Place Kista - Stockholm

Signed Date 31 October 2018
Helen Gustafsson Page 1 of 2

This certificate is issued in accordance with the terms and conditions set out in the Appendix.

AUTOMATION



C40N-4,5kA
MCB
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C60N-6kA
MCB
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C100L-10kA
MCB
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HIGH POWER DEVICE
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RT18
HIGH POWER DEVICE
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ISS
SWITCH DISCONNECTOR
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ISS2
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EQ2M
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DS1 MAX
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DW1
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EQ1
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STAR/DELTA
STARTERS
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ELM 2000+
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ELM 2500
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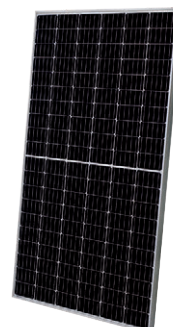
HY-RPCF
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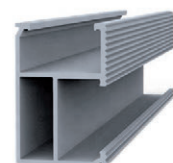
500W SET
SOLAR POWER
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ULTRACELL 100Ah
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EC69025
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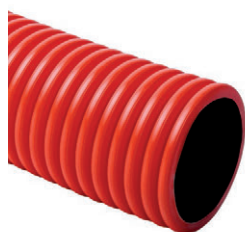
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EARTHING ROD
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EARTHING STRIP
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ALUMINUM CONDUCTOR
LIGHTING PROTECTION
PAGE 260



EARTHING ACCESSOIRES
LIGHTING PROTECTION
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EC350
FLUSH MOUNTING BOXES
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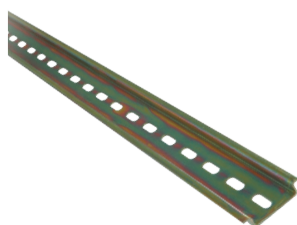
CONSOLE BOX Ø65
CONSOLE BOXES
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B 9/T
WATERPROOF BOXES
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CABLES AND MULTIPLUGS



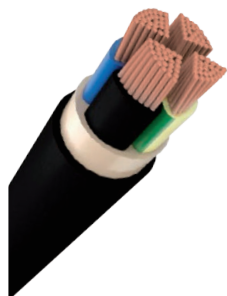
MAK - 3
CABLE REELS
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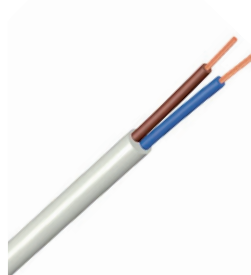
4 HOLES WITH KEY
MULTIPLUGS
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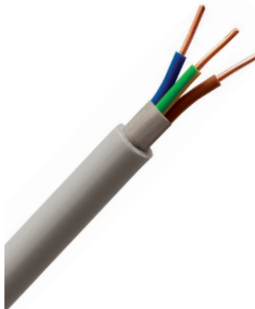
CLIP
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NYN
POWER CABLES
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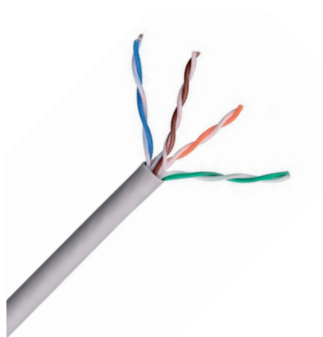
H03VV-F
INSIDE POWER CABLES
PAGE 309



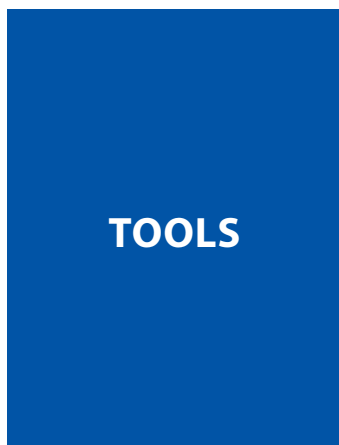
NYM
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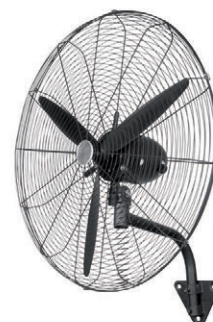
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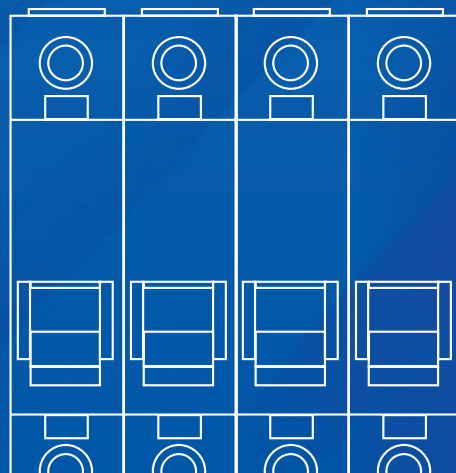
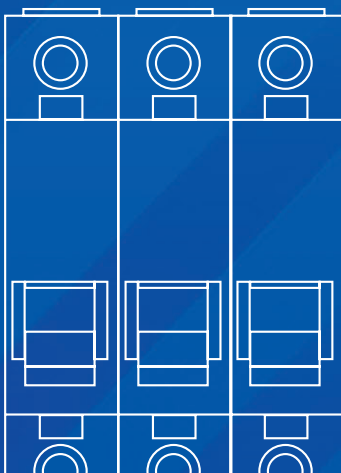
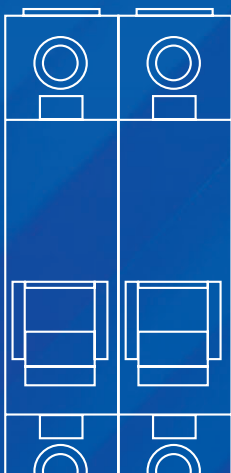
DECORATIVE LIGHTING



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ELECTRICAL

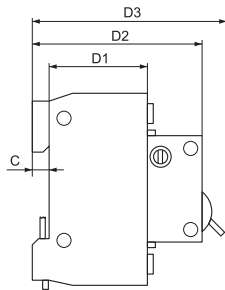
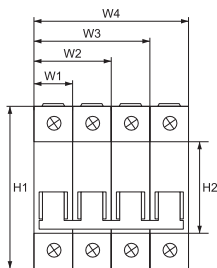
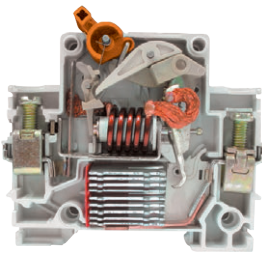


C4XN

- number of poles (1,2,3)
- breaking capacity in (kA)
- tripping curve C
- C X** — rated current in (A)
- tripping curve C

Documents corresponding to the product:

Standard EN60898-1
EN60947-2



Dimensions (mm)

C	D1	D2	D3	H1
5	40	65	72	78
H2	W1	W2	W3	W4
45	18	36	54	72

MINIATURE CIRCUIT BREAKERS (MCB) C40N

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

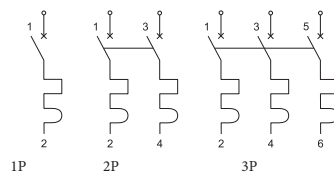
*for industrial
usage, 3 years
warranty

FUNCTIONS:

- protection of the electrical circuits from overload or short circuits of the outer circuit
- it can be used as a device for commutation and control of electrical circuits
- in combination with auxiliary devices it allows remote control, commutation or indication of the protected circuit
- for mounting in residential and industrial buildings
- for mounting at a distance from the transformer post from 150 to 850 m
- allows protection of consumers generating short circuit currents up to 4500 A

TECHNICAL DATA:

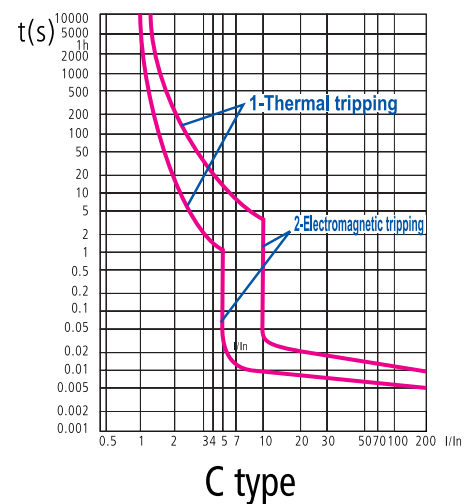
- Rated voltage: 230/400V; 50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1: 4500A
- Rated breaking capacity $I_{cs} = 75\% I_{cu}$
- Isolating voltage: $\geq 2000V$
- Electrical wear resistance (number of cycles): 4000
- Mechanical (number of cycles): 20000
- Class of current limiting: 3
- IP code: IP>20
- Tripping:
 - C – the maximum current release breaks between 5 and 10 In; used to protect main power supply cables and conventional consumers
- Joining terminal: flat (tunnel) screw terminal with composition 1.5 coldly draw-plated plane Q235– A
- Plastic box – not keeping the burning material nylon PA66, UV rays wear resistance
- Box permittivity strength: $>18MV/m$
- Abnormal heating wear resistance and fire of the outer parts: $960^{\circ}C / 3s$



- Maximum current release containing:
 - copper coil - composition: pure copper T2 type
 - resistance: from 0.6 to 180m
 - welding effort: $<150\,000\,N/mm$
 - bimetal plate – composition: 5J158 to TB180 depending on the current
 - thickness: 0.6mm (up to 40A) and 0.8mm (up to 63A)
 - magnetic core – composition: coldly draw-plated metal wire (1Gr18Ni9)
 - thickness: 1.15 to 2.24μm
 - drawing effort: from 200 to 400N/mm
 - contact head of the movable contact – composition: silver graphite CAg(5)
 - dimension 3x3x0.8 (up to 40A) and 4x4x0.8 (up to 63A)
 - static contact – composition: pure copper T2Y2
 - composition of the contact head: silver graphite CAg(5)
- Power supply (conducting)
 - power supply busbar 1P63, 2P63, 3P63
 - rigid conductors up to 25 mm
 - flexible conductors up to 16 mm
- Tightening moment: 1.33Nm

MOUNTING:

- vertical
- DIN-rail
- for mounting in housing or industrial environment without serious interference
- ambient temperature: $-5^{\circ}C$ to $+65^{\circ}C \pm 2^{\circ}C$





Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C
C41N / 2A	1P	2	4.5	1.0	12/240	B	41660C
C41N / 4A	1P	4	4.5	1.0	12/240	B	41661C
C41N / 6A	1P	6	4.5	1.0	12/240	B	41651C
C41N / 10A	1P	10	4.5	1.5	12/240	B	41652C
C41N / 16A	1P	16	4.5	2.5	12/240	B	41653C
C41N / 20A	1P	20	4.5	2.5	12/240	B	41654C
C41N / 25A	1P	25	4.5	4.0	12/240	B	41655C
C41N / 32A	1P	32	4.5	6.0	12/240	B	41656C
C41N / 40A	1P	40	4.5	10.0	12/240	B	41657C
C41N / 50A	1P	50	4.5	10.0	12/240	B	41658C
C41N / 63A	1P	63	4.5	10.0	12/240	B	41659C



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C
C42N / 6A	2P	6	4.5	1.0	6/120	B	41670C
C42N / 10A	2P	10	4.5	1.5	6/120	B	41671C
C42N / 16A	2P	16	4.5	2.5	6/120	B	41672C
C42N / 20A	2P	20	4.5	2.5	6/120	B	41673C
C42N / 25A	2P	25	4.5	4.0	6/120	B	41674C
C42N / 32A	2P	32	4.5	6.0	6/120	B	41675C
C42N / 40A	2P	40	4.5	10.0	6/120	B	41676C
C42N / 50A	2P	50	4.5	10.0	6/120	B	41677C
C42N / 63A	2P	63	4.5	10.0	6/120	B	41678C



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C
C43N / 6A	3P	6	4.5	1.0	4/80	B	41641C
C43N / 10A	3P	10	4.5	1.5	4/80	B	41642C
C43N / 16A	3P	16	4.5	2.5	4/80	B	41643C
C43N / 20A	3P	20	4.5	2.5	4/80	B	41644C
C43N / 25A	3P	25	4.5	4.0	4/80	B	41645C
C43N / 32A	3P	32	4.5	6.0	4/80	B	41646C
C43N / 40A	3P	40	4.5	10.0	4/80	B	41647C
C43N / 50A	3P	50	4.5	10.0	4/80	B	41648C
C43N / 63A	3P	63	4.5	10.0	4/80	B	41649C

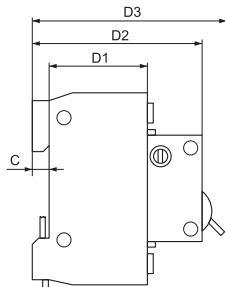
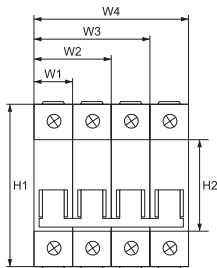
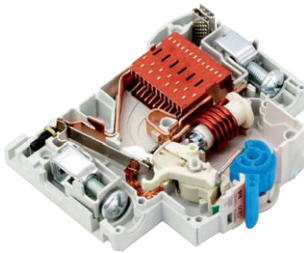


C6XN

- number of poles (1,2,3,4)
- breaking capacity in (kA)
- tripping curve C
- C X** — rated current in (A)
- tripping curve C,B

Documents corresponding to the product:

Standard EN60898-1



Dimensions (mm)

C	D1	D2	D3	H1
5	50	65	72	81
H2	W1	W2	W3	W4
45	18	36	54	72

MINIATURE CIRCUIT BREAKERS (MCB) C60N

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- protection of the electrical circuits from overload or short circuits of the outer circuit
- it can be used as a device for commutation and control of electrical circuits
- in combination with auxiliary devices it allows remote control, commutation or indication of the protected circuit
- for mounting in industrial buildings with high contamination level of the electric systems
- for mounting at a distance from the transformer post from 150 to 850 m
- allows protection of consumers generating short circuit currents up to 6000 A

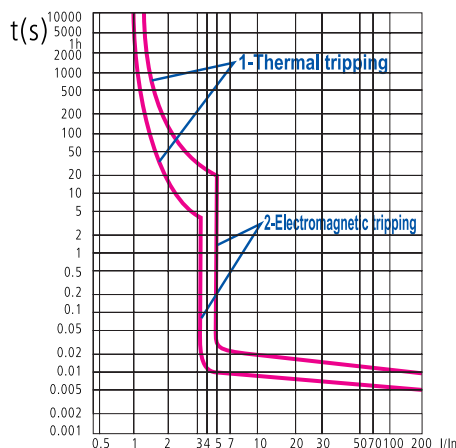
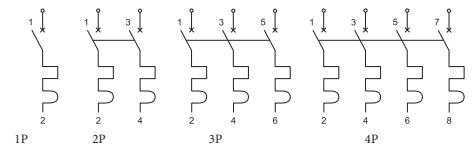
TECHNICAL DATA:

- Rated voltage: 230/400V; 50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1: 6000A
- Rated breaking capacity $I_{cs} = 75\% I_{cu}$
- Isolating voltage: $\geq 2000V$
- Electrical wear resistance (number of cycles): 8000
- Mechanical (number of cycles): 50000
- Class of current limiting: 3
- IP code: IP>20
- Tripping curve:
 - B – the maximum current release breaks between 3 and 5 I_n ; used to protect long circuits and generators
 - C – the maximum current release breaks between 5 and 10 I_n ; used to protect main power supply cables and conventional consumers
- Joining terminal: Combined screw clamp made of 1.5 cold extruded Q235-A material with additional coating
- Plastic box – nylon glass filled FR material
- Status indicator
- Box permittivity strength: >18MV/m
- Abnormal heating wear resistance and fire of the outer parts: 960°C / 3s

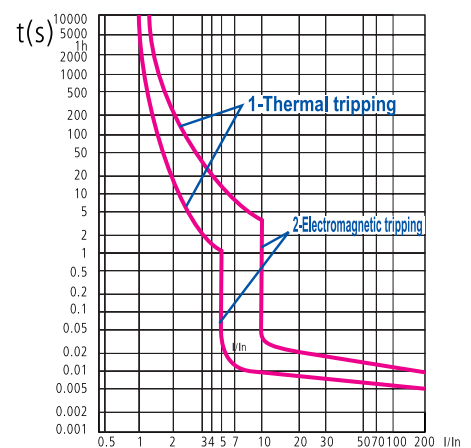
- Heat resistance of internal non-electrical components: 850°C / 10 s
- Maximum current release containing:
 - coil: solenoid
 - resistance: from 0.6 to 180m
 - welding effort: <150 000 N/mm
 - bimetal plate – composition: 5J158 to TB180 depending on the current
 - thickness: 0.6mm (up to 40A) and 0.8mm (up to 63A)
 - thickness: 1.15 to 2.24µm
 - drawing effort: from 200 to 400N/mm
 - contact head of the movable contact – composition: silver graphite CAg(5)
 - dimension 3x3x0.8 (up to 40A) and 4x4x0.8 (up to 63A)
 - static contact – composition: pure copper T2Y2
 - composition of the contact head: silver graphite CAg(5)
- Power supply (conducting)
 - power supply busbar 1P63, 2P63, 3P63
 - rigid conductors up to 25 mm
 - flexible conductors up to 16 mm
- Tightening moment: 1.33Nm

MOUNTING:

- vertical
- DIN-rail
- for mounting in housing or industrial environment without serious interference
- ambient temperature: -5°C to + 65°C±2° C



B type



C type

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C61N / 1A	1P	1	6	1.0	12/240	B	41100C	41501C
C61N / 2A	1P	2	6	1.0	12/240	B	41102C	41502C
C61N / 4A	1P	4	6	1.0	12/240	B	41104C	41504C
C61N / 6A	1P	6	6	1.0	12/240	B	41106C	41506C
C61N / 10A	1P	10	6	1.5	12/240	B	41110C	41510C
C61N / 16A	1P	16	6	2.5	12/240	B	41116C	41516C
C61N / 20A	1P	20	6	2.5	12/240	B	41120C	41520C
C61N / 25A	1P	25	6	4.0	12/240	B	41125C	41525C
C61N / 32A	1P	32	6	6.0	12/240	B	41132C	41532C
C61N / 40A	1P	40	6	10.0	12/240	B	41140C	41540C
C61N / 50A	1P	50	6	10.0	12/240	B	41150C	41550C
C61N / 63A	1P	63	6	10.0	12/240	B	41163C	41563C



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C62N / 2A	2P	2	6	1.0	6/120	B	C	41602C
C62N / 4A	2P	4	6	1.0	6/120	B	41204C	41604C
C62N / 6A	2P	6	6	1.0	6/120	B	41206C	41606C
C62N / 10A	2P	10	6	1.5	6/120	B	41210C	41610C
C62N / 16A	2P	16	6	2.5	6/120	B	41216C	41616C
C62N / 20A	2P	20	6	2.5	6/120	B	41220C	41620C
C62N / 25A	2P	25	6	4.0	6/120	B	41225C	41625C
C62N / 32A	2P	32	6	6.0	6/120	B	41232C	41632C
C62N / 40A	2P	40	6	10.0	6/120	B	41240C	41640C
C62N / 50A	2P	50	6	10.0	6/120	B	41250C	41650C
C62N / 63A	2P	63	6	10.0	6/120	B	41263C	41663C





Type	Number of poles	Rated current I _n (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C63N / 2A	3P	2	6	1.0	4/80	B	41302C	41702C
C63N / 4A	3P	4	6	1.0	4/80	B	41304C	41704C
C63N / 6A	3P	6	6	1.0	4/80	B	41306C	41706C
C63N / 10A	3P	10	6	1.5	4/80	B	41310C	41710C
C63N / 16A	3P	16	6	2.5	4/80	B	41316C	41716C
C63N / 20A	3P	20	6	2.5	4/80	B	41320C	41720C
C63N / 25A	3P	25	6	4.0	4/80	B	41325C	41725C
C63N / 32A	3P	32	6	6.0	4/80	B	41332C	41732C
C63N / 40A	3P	40	6	10.0	4/80	B	41340C	41740C
C63N / 50A	3P	50	6	10.0	4/80	B	41350C	41750C
C63N / 63A	3P	63	6	10.0	4/80	B	41363C	41763C



Type	Number of poles	Rated current I _n (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C64N / 2A	4P	2	6	1.0	3/60	B	41402C	41802C
C64N / 4A	4P	4	6	1.0	3/60	B	41404C	41804C
C64N / 6A	4P	6	6	1.0	3/60	B	41406C	41806C
C64N / 10A	4P	10	6	1.5	3/60	B	41410C	41810C
C64N / 16A	4P	16	6	2.5	3/60	B	41416C	41816C
C64N / 20A	4P	20	6	2.5	3/60	B	41420C	41820C
C64N / 25A	4P	25	6	4.0	3/60	B	41425C	41825C
C64N / 32A	4P	32	6	6.0	3/60	B	41432C	41832C
C64N / 40A	4P	40	6	10.0	3/60	B	41440C	41840C
C64N / 50A	4P	50	6	10.0	3/60	B	41450C	41850C
C64N / 63A	4P	63	6	10.0	3/60	B	41463C	41863C

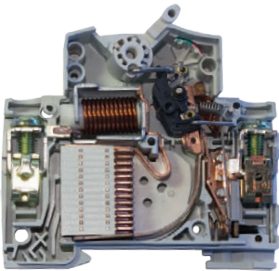


C10XL

- number of poles (1,2,3)
 — breaking capacity in (kA)
 — tripping curve B, C
C X — rated current in (A)
 — tripping curve C, B

Documents corresponding to the product:

Standard EN60898-1
EN60947-2

**MINIATURE CIRCUIT BREAKERS (MCB) C100L**

7+0
standard
+extended

7

**YEAR TOTAL
WARRANTY**

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- protection of the electrical circuits from overload or short circuits of the outer circuit
- it can be used as a device for commutation and control of electrical circuits
- in combination with auxiliary devices it allows remote control, commutation or indication of the protected circuit

≥20000

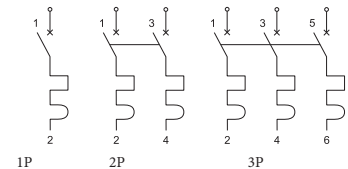
- Class of current limiting:3
- IP code: IP>20
- Tripping curve: C

MOUNTING:

- vertical
- DIN-rail
- possibility for labeling

TECHNICAL DATA:

- Rated voltage: 230/400V; 50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1: 10000A
- Rated breaking capacity $I_{cs} = 75\% I_{cu}$
- Isolating volatage: ≥2000V, 1 min at impulse wave 1.2/50μs
- Electrical wear resistance (number of cycles): ≥4000
- Mechanical wear resistance (number of cycles):



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C101L/6A	1P	6	10	1.0	12 / 240	B	41101C	41101C/B
C101L/10A	1P	10	10	1.5	12 / 240	B	41103C	41103C/B
C101L/16A	1P	16	10	2.5	12 / 240	B	41105C	41105C/B
C101L/20A	1P	20	10	2.5	12 / 240	B	41107C	41107C/B
C101L/25A	1P	25	10	4.0	12 / 240	B	41108C	41108C/B
C101L/32A	1P	32	10	6.0	12 / 240	B	41109C	41109C/B
C101L/40A	1P	40	10	10.0	12 / 240	B	41111C	41111C/B
C101L/50A	1P	50	10	10.0	12 / 240	B	41112C	41112C/B
C101L/63A	1P	63	10	16.0	12 / 240	B	41113C	41113C/B



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C102L/6A	2P	6	10	1.0	6/120	B	41201C	41201C/B
C102L/10A	2P	10	10	1.5	6/120	B	41203C	41203C/B
C102L/16A	2P	16	10	2.5	6/120	B	41205C	41205C/B
C102L/20A	2P	20	10	2.5	6/120	B	41207C	41207C/B
C102L/25A	2P	25	10	4.0	6/120	B	41208C	41208C/B
C102L/32A	2P	32	10	6.0	6/120	B	41209C	41209C/B
C102L/40A	2P	40	10	10.0	6/120	B	41211C	41211C/B
C102L/50A	2P	50	10	10.0	6/120	B	41212C	41212C/B
C102L/63A	2P	63	10	16.0	6/120	B	41213C	41213C/B





Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C103L/6A	3P	6	10	1.0	4 / 80	B	41301C	41301C/B
C103L/10A	3P	10	10	1.5	4 / 80	B	41303C	41303C/B
C103L/16A	3P	16	10	2.5	4 / 80	B	41305C	41305C/B
C103L/20A	3P	20	10	2.5	4 / 80	B	41307C	41307C/B
C103L/25A	3P	25	10	4.0	4 / 80	B	41308C	41308C/B
C103L/32A	3P	32	10	6.0	4 / 80	B	41309C	41309C/B
C103L/40A	3P	40	10	10.0	4 / 80	B	41311C	41311C/B
C103L/50A	3P	50	10	10.0	4 / 80	B	41312C	41312C/B
C103L/63A	3P	63	10	16.0	4 / 80	B	41313C	41313C/B



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C	Catalogue number Curve B
C104L/6A	4P	6	10	1.0	3/60	B	41401C	41401C/B
C104L/10A	4P	10	10	1.5	3/60	B	41403C	41403C/B
C104L/16A	4P	16	10	2.5	3/60	B	41405C	41405C/B
C104L/20A	4P	20	10	2.5	3/60	B	41407C	41407C/B
C104L/25A	4P	25	10	4.0	3/60	B	41408C	41408C/B
C104L/32A	4P	32	10	6.0	3/60	B	41409C	41409C/B
C104L/40A	4P	40	10	10.0	3/60	B	41411C	41411C/B
C104L/50A	4P	50	10	10.0	3/60	B	41412C	41412C/B
C104L/63A	4P	63	10	16.0	3/60	B	41413C	41413C/B



MINIATURE CIRCUIT BREAKERS DP1N (1P + E)

7+0
standard
+extended

7

YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty



FUNCTIONS:

- protection of the electrical circuits from overload or short circuit of the outer circuit
- it can be used as a device for commutation and control of electrical circuits
- it breaks simultaneously the lead and the neutral conductor as the heat protection is only at the lead conductor

TECHNICAL DATA:

- Rated voltage: 230V; 50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1: 4500 A

- Rated breaking capacity I_{cs} = 50% I_{cu}
- Insulating voltage: ≥2000V
- Tripping curve: C – the maximum current release breaks between 5 and 10 I_n; used to protect main power supply
- cables and conventional consumers

CONNECTING:

- Joining terminal: flat (tunnel) screw terminal
- Power supply (conducting):
 - power supply busbar DP1N
 - flexible or rigid conductor
- Mounting: on DIN-rail

Type	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C
DP1N / 6	6	4.5	1.0	12 / 240	B	41006
DP1N / 10	10	4.5	1.5	12 / 240	B	41010
DP1N / 16	16	4.5	2.5	12 / 240	B	41016
DP1N / 20	20	4.5	2.5	12 / 240	B	41020
DP1N / 25	25	4.5	4.0	12 / 240	B	41025
DP1N / 32	32	4.5	6.0	12 / 240	B	41032



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

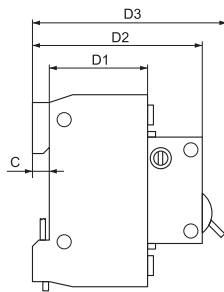
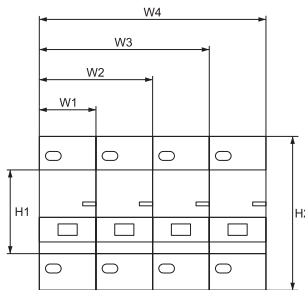
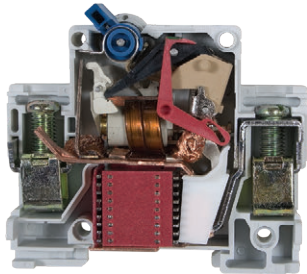
C100M — constructive series
 — number of poles (1;2;3;4)

D X — rated current
 — tripping curve C, D, B

Documents corresponding to the product:

Standard EN60898-1

EN 60947-2



Dimensions (mm)

C	D1	D2	D3	H1
5	50	65	74	45
H2	W1	W2	W3	W4
81	27	54	81	108

MINIATURE CIRCUIT BREAKERS (MCB) C100M

7+0
standard
+extended

7
YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- protection of the electrical circuits from overload or short circuits of the outer circuit
- it can be used as a device for commutation and control of electrical circuits
- in combination with auxiliary devices it allows remote control, commutation or indication of the protected circuit

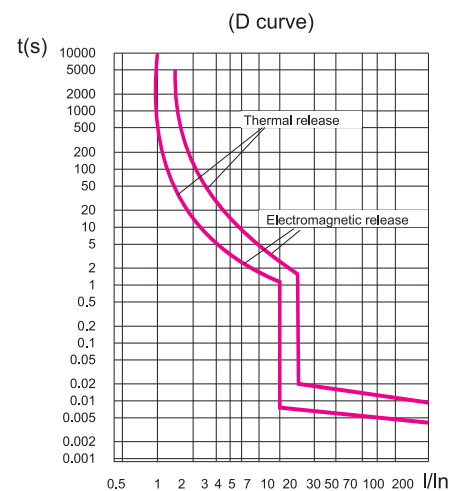
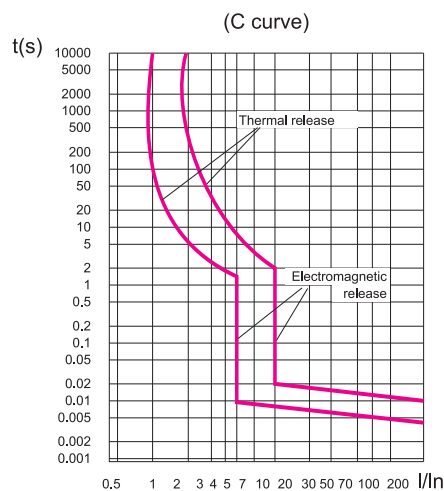
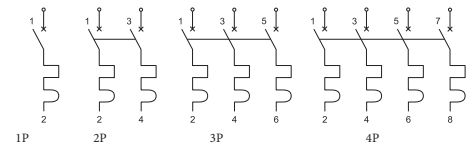
TECHNICAL DATA:

- Rated voltage: 230/400V; 50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1: 10000A
- Rated breaking capacity $I_{cs} = 75\% I_{cu}$
- Isolating voltage: $\geq 2000V$
- Electrical wear resistance (number of cycles): ≥ 4000
- Mechanical wear resistance (number of cycles): ≥ 20000
- Class of current limiting: 3
- IP code: IP>20
- Tripping curve: C,D
- Joining terminal: flat (tunnel) screw terminal with composition 1.5 coldly draw-plated plane Q235 – A
- Plastic box – not keeping the burning material nylon PA66, UV rays wear resistance
- Box permittivity strength: $>18MV/m$
- Abnormal heating wear resistance and fire of the outer parts: $960^{\circ}C / 3s$
- Maximum current release containing:
 - copper coil - composition: pure copper T2 type
 - resistance: from 148 to 230m
 - welding effort: $<400 N$

- bimetal plate – composition: TB180/0.5
- thickness: 0.8mm
- magnetic core – composition: coldly draw-plated metal wire (1Gr18Ni9)
- thickness: 1.15 to 2.24 μm
- drawing effort: 20N/mm²
- contact head of the movable contact – composition: silver graphite Ag(5)
- dimension 6x6x1
- static contact – composition: pure copper T2Y2
- composition of the contact head: silver graphite Ag(5)
- Power supply (conducting)
 - power supply busbar
 - rigid conductors up to 50
 - flexible conductors up to 35
- Tightening moment: 1.33Nm

MOUNTING:

- vertical
- DIN-rail
- possibility for labeling
- for mounting in industrial environment
- ambient temperature: $-5^{\circ}C$ to $+65^{\circ}C \pm 2^{\circ}C$





Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Packing/Box (pcs)	Product category	Catalogue number Curve B	Catalogue number Curve C	Catalogue number Curve D
C100M	1P	80	10	9 / 180	B	41180B	41180	41180D
C100M	1P	100	10	9 / 180	B	41190B	41190	41190D
C100M	1P	125	10	9 / 180	B	41195B	41195	41195D



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Packing/Box (pcs)	Product category	Catalogue number Curve B	Catalogue number Curve C	Catalogue number Curve D
C100M	2P	80	10	6 / 120	B	41282	41280	41281
C100M	2P	100	10	6 / 120	B	41292	41290	41291



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Packing/Box (pcs)	Product category	Catalogue number Curve B	Catalogue number Curve C	Catalogue number Curve D
C100M	3P	80	10	4 / 60	B	41382	41380	41381
C100M	3P	100	10	4 / 60	B	41392	41390	41391



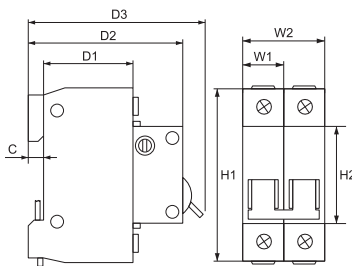
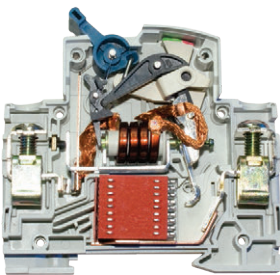
Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Packing/Box (pcs)	Product category	Catalogue number Curve B	Catalogue number Curve C	Catalogue number Curve D
C100M	4P	80	10	3 / 60	B	41482	41480	41481
C100M	4P	100	10	3 / 60	B	41492	41490	41491

C6XDC

- └─ number of poles (1,2)
- └─ breaking capacity in (kA)
- └─ tripping curve C
- C X** └─ rated current in (A)
- └─ tripping curve C

Documents corresponding to the product:

Standard EN60898-1
EN60898-2



Dimensions (mm)

C	D1	D2	D3
5	49	65	72
H1	H2	W1	W2
78	45	18	36

MINIATURE CIRCUIT BREAKERS (MCB) C60DC

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- for lowering constant current voltaic arc and use of the breaker at constant current consumer protection
- protection of the electrical circuits from overload or short circuit of the outer circuit at alternating current and constant current power supply circuits
- for commutation and control of electrical circuits
- in combination with auxiliary alternating current devices for remote control, commutation or indication of the protected circuit
- for mounting in industrial buildings
- for protection of consumers generating short circuit currents to 6000 A at alternating current power supply

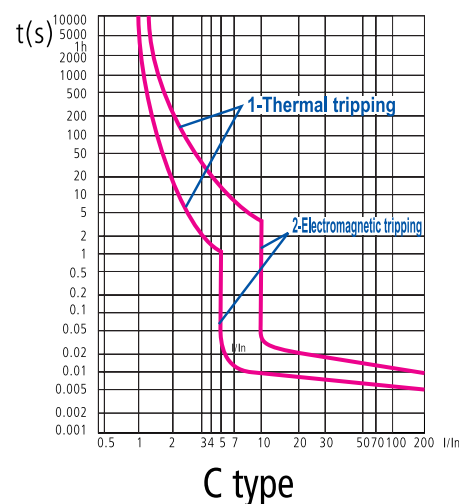
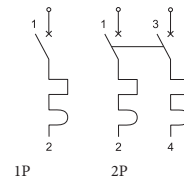
TECHNICAL DATA:

- Rated voltage: 240V; AC/DC
- Breaking capacity (cycle O -CO) in accordance with standard EN 60 898- 1: 6000A
- Rated breaking capacity $I_{cs}=75\% I_{cu}$
- Insulating voltage: $\geq 2000V$
- Electrical wear resistance (number of cycles): ≥ 4000
- Mechanical wear resistance (number of cycles): ≥ 20000
- Class of current limiting: 3
- IP code: IP>20
- Tripping curve: C – the maximum current release breaks between 5 and 10 I_n ; used to protect power supply cables and conventional consumers
- Joining terminal: flat (tunnel) screw terminal with composition 1.5 coldly draw-plated plane Q235– A
- Plastic box – nylon glass filled FR material
- Box permittivity strength: $>18MV/m$
- Abnormal heating wear resistance and fire of the outer parts: $960^{\circ}C / 3s$
- Maximum current release containing:
 - Coil: solenoid
 - resistance: from 0.6 to 180m
 - welding effort: $<150\ 000\ N/mm$
 - bimetal plate – composition: 5J158 to TB180 according to the current
 - thickness: 0.6mm (up to 40A) and 0.8mm (up to 63A)

- thickness: 1.15 to 2.24 μm
- drawing effort: from 200 to 400N/mm
- contact head of the movable contact – composition: silver graphite CAg(5)
- dimension 3x3x0.8 (up to 40A) and 4x4x0.8 (up to 63A)
- static contact – composition: pure copper T2Y2
- composition of the contact head: silver graphite CAg(5)
- metal magnetic plate for lowering the constant current arc
- Conducting:
 - power supply busbar 1P63, 2P63
 - rigid conductors up to 25 mm
 - flexible conductors up to 16 mm
- Tightening moment: 1.33Nm

MOUNTING

- vertical
- DIN-rail
- for mounting in housing or industrial environment without serious current interference
- Ambient temperature: $-5^{\circ}C$ to $+65^{\circ}C \pm 2^{\circ}C$





Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C
C61DC / 1A	1P	1	6	1.0	12/240	B	41164C
C61DC / 2A	1P	2	6	1.0	12/240	B	41165C
C61DC / 4A	1P	4	6	1.0	12/240	B	41166C
C61DC / 6A	1P	6	6	1.0	12/240	B	41167C
C61DC / 10A	1P	10	6	1.5	12/240	B	41168C
C61DC / 16A	1P	16	6	2.5	12/240	B	41169C
C61DC / 20A	1P	20	6	2.5	12/240	B	41170C
C61DC / 25A	1P	25	6	4.0	12/240	B	41171C
C61DC / 32A	1P	32	6	6.0	12/240	B	41172C
C61DC / 40A	1P	40	6	10.0	12/240	B	41173C
C61DC / 50A	1P	50	6	10.0	12/240	B	41174C
C61DC / 63A	1P	63	6	10.0	12/240	B	41175C



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number Curve C
C62DC / 2A	2P	2	6	1.0	6/120	B	41176C
C62DC / 4A	2P	4	6	1.0	6/120	B	41177C
C62DC / 6A	2P	6	6	1.0	6/120	B	41178C
C62DC / 10A	2P	10	6	1.5	6/120	B	41179C
C62DC / 16A	2P	16	6	2.5	6/120	B	41181C
C62DC / 20A	2P	20	6	2.5	6/120	B	41182C
C62DC / 25A	2P	25	6	4.0	6/120	B	41183C



Documents corresponding to the product:
EN 60255-1; IEC60947-5-1



SINGLE POLE MONITORING VOLTAGE RELAY MN1

7+0 standard +extended
7 YEAR TOTAL WARRANTY
*for industrial usage, 3 years warranty

FUNCTIONS:

- Protect electrical equipment from over & under voltage
- Voltage measurement accuracy <1%
- Relay status is indicated by LED

TECHNICAL CHARACTERISTICS:

- Rated voltage: 220V AC; 50/60Hz
- Hysteresis: 0-20% adjustable

- Time delay: 0.1-10s adjustable
- Reset time: 0.2 sec max
- Current rating: 3A/AC-15
- Mechanical life: 1X10⁷
- Electrical life: 1X10⁵
- Ambiente temperature: -10C°/+55C°
- Dimensions: 90x18x64mm
- Mounting: on DIN rail

Type	Rated voltage	Hysteresis	Packing/Box (pcs)	Product category	Catalogue number
ELMARK MN1	220V AC	0-20% adjustable	12 / 240	B	41900



Documents corresponding to the product:
EN 60255-1; IEC60947-5-1



THREE POLE MONITORING VOLTAGE RELAY MN3

7+0 standard +extended
7 YEAR TOTAL WARRANTY
*for industrial usage, 3 years warranty

FUNCTIONS:

- Protect electrical equipment from over & under voltage
- Voltage measurement accuracy <1%
- Relay status is indicated by LED

TECHNICAL CHARACTERISTICS:

- Rated voltage: 415V AC; 50/60Hz
- Hysteresis: 0-20% adjustable

- Time delay: 0.1-10s adjustable
- Reset time: 0.2 sec max
- Current rating: 3A/AC-15
- Mechanical life: 1X10⁷
- Electrical life: 1X10⁵
- Ambiente temperature: -10C°/+55C°
- Dimensions: 90x18x64mm
- Mounting: on DIN rail

Type	Rated voltage	Hysteresis	Packing/Box (pcs)	Product category	Catalogue number
ELMARK MN3	415V AC	0-20% adjustable	12 / 240	B	41927



SINGLE-PHASE DIGITAL VOLTAGE AND CURRENT PROTECTOR

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



FUNCTIONS:

- Under-voltage protection
- Over-voltage protection
- Over-current protection

TECHNICAL CHARACTERISTICS:

- Operated voltage range: 80-400V AC; 50/60Hz (Single-phase)
- Rated current: 63A
- Over-voltage protection value: 230-300V AC
- Under-voltage protection value: 140-230VAC
- Over-current protection value: 1-63A
- Voltage power off time: 0-400s
- Current power off time: 0-30s
- Voltage range setting step: 1V
- Time range setting step: 1s

- Power consumption: $\leq 1.5W$
- Mechanical life: 100 000
- Relative humidity: 45-90% Rh
- Altitude: up to 2000m
- Pollution level: 2 class
- Dimensions: 36x80x66mm
- Mounting: on DIN rail

FACTORY SETTING:

- Over-voltage trip value: 270V
- Under-voltage trip value: 170V
- Over-current trip value: 63A
- Voltage power off time: 2s
- Starting delay time: 2s
- Current power off time: 2s

Type	Rated voltage	Over-voltage protection range	Under-voltage protection range	Over-current protection range	Packing/ Box (pcs)	Product category	Catalogue number
ELMARK MN4	220V AC	230-300V AC	140-230V AC	1-63A	1/100	B	41906



THREE-PHASE DIGITAL VOLTAGE AND CURRENT PROTECTOR

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



FUNCTIONS:

- Under-voltage protection
- Over-voltage protection
- Over-current protection

TECHNICAL CHARACTERISTICS:

- Operated voltage range: 140-500V AC; 50/60Hz (Three-phase)
- Rated current: 63A
- Over-voltage protection value: 390-500V AC
- Under-voltage protection value: 140-370VAC
- Over-current protection value: 1-63A
- Voltage power off time: 0-400s
- Current power off time: 0-30s
- Voltage range setting step: 1V
- Time range setting step: 1s

- Power consumption: $\leq 1.5W$
- Mechanical life: 100 000
- Relative humidity: 45-90% Rh
- Altitude: up to 2000m
- Pollution level: 2 class
- Dimensions: 72x80x66mm
- Mounting: on DIN rail

FACTORY SETTING:

- Over-voltage trip value: 420V
- Under-voltage trip value: 210V
- Over-current trip value: 63A
- Voltage power off time: 2s
- Starting delay time: 2s
- Current power off time: 2s

Type	Rated voltage	Over-voltage protection range	Under-voltage protection range	Over-current protection range	Packing/ Box (pcs)	Product category	Catalogue number
ELMARK MN4	400V AC	390-500V AC	140-370V AC	1-63A	1/50	B	41907



Type designation:

MN - constructive series
number of poles - 1

Documents corresponding to the product:

Standard EN60898-1



UNTIL SUPPLY
LAST

COMBINED VOLTAGE CIRCUIT-BREAKER MN2

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- when the voltage is reduced below 170V operation is initiated and the automatic switch is turned off
- when the voltage is increased above 280V operation is initiated and the automatic switch is turned off
- allows manual turning on of the switch after powering is restored
- indication of the position of the device

TECHNICAL CHARACTERISTICS:

- Rated voltage: 230V; 50/60Hz
- Insulation voltage: $\geq 2000V$

- IP code: IP>20

CONNECTION METHOD:

- Double connector: flat (tunnel) screw connector
- Conductors: flexible up to $1.5mm^2$
- Tightening moment of the screw: 1.33Nm

MOUNTING:

- vertical, by means of two pins attached to the rivets of the circuit-breaker, while the operating mechanism is connected to the switching off mechanism of the circuit breaker after the sealing lid is demounted

Type	Rated voltage	Type breaker	Packing/Box (pcs)	Product category	Catalogue number
ELMARK MN 2 60	230V	C60	12 / 240	F	41909

**SHUNT RELEASE MX**

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- remote circuit breaker switching off at voltage feed
- allows manual switching on of the breaker at voltage recovery
- indication of the device's location

TECHNICAL DATA:

- Rated voltage: 230V; 50/60Hz
- Isolating voltage: $\geq 2000V$
- IP code: IP>20

CONNECTING:

- Joining terminal: flat (tunnel) screw terminal

- Conductors: flexible up to $1.5mm^2$

- Tightening moment: 1.33Nm
- The power supply of the release is accomplished at the outlet of the breaker

MOUNTING:

- vertical, clamps with two pins to the breaker's rivets and the executive mechanism is joined up to the switching mechanism of the breaker after dismantling the seal cover

Type	Rated voltage	Type breaker	Packing/Box (pcs)	Product category	Catalogue number
ELMARK MX 60	230V	C60	12 / 240	B	41902C

**AUXILIARY CONTACT OF**

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

FUNCTIONS:

- at circuit breaker switching off it sends a signal to the control or signalization system
- indication of the location of the auxiliary contact and the breaker

TECHNICAL DATA:

- Rated voltage: 230V
- Isolating voltage: $\geq 2000V$
- IP code: IP>20

CONNECTING:

- Joining terminal: flat (tunnel) screw terminal
- Power supply (conducting): - flexible conductors up to $1.5mm^2$

MOUNTING:

- vertical, clamps with two pins to breaker's rivets, and the executive mechanism is joined up to the switching mechanism of the breaker after dismantling the seal cover

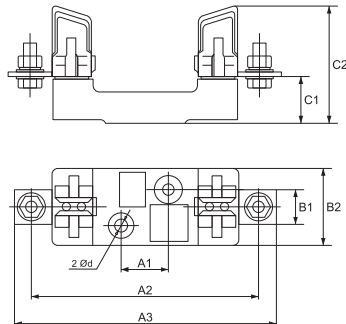
Type	Rated voltage	Type breaker	Packing/Box (pcs)	Product category	Catalogue number
ELMARK OF 60	230V	C60	12 / 240	B	41901C



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60269-1

**BASES FOR HIGH POWER SAFETY DEVICES**
3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The series bases for high power safety device is manufactured of permittivity alloy with mounted contact jaws of electrolytic copper supplied with special springs for contact compression and easy fuse links taking out. All current leading parts are connected to inlet outlet terminals with bolts; the terminals also end with bolts, to which the power supply conductors are connected. The bases are offered in five type sizes corresponding to the five types of fuse links.

Remark : Fuse bases SIST are made of resin / **Remark :** Fuse bases SISP are made of porcelain

Base type	Overall dimensions (mm)							
	A1	A2	A3	B1	B2	C1	C2	Ød
SIST00	25	100	120	-	30	25	60	7.5
SIST 0	25	150	170	-	30	37	72	7.5
SIST1	25	175	200	30	58	38	84	10.5
SIST2	25	200	225	30	60	38	100	10.5
SIST3	25	210	250	30	60	40	105	10.5

Base type	Fuse link type	Rated current (A)	Rated voltage Un (V)	Weight (gr)	Packing / Box (pcs)	Product category	Catalogue number
SIST00	NT 00	up to 160	600	193	5 / 120	B	12001



Base type	Fuse link type	Rated current (A)	Rated voltage Un (V)	Weight (gr)	Packing / Box (pcs)	Product category	Catalogue number
SIST0	NT 0	up to 160	600	295	3 / 54	B	12010



Base type	Fuse link type	Rated current (A)	Rated voltage Un (V)	Weight (gr)	Packing / Box (pcs)	Product category	Catalogue number
SIST1	NT 1	up to 250	600	550	3 / 36	B	12100



Base type	Fuse link type	Rated current (A)	Rated voltage Un (V)	Weight (gr)	Packing / Box (pcs)	Product category	Catalogue number
SIST2	NT 2	up to 400	600	770	1 / 20	B	12200



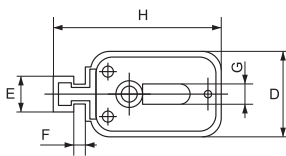
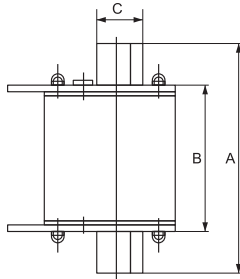
Base type	Fuse link type	Rated current (A)	Rated voltage Un (V)	Weight (gr)	Packing / Box (pcs)	Product category	Catalogue number
SIST3	NT 3	up to 630	600	965	1 / 20	B	12300



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60269-1
EN 60269-2

**FUSE LINKS FOR HIGH POWER SAFETY DEVICE**

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The series fuse links for high power safety devices is designed for short circuit protection. They are distinguished with high speed of operation and high reliability. The element is a ceramic (porcelain) body filled with fine quartz sand for voltaic arc lowering. In the ceramic body is mounted a fusible, specially profiled wafer connecting the current leading terminals. These terminals are manufactured of copper alloy with special nickel coating and have the form of knives to provide more contact surface. The fuse links correspond to "gL – gG" class which means that they are with common function and normal response time. NH Fuses

TWO OPERATING CLASSES OF NH FUSES ARE AVAILABLE:

- Operating class gL/gG – general purpose, line protection, slow acting

TECHNICAL DATA:

- Rated voltage: 500V
- Rated short circuit current: 120 kA
- IP code: IP 00
- Ambient temperature: -5 to +65°C
- Altitude: up to 2000m

Base type	Overall dimensions (mm)				
	A	B	C	D	H
NT00	78	40	15	29	56,5
NT 0	125	68	15	29	56,5
NT1	135	68	21	48	62
NT 2	150	68	27	58	72
NT 3	150	68	33	67	84,5
NT00C	78	40	15	21	56,5
NT1C	135	68	21	29	62
NT2C	150	68	33	48	84,5

Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT00	16	500,600	3 / 90	B	10001
NT00	25	500,600	3 / 90	B	10002
NT00	32	500,600	3 / 90	B	10003
NT00	40	500,600	3 / 90	B	10004
NT00	50	500,600	3 / 90	B	10005
NT00	63	500,600	3 / 90	B	10006
NT00	80	500,600	3 / 90	B	10008
NT00	100	500,600	3 / 90	B	10009
NT00	125	500,600	3 / 90	B	10012
NT00	160	500,600	3 / 90	B	10016



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT0	16	500,600	3 / 90	B	10015
NT0	25	500,600	3 / 90	B	10025
NT0	32	500,600	3 / 90	B	10032
NT0	40	500,600	3 / 90	B	10040
NT0	50	500,600	3 / 90	B	10050
NT0	63	500,600	3 / 90	B	10063
NT0	80	500,600	3 / 90	B	10080
NT0	100	500,600	3 / 90	B	10090
NT0	125	500,600	3 / 90	B	10092
NT0	160	500,600	3 / 90	B	10096



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT1	80	500,600	3 / 36	B	10108
NT1	100	500,600	3 / 36	B	10110
NT1	125	500,600	3 / 36	B	10112
NT1	160	500,600	3 / 36	B	10116
NT1	200	500,600	3 / 36	B	10120
NT1	225	500,600	3 / 36	B	10122
NT1	250	500,600	3 / 36	B	10125



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT2	160	500,600	1 / 24	B	10216
NT2	200	500,600	1 / 24	B	10220
NT2	250	500,600	1 / 24	B	10225
NT2	315	500,600	1 / 24	B	10231
NT2	400	500,600	1 / 24	B	10240



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT3	500	500,600	1 / 24	B	10350
NT3	630	500,600	1 / 24	B	10363



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT00C	16	500,600	3/120	B	10001C
NT00C	25	500,600	3/120	B	10002C
NT00C	32	500,600	3/120	B	10003C
NT00C	40	500,600	3/120	B	10004C
NT00C	50	500,600	3/120	B	10005C
NT00C	63	500,600	3/120	B	10006C
NT00C	80	500,600	3/120	B	10008C
NT00C	100	500,600	3/120	B	10009C



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT1C	80	500,600	3/54	B	10108C
NT1C	100	500,600	3/54	B	10110C
NT1C	125	500,600	3/54	B	10112C
NT1C	160	500,600	3/54	B	10116C



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	In (A)	Un (V)	Packing / Box (pcs)	Product category	Catalogue number
NT2C	160	500,600	1/30	B	10216C
NT2C	200	500,600	1/30	B	10220C
NT2C	250	500,600	1/30	B	10225C



Documents corresponding to the product:

Standard EN 60947-1; EN 60947-3



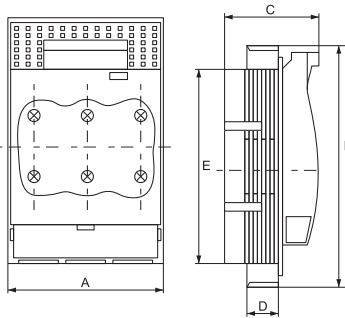
ISOLATING SWITCHES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Designed in two types – horizontal and vertical. They represent a combination of low voltage isolating switch and high power safety devices mounted in a common plastic corpus. They are used for low voltage distribution boards and complete transformer substations (CTS) where visible circuit distribution is necessary. They provide safety and convenience at fuse links change. The plastic corpus increases the IP code and the plastic lid provides simultaneous circuits switching on/off. The lid allows easy removing which is additional measure at repairs. The vertical isolating switches are mounted directly to the power supply rails which enables the exploitation and improves the safety of the staff.

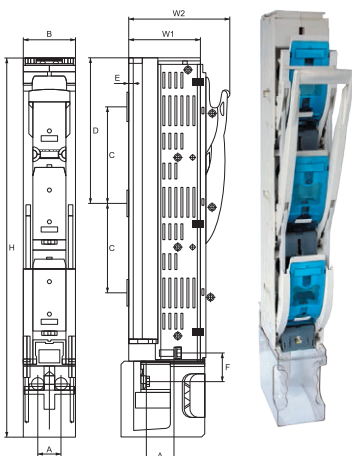
TECHNICAL DATA:

- Rated voltage: 500V
- Rated short circuit current: according to the mounted fuse links
- Number of poles: 3
- Impulse voltage wear resistance: 8kV
- Mechanical wear resistance: 3000 cycles
- IP code: IP 40
- Plastic: UV rays wear resistance
- Ambient temperature: -5 to +65°C
- Altitude: up to 2000m



Base type	Overall dimensions (mm)				
	A	B	C	D	E
THB - 160	105	160	85	45	100
THB - 250	185	220	111	66	180
THB - 400	210	260	130	88	205
THB - 630	256	270	140	94.5	245

Type	In (A)	Un (V)	Fuse link size	Packing / Box (pcs)	Product category	Catalogue number
THB	160	500,660	NT00	1 / 18	B	44801
THB	250	500,660	NT1	1 / 6	B	44802
THB	400	500,660	NT2	1 / 4	B	44803
THB	630	500,660	NT3	1/4	B	44804



Overall dimensions (mm)									
A	B	C	D	E	F	G	H	W1	W2
50	99	185	290	2	57	58	746	146	195

Type	In (A)	Un (V)	Fuse link size	Packing / Box (pcs)	Product category	Catalogue number
HG2B	160	500,660	NT00	1 / 4	B	44805
HG2B	250	500,660	NT1	1 / 4	B	44806
HG2B	400	500,660	NT2	1 / 4	B	44807
HG2B	630	500,660	NT3	1 / 4	B	44808



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60269-2;
IEC269-2

SWITCH DISCONNECTORS RT18

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

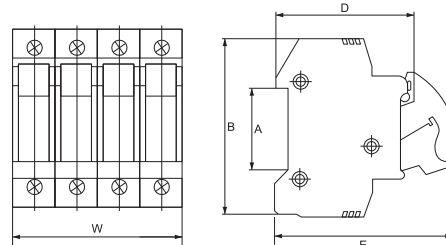


The series of switch disconnectors are developed for short-circuit protection. They have a high speed of start and high reliability. They have a plastic body of non-flammable plastics adapted for mounting on a DIN rail, where a porcelain round plug, which is filled with fine quartz sand for extinguishing the electric arc. LED indicator is mounted on the front panel to show fuse link condition. In this ceramic body is mounted melting, specifically profiled plate, which connects the input power terminals. These terminals are produced from copper alloy with especially laid nickel layer and contact with the projecting bolts from the plastic body. There are offered two types of insertions according to the degree of quick operation: normally quickly operating ones – class "gG". Suitable for DC system.

TECHNICAL DATA:

- Rated voltage: 500V
- Insulation voltage: >2500V
- Rated current on short-circuit: 100 kA
- Direct mounting to the load
- Two insulated points to the load
- IP code: IP 44
- Cross-section of the supply conductors: up to 35mm²
- Environmental temperature: -5° to +65°C
- Utilization category: AC - 20B; DC - 20B
- Altitude: up to 2000m

Overall dimensions



Base type	Number of poles	Rated current (A)	Type of the fuse	Base dimensions (mm)				Packing / Box (pcs)	Product category	Catalogue number
				A	B	W	E			
1PRT18 - 32x	1P	32	xxG1038	37	82	18	78	12 / 240	B	10RT1831
1NRT18 - 32x	1P+N	32	xxG1038	37	82	36	78	6 / 120	B	10RT18311
2PRT18 - 32x	2P	32	xxG1038	37	82	36	78	6 / 120	B	10RT1832
3PRT18 - 32x	3P	32	xxG1038	37	82	54	78	4 / 80	B	10RT1833
3NRT18 - 32x	3P+N	32	xxG1038	37	82	72	78	3 / 60	B	10RT18331
1PRT18 - 63x	1P	63	xxG1451	37	105	27	110	6 / 108	B	10RT1861
1NRT18 - 63x	1P+N	63	xxG1451	37	105	54	110	6 / 108	B	10RT18611
2PRT18 - 63x	2P	63	xxG1451	37	105	54	110	6 / 108	B	10RT1862
3PRT18 - 63x	3P	63	xxG1451	37	105	81	110	6 / 108	B	10RT1863
3NRT18 - 63x	3P+N	63	xxG1451	37	105	108	110	6 / 108	B	10RT18631



FUSE FOR SWITCH DISCONNECTORS RT18



RT18 Type

Type of the fuse class gG	Voltage (V)	Rated current (A)	Size of the fuse A x ØB x C	Packing / Box (pcs)	Product category	Catalogue number
01G1038	500	1	38xØ10.3x10mm	10 / 2000	B	10G10381
02G1038	500	2	38xØ10.3x10mm	10 / 2000	B	10G10382
04G1038	500	4	38xØ10.3x10mm	10 / 2000	B	10G10384
06G1038	500	6	38xØ10.3x10mm	10 / 2000	B	10G10386
10G1038	500	10	38xØ10.3x10mm	10 / 2000	B	10G103810
16G1038	500	16	38xØ10.3x10mm	10 / 2000	B	10G103816
20G1038	500	20	38xØ10.3x10mm	10 / 2000	B	10G103820
25G1038	500	25	38xØ10.3x10mm	10 / 2000	B	10G103825
32G1038	500	32	38xØ10.3x10mm	10 / 2000	B	10G103832
40G1451	500	40	51xØ14.3x12mm	10 / 500	B	10G145140
50G1451	500	50	51xØ14.3x12mm	10 / 500	B	10G145150
63G1451	500	63	51xØ14.3x12mm	10 / 500	B	10G145163



FUSE FOR SWITCH DISCONNECTORS EL-D02



EL-D02 Type

Type of the fuse class gG	Voltage (V)	Rated current (A)	Size of the fuse A x ØB x C	Product category	Catalogue number
RO 26/32 2A	500	2	Ø11x 36mm	F	10R0232
RO 26/32 4A	500	4	Ø11x 36mm	F	10R0234
RO 26/32 6A	500	6	Ø11x 36mm	F	10R0236
RO 26/32 10A	500	10	Ø11x 36mm	F	10R0240
RO 26/32 16A	500	16	Ø11x 36mm	F	10R0246
RO 26/32 20A	500	20	Ø15x 36mm	F	10R0248
RO 26/63 40A	500	40	Ø15x 36mm	F	10R0640
RO 26/63 50A	500	50	Ø15x 36mm	F	10R0650

UNTIL SUPPLY
LAST



Documents corresponding to the product:

Standard EN 60947-3 and IEC947-3



Dimensions (mm)

H1	H2	D1	D2	D3
81	45	50	65	76
W1	W2	W3	W3	
17,5	35	52,5	70	

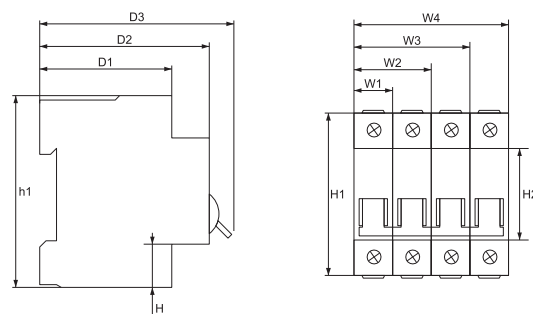
SWITCH DISCONNECTORS ISS FROM 20A TO 125A SERIES
5+2 standard +extended
7 YEAR TOTAL WARRANTY
*for industrial usage, 3 years warranty
FUNCTIONS:

- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits
- can be used as a main breaker
- it has no protective function
-

TECHNICAL DATA:

- Rated voltage: 230/400V; 50/60Hz
- Joining terminal: flat (tunnel) screw terminal
- Connecting: power supply busbar, rigid or flexible conductors
- Tightening moment: 1.33Nm
- Isolating voltage: $\geq 500V$

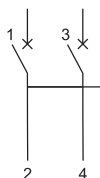
- Electrical wear resistance (number of cycles): ≥ 10000
- Mechanical wear resistance (number of cycles): ≥ 20000
- IP code: IP>20
- Mounting: DIN-rail
- Plastic material of UV rays
- Ambient temperature: $-20^{\circ}C + 65^{\circ}C$



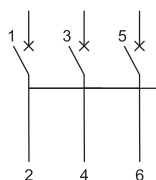
Type	Number of poles	Rated current I_n (A)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number
ISS	1P	40	10	12 / 240	B	41914
ISS	1P	63	16	12 / 240	B	41911
ISS	1P	80	25	12 / 240	B	41912
ISS	1P	100	35	12 / 240	B	41913
ISS	1p	125	50	12 / 240	B	41916



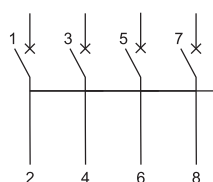
Type	Number of poles	Rated current I_n (A)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number
ISS	2P	40	10	6 / 120	B	41924
ISS	2P	63	16	6 / 120	B	41921
ISS	2P	80	25	6 / 120	B	41922
ISS	2P	100	35	6 / 120	B	41923
ISS	2p	125	50	6 / 120	B	41925



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	Number of poles	Rated current In (A)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number
ISS	3P	20	2.5	4/80	B	41935
ISS	3P	32	6.0	4/80	B	41936
ISS	3P	40	10	4 / 80	B	41934
ISS	3P	63	16	4 / 80	B	41931
ISS	3P	80	25	4 / 80	B	41932
ISS	3P	100	35	4 / 80	B	41933
ISS	3p	125	50	4 / 80	B	41937



Type	Number of poles	Rated current In (A)	Recommended conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number
ISS	4P	40	10	3 / 60	B	41944
ISS	4P	63	16	3 / 60	B	41941
ISS	4P	80	25	3 / 60	B	41942
ISS	4P	100	35	3 / 60	B	41943
ISS	4p	125	50	3 / 60	B	41945



PADLOCK ADAPTOR FOR MCB

An adaptor makes it possible to block the operating lever whether switched ON or OF

Type	Product category	Catalogue number
Padlock adaptor for MCB	B	41904



**DOCUMENTS CORRESPONDING
TO THE PRODUCT:**

Standard EN 60947-1
EN 60947-3 and IEC 60947-6

**SWITCH DISCONNECTORS ISS2
FROM 125A TO 800A**

5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty



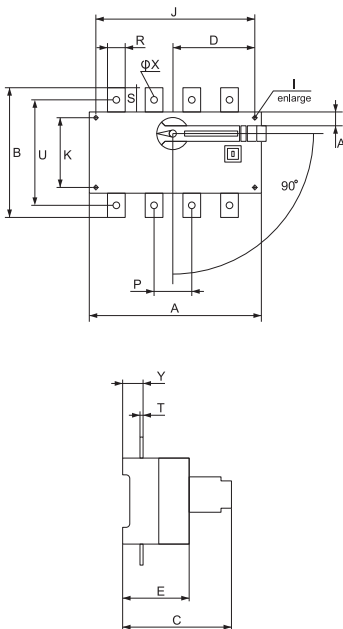
The series three- and four-pole load switch disconnectors ISS2 xxx are produced for mounting in main electrical boards for disconnection of the circuits, switching on of generators because of the fact they are not affected by the frequency variations. High mechanical strength and resistance to circulation. Simple and secure management.

FUNCTIONS:

- switching on and off of electrical circuits under load
- disconnection of electrical circuits
- used as main circuit-breaker
- resistant to high voltages, to short circuits in the protected circuit
- it has no protective function

TECHNICAL FEATURES:

- Rated voltage: not higher than 660V; 50/60Hz
- Double connector: screw connection
- Connection: solid or flexible conductors
- Insulation voltage: $\geq 1000V$
- Resistance to impulse voltage: 8000V
- Electrical endurance (number of cycles): $\geq 5\,000$
- Mechanical endurance (number of cycles): $\geq 10\,000$
- IP code: IP>20
- Mounting method: to a surface by means of bolts
- Plastic resistant to UV rays
- Ambient temperature: $-20^{\circ}\div 65^{\circ}C$



Type	Dimensions (mm)												
	A	B	C	D	E	J	J1	K	R	S	T	Y	
ISS2-125/3	140	135	125	27	73	120	120	65	20	25	3.5	25	
ISS2-125/4	170	135	125	27	73	150	150	65	20	25	3.5	25	
ISS2-160/3	140	135	125	27	73	120	120	65	20	25	3.5	25	
ISS2-160/4	170	135	125	27	73	150	150	65	20	25	3.5	25	
ISS2-250/3	180	170	138	35	86	160	160	90	25	30	3.5	25	
ISS2-250/4	230	170	138	35	86	210	210	90	25	30	3.5	25	
ISS2-400/3	230	240	165	50	110	210	210	140	32	40	5	37	
ISS2-400/4	295	240	165	50	110	275	275	140	32	40	5	37	
ISS2-630/3	230	260	165	50	110	210	210	140	40	50	6	37	
ISS2-630/4	295	260	165	50	110	275	275	140	40	50	6	37	
ISS2-800/3	378	312	240	50	140	353	353	175	60	56	8	48	
ISS2-800/4	498	312	240	50	140	473	473	175	60	56	8	48	

Type	Rated current In (A)	Maximum breaking capacity Icu (A)	Tightening moment (Nm)	Packing/Box (pcs)	Product category	Catalogue number three- pole	Catalogue number four- pole
ISS2-125in	125	1250	6.5	1 / 12	B	41951	41961
ISS2-125out	125	1250	6.5	1 / 12	B	41952	41962
ISS2-160in	160	1250	6.5	1 / 12	B	41953	41963
ISS2-160out	160	1250	6.5	1 / 12	B	41954	41964
ISS2-250in	250	2000	10	1 / 6	B	41955	41965
ISS2-250out	250	2000	10	1 / 6	B	41956	41966
ISS2-400in	400	3200	14.5	1 / 2	B	41957	41967
ISS2-630in	630	4000	14.5	1 / 2	B	41958	41968
ISS2-800in	800	1000	27	1 / 2	B	41959	41969



Note: ISS2-xxx in – load circuit-breaker for mounting in the interior of a board
ISS2 -xxx out – load circuit-breaker with an extended lever for mounting on the front panel of the board

**DOCUMENTS CORRESPONDING
TO THE PRODUCT:**

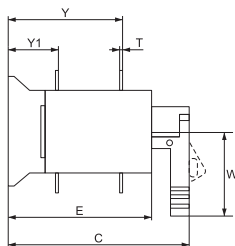
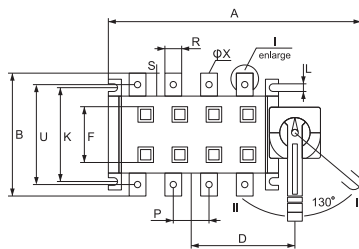
Standard EN 60947-1
EN 60947-3 and IEC 60947-6

**MANUAL SWITCHING TO RESERVE SERIES
EQ 2M FROM 160A TO 800A**

5+2
standard
+extended

7 **YEAR TOTAL
WARRANTY**

*for industrial
usage, 3 years
warranty



The series three- and four-pole load isolating switch EQ 2 M xxx are produced for mounting in main electrical boards for disconnection of the circuits, manual switching between two power supplies or switching ON of generators because of the fact they are not affected by the frequency variations. High mechanical strength and resistance to circulation. Simple and secure management.

FUNCTIONS:

- switching on and off of low voltage electrical circuits under load
- disconnection of the electrical circuit from one of the power supplies, while providing immediately switching to the other
- used as main switch
- resistant to high voltages, to short circuits in the protected circuit
- it has no protective function

TECHNICAL CHARACTERISTICS:

- Rated voltage: not higher than 690V; 50/60Hz
- Double connector: screw connection
- Connection: hard or flexible conductors
- Insulation voltage: $\geq 1000V$
- Resistance to impulse voltage: 8000V
- Electrical endurance (number of cycles): $\geq 5\ 000$
- Mechanical endurance (number of cycles): $\geq 10\ 000$
- IP code: IP>20
- Mounting method: to a surface by means of bolts
- Plastic resistant to UV rays
- Ambient temperature: $-20^{\circ}\div 65^{\circ}C$
- Small size
- Indication which of the two supplies is operating

Type	Dimensions (mm)												
	A	B	C	D	E	J	J1	K	R	S	T	Y	Y1
EQ2M-160/3	270	135	212	89	150	120	65	95	20	25	3.5	55	25
EQ2M-160/4	300	135	212	104	150	150	65	95	20	25	3.5	55	25
EQ2M-250/3	307	170	260	110	180	160	65	115	25	30	3.5	70	25
EQ2M-250/4	357	170	260	135	180	210	65	115	25	30	3.5	70	25
EQ2M-400/3	372	240	297	150	236	210	77	180	32	40	5	83	37
EQ2M-400/4	432	240	297	180	236	275	77	180	32	40	5	83	37
EQ2M-630/3	372	240	297	150	236	210	77	180	40	50	6	83	37
EQ2M-630/4	432	240	297	180	236	275	77	180	40	50	6	83	37
EQ2M-800/3	372	240	297	150	236	210	77	180	60	56	8	83	48
EQ2M-800/4	432	240	297	180	236	275	77	180	60	56	8	83	48

Type	Rated current In (A)	Maximum breaking capacity Icu (A)	Tightening moment (Nm)	Packing/Box (pcs)	Product category	Catalogue number three- pole	Catalogue number four- pole
EQ2M-160	160	1250	6.5	1 / 4	B	44641	44641P
EQ2M-250	250	2000	10	1 / 2	B	44642	44642P
EQ2M-400	400	3200	14.5	1 / 2	B	44643	44643P
EQ2M-630	630	4000	14.5	1 / 2	B	44644	44644P
EQ2M-800	800	1000	27	1 / 2	B	44645	44645P



Documents corresponding to the product:

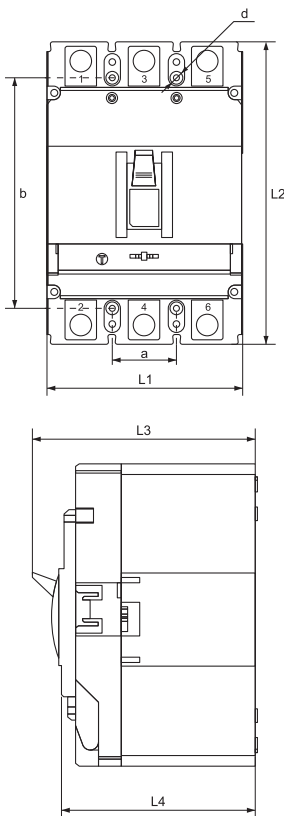
Standard EN 60947-1
EN 60947-2

HIGH BREAKING CAPACITY LEVEL MOULDED CASE CIRCUIT BREAKERS (MCCB) DS1 MAX FROM 63A... 800A

7+0
Standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

**FUNCTIONS:**

- high breaking capacity level
- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- can be used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics control: manual
- possibility for auxiliary devices mounting for automation

TECHNICAL DATA:

- Rated operating voltage: 415/690V; 50/60Hz
- Isolating voltage: 2000V
- Surge voltage wear resistance: $\geq 8000V$
- Connecting:
 - rigid or flexible conductors
 - front conductors joining

- possibility for mounting to lengthening terminal
- Plastic elements
 - not keeping the burning material nylon PA66
 - box permittivity strength: $>16MV/m$
- Abnormal heating wear resistance and fire of the outer parts: 960°C
- Static contacts – alloy: pure copper T2Y2
 - acontact head: silver graphite CAg(5)
 - athickness: depends on the current
- Tightening moment: 1.33Nm
- Electrical wear resistance (number of cycles): ≥ 10000
- Mechanical wear resistance (number of cycles): ≥ 20000
- IP code: IP>20
- Mounting:
 - joining with bolts
 - mounting position: vertical
- Plastic material of UV rays and non-flammable
- Test button
- Ambient temperature: -20°/65°C.

Type	Overall dimensions (mm)						
	L1	L2	L3	L4	a	b	d
DS1 MAX 125/63 3P M	92	150	110	92	30	129	4.5
DS1 MAX 125/80 3PM	92	150	110	92	30	129	4.5
DS1 MAX 125/100 3P M	92	150	110	92	30	129	4.5
DS1 MAX 125/125 3P M	92	150	110	92	30	129	4.5
DS1 MAX 250/160 3P M	92	165	110	90	35	126	4.5
DS1 MAX 250/200 3P M	107	165	110	90	35	126	4.5
DS1 MAX 250/250 3P H	107	165	110	90	35	126	4.5
DS1 MAX 400/400 3P H	150	257	146	106	44	194	7
DS1 MAX 630/630 3P H	182	270	155	116	116	200	7
DS1 MAX 800/800 3P H	210	28	155	116	70	243	7
DS1 MAX 125/63 4P M	122	150	110	92	60	129	4.5
DS1 MAX 125/80 4PM	122	150	110	92	60	129	4.5
DS1 MAX 125/100 4P M	122	150	110	92	60	129	4.5
DS1 MAX 125/125 4P M	122	150	110	92	60	129	4.5
DS1 MAX 250/160 4P M	142	165	110	90	70	126	4.5
DS1 MAX 250/200 4P M	142	165	110	90	70	126	4.5
DS1 MAX 250/250 4P H	142	165	110	90	70	126	4.5
DS1 MAX 400/400 4P H	198	257	146	106	44	194	7
DS1 MAX 630/630 4P H	240	270	155	116	116	200	7
DS1 MAX 800/800 4P H	280	280	155	116	70	243	7

Type	Rated current In (A)	Operating breaking capacity (kA) Ics	Maximum breaking capacity (kA) Icu		Thermal current adjustment (A)	Packing/ box	Product category	Catalogue number three- poles	Catalogue number four-poles
			415V	690V					
DS1 MAX - 125 63	63	36	50	20	50,4-63	1/16	B	44163MM	444163MM
DS1 MAX - 125 80	80	36	50	20	64-80	1/16	B	44164MM	444164MM
DS1 MAX - 125 100	100	36	50	20	80-100	1/16	B	44165MM	444165MM
DS1 MAX - 125 125	125	36	50	20	100-125	1/16	B	44166MM	444166MM
DS1 MAX - 250 160	160	36	50	20	128-160	1/6	B	44160MM	444160MM
DS1 MAX - 250 200	200	36	50	20	160-200	1/6	B	44200MM	444200MM
DS1 MAX - 250 250	250	42	65	25	200-250	1/6	B	44250MH	444250MH
DS1 MAX - 400 400	400	50	85	30	320-400	1/3	B	44401MH	444401MH
DS1 MAX - 630 630	630	50	85	30	504-630	1/2	B	44630MH	444630MH
DS1 MAX - 800 800	800	65	100	50	640-800	1/2	B	44800MH	444800MH



Documents corresponding to the product:

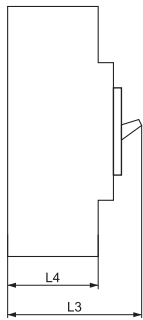
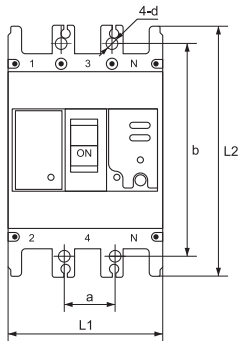
Standard EN 60947-1
EN 60947-2

HIGH BREAKING CAPACITY LEVEL MOULDED CASE CIRCUIT BREAKERS (MCCB) DS1 MAX TO 800A-ELECTRONIC TYPE

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

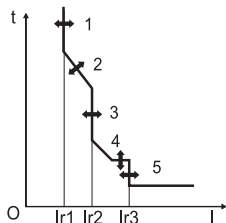
**FUNCTIONS:**

- high breaking capacity level
- switching on/off heavily loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- can be used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics
- control: manual
- possibilities for electrical module parameters adjustment through direct modules (combination of keys) thus providing accurate protection from overload and short circuit
- simultaneous protection of the three phases
- possibility for auxiliary devices mounting for automation
- contactor for TT test 15V DC

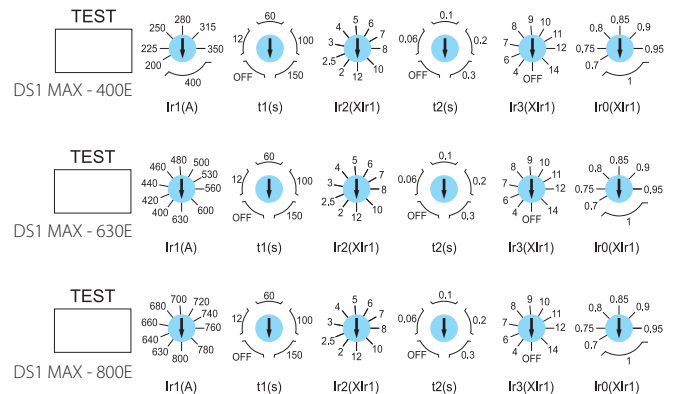
TECHNICAL DATA:

- Rated operating voltage: 415/690V; 50/60Hz
- Isolating voltage: 2000V
- Surge voltage wear resistance: $\geq 8000V$
- Joining terminal: flat (tunnel) screw terminal
- Connecting:
 - rigid or flexible conductors
 - front conductors joining
 - possibility for mounting to lengthening terminal
- Electrical wear resistance (number of cycles): ≥ 10000
- Mechanical wear resistance (number of cycles): ≥ 20000
- IP code: IP>20
- Abnormal heating wear resistance and fire of the outer parts: 960°C
- Mounting:
 - joining with bolts
 - mounting position: vertical
- Plastic material of UV rays and non-flammable
- Test button
- Ambient temperature: $-20^{\circ}\div 65^{\circ}C$

Type	Rated current In (A)	Operating breaking capacity (kA) Ics	Maximum breaking capacity (kA) Icu		Thermal current adjustment (A)	Packing/ box	Product category	Catalogue number three- poles	Catalogue number four- poles
			415V	690V					
DS1 MAX - 400E	400	50	85	30	200-400	1/3	B	44940MH	444940MH
DS1 MAX - 630E	630	50	85	30	400-630	1/2	B	44963MH	444963MH
DS1 MAX - 800E	800	65	100	50	630-800	1/2	B	44980MH	444980MH

**Tripping characteristic:**

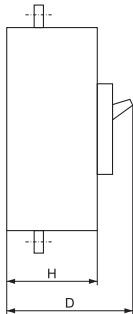
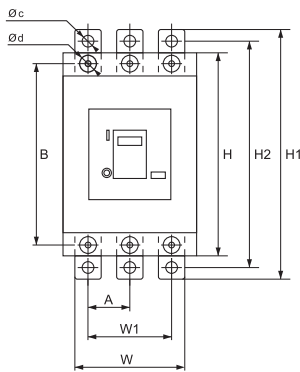
Ir1(A) Over-load long time delay tripping current
Ir1 adjustment, according to the different rated current of MCCB.
t1(s) Long time delay tripping time t1 adjustment.
Ir2(XIr1) Short circuit short time delay tripping time Ir2 adjustment.
t2(s) Short time delay tripping time t2 adjustment.
Ir3(XIr1) Short circuit instantaneous tripping current Ir3 adjustment.
Ir0(XIr1) Pre-alarm tripping current Ir0 adjustment.



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60947-1
EN 60947-2



MOULDED CASE CIRCUIT BREAKERS (MCCB) DS1 SERIES FROM 40A TO 1250A

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTIONS:

- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- can be used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics
- control: manual
- possibility for auxiliary devices mounting for automation
- Connecting:
 - rigid or flexible conductors
 - front conductors joining
 - possibility for mounting to lengthening terminal
- Plastic elements
 - not keeping the burning material nylon PA66
 - box permittivity strength: >16MV/m
- Abnormal heating wear resistance and fire of the outer parts: 960°C
- Static contacts – alloy: pure copper T2Y2
 - contact head: silver graphite CAg(5)
 - thickness: depends on the current
- Tightening moment: 1.33Nm
- Electrical wear resistance (number of cycles): ≥10000
- Mechanical wear resistance (number of cycles): ≥20000
- IP code: IP>20
- Mounting:
 - joining with bolts
 - mounting position: vertical
- Plastic material of UV rays and non-flammable
- Test button
- Ambient temperature: -20°÷65°C

TECHNICAL DATA:

- Rated operating voltage: 415/690V; 50/60Hz
- Isolating voltage: 2000V
- Surge voltage wear resistance: ≥8000V
- Joining terminal: flat (tunnel) screw terminal for the breakers up to 160A and a bolt connection for the breakers from 250A to 1600A

Type	Overall dimensions (mm)					Installation dimensions (mm)					
	W	H	D	H1	D1	A	B	W1	H2	Ø d	Ø e
DS1-125/3P	76.2	120	70		90	25	100	50		4	
DS1-160/3P	90	120	70		93	30	100	60		5	
DS1-250/3P	105	170	104	238	143.5	35	139	70	210	6	8.5
DS1-400/3P	140	257	104	316	144	44	214	87.5	285	6	11
DS1-630/3P	210	275	104	310	172	70	230	140	280	6	11
DS1-800/3P	210	275	104	347	172	70	230	140	307	6	16
DS1-1600/3P	210	410	140	410	210	70	300	140	350	10	12
DS1-125/4P	110	120	70		90	25	100	50		4	
DS1-160/4P	120	120	70		93	30	100	60		5	
DS1-250/4P	140	170	104	238	143.5	35	139	70	210	6	8.5
DS1-400/4P	184	257	104	316	144	44	214	87.5	285	6	11
DS1-630/4P	280	275	104	310	172	70	230	140	280	6	11
DS1-800/4P	280	275	104	347	172	70	230	140	307	6	16
DS1-1600/4P	280	410	140	410	210	70	300	140	350	10	12

Type	Rated current In (A)	Operating breaking capacity (kA) Ics	Maximum breaking capacity (kA) Icu		Thermal current adjustment (A)	Section of the conductor (mm²)	Packing/Box (pcs)	Product category	Catalogue number tree-poles
			415V	690V					
DS1-125	40	16	35	10	fixed	16	1 / 20	F	44040
DS1-125	50	16	35	10	fixed	16	1 / 20	F	44050
DS1-125	100	16	35	10	fixed	35	1 / 20	F	44090

UNTIL SUPPLY
LAST





UNTIL SUPPLY
LAST

Type	Rated current In (A)	Operating breaking capacity (kA) Ics	Maximum breaking capacity (kA) Icu		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number tree-poles
			415V	690V					
DS1 - 160	80	22	35	15	56 - 80	25	1 / 20	F	44164
DS1 - 160	100	22	35	15	70 - 100	50	1 / 20	F	44165



UNTIL SUPPLY
LAST

Type	Rated current In (A)	Operating breaking capacity (kA) Ics	Maximum breaking capacity (kA) Icu		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packing/Box (pcs)	Product category	Catalogue number tree-poles
			415V	690V					
DS1 - 630	500	65	75	25	fixed	185	1 / 2	F	44500



UNTIL SUPPLY
LAST

Type	Rated current In (A)	Max. breaking capacity (kA) Icu	Operating breaking capacity (kA) Ics	Section of the power supply conductor (mm ²)	Protection from overload	Packing/Box (pcs)	Product category	Catalogue number
DS1 - 1250	1000	85	65	240	fixed	1 / 1	F	44000
DS1 - 1250	1250	85	65	240	fixed	1 / 1	F	44502



Documents corresponding to the product:

Standard EN 60947-1

EN 60947-2

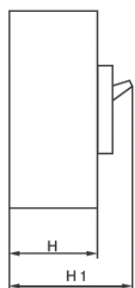
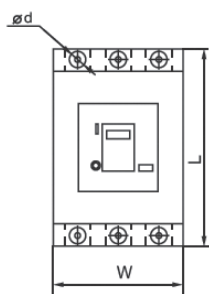
**MOULDED CASE CIRCUIT BREAKER (MCCB)
DS2 SERIES**
3+0 standard
+extended **3** YEAR TOTAL WARRANTY
FUNCTIONS:

- no auxiliaries available for this type of MCCB
- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- can be used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics
- control: manual

TECHNICAL DATA:

- Rated operating voltage: 400V; 50/60Hz
- Isolating voltage: 690V

- Surge voltage wear resistance: $\geq 6000V$
- Joining terminal: flat (tunnel) screw terminal
- Connecting:
 - rigid or flexible conductors
 - front conductors joining
 - possibility for mounting to lengthening terminal
- Electrical wear resistance (number of cycles): ≥ 6000
- Mechanical wear resistance (number of cycles): ≥ 10000
- IP code: IP>20
- Mounting:
 - joining with bolts
 - mounting position: vertical
- Plastic material of UV rays and non-flammable
- Test button
- Ambient temperature: $-20^{\circ}\div 55^{\circ}C$


 UNTIL SUPPLY
LAST

Type	Overall dimensions (mm)			
	W	L	H	H1
DS2-63	76	135	73,5	90,5
DS2-500	180	270	111,5	160
DS2-630	180	270	111,5	160
DS2-800	210	274,3	109	145,8

Type	Rated current In (A)	Max. breaking capacity (kA) Icu	Operating breaking capacity (kA) Ics	Recommended conductor (mm ²)	Protection from overload	Packing/Box (pcs)	Product category	Catalogue number tree-poles
DS2-63	63	18	12	16	fixed	1/12	F	44006
DS2-800	800	65	48	240	fixed	1/1	F	44008



Documents corresponding to the product:

Standard EN 60947-1
EN 60947-2



MOULDED CASE CIRCUIT BREAKERS (MCCB) DS1 TO 1600A-ELECTRONIC TYPE

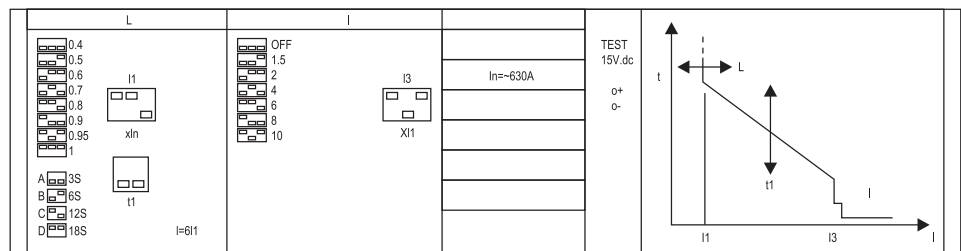
3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTIONS:

- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- can be used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics
- control: manual
- possibilities for electrical module parameters adjustment through direct modules (combination of keys) thus providing accurate protection from overload and short circuit
- simultaneous protection of the three phases
- possibility for auxiliary devices mounting for automation
- contactor for TT test 15V DC

TECHNICAL DATA:

- Rated operating voltage: 415/690V; 50/60Hz
- Isolating voltage: 2000V
- Surge voltage wear resistance: $\geq 8000V$
- Joining terminal: flat (tunnel) screw terminal
- Connecting:
 - rigid or flexible conductors
 - front conductors joining
 - possibility for mounting to lengthening terminal
- Electrical wear resistance (number of cycles): ≥ 10000
- Mechanical wear resistance (number of cycles): ≥ 20000
- IP code: IP>20
- Abnormal heating wear resistance and fire of the outer parts: 960°C
- Mounting:
 - joining with bolts
 - mounting position: vertical
- Plastic material of UV rays and non-flammable
- Test button
- Ambient temperature: $-20^{\circ}\div 65^{\circ}C$

**PROTECTING FUNCTIONS:**

Function L – step adjustment for protection against overload. Adjustment of the operating current $I1=0.4+1 \times I_n$ with discrete coefficients as the value can be 0.4; 0.5; 0.6; 0.7; 0.8; 0.9; 0.95 and 1

Time delay adjustment $t1$ of the protection against overload – step adjustment with four values A-3s; B-6s; C-12s; D-18s when current is $I=6I1$. The diagram of the current curves is presented on fig.1

Adjustment of the transitory protection current against short circuit $I3=X \times I1$ where X can take discrete value OFF; 1.5; 2; 4; 6; 8; 10

Type	Rated current I_n (A)	Operating breaking capacity (kA) I_{cs}	Maximum breaking capacity (kA) I_{cu}		Thermal current adjustment (A)	Section of the Packing/Box conductor (mm ²)	Product category	Catalogue number tree-poles
			415V	690V				
DS1 - 630E	630	65	75	25	252 - 630	240	1 / 2	F 44963
DS1 - 1250E	1000	85	100	65	400 - 1000	240	1 / 1	F 44999
DS1 - 1250E	1250	85	100	65	500 - 1250	240	1 / 1	F 44925
DS1 - 1600E	1600	85	100	65	640 - 1600	240	1 / 1	F 44960

UNTIL SUPPLY
LAST





SHUNT RELEASE (MX)

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

The device is used for remote control of breakers as at voltage signal it starts operating and switches off the breaker to which it is mounted

TECHNICAL DATA:

- rated operating voltage: 230/400V 50/60Hz
- electromagnetic coil 100VA for breakers up to 400A
- electromagnetic coil 150VA for breakers 630-800A
- available joining conductors

UNTIL SUPPLY
LAST

*Until Supply Last- 3 year standard+0 year extended warranty

MOUNTING:

Mounted in a special jack after cover dismounting

CONNECTING:

Connected with the operative system through the provided conductors

DS1-ELECTRONIC TYPE WITH MOUNTED MX

Type	Product category	Catalogue number	
		400V	230V

DS1 630/3300* F **44455**



DS1 MAX-ELECTRONIC TYPE WITH MOUNTED MX

Type	Product category	Catalogue number	
		400V	230V

DS1 MAX 400/3300 B **444511M 44452M**

DS1 MAX 630/3300 B **44455M 44456M**

DS1 MAX 800/3300 B **44459M 44460M**



DS1-THERMOMAGNETIC TYPE WITH MOUNTED MX

Type	Product category	Catalogue number	
		400V	230V

DS1 125/40* F **44317 44318**

DS1 125/50* F **44321 44322**

DS1 125/100* F **44336 44337**

DS1 160/100* F **44463 44464**

DS1 630/500* F **44359 44360**



DS1 MAX-THERMOMAGNETIC TYPE WITH MOUNTED MX

Type	Product category	Catalogue number	
		400V	230V

DS1 MAX 125/63 B **44326M 44327M**

DS1 MAX 125/80 B **44331M 44332M**

DS1 MAX 125/100 B **44336M 44337M**

DS1 MAX 125/125 B **44340M 44341M**

DS1 MAX 250/160 B **44333M 44344M**

DS1 MAX 250/200 B **44347M 44348M**

DS1 MAX 250/250 B **44351M 44352M**

DS1 MAX 400/400 B **44355M 44356M**

DS1 MAX 630/630 B **44363M 44364M**

DS1 MAX 800/800 B **44367M 44368M**



UNDER VOLTAGE RELEASE (MN)

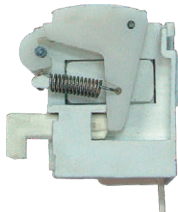
7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty



MN for DS1 - 125-160



MN for DS1 - 250-800

The device switches off and/or does not allow the switching on of the breaker to which it is mounted at power breakdown or voltage decrease under certain limits

TECHNICAL DATA:

- operating voltage: 230/400V 50Hz
- electromagnetic coil 6VA for breakers up to 400A
- electromagnetic coil 10VA for breakers 630-800A
- available joining conductors
- switches off at voltage decrease under 75% of the operating

UNTIL SUPPLY
LAST

*Until Supply Last - 3 year standard+0 year extended warranty

MOUNTING:

Mounted in a special jack after cover dismounting

Note: The breakers are offered with mounted accessory

CONNECTING:

Connected with the operative system through the provided conductors

DS1-ELECTRONIC TYPE WITH MOUNTED MN

Type	Product category	Catalogue number	
		400V	230V
DS1 630/3300*	F	44487	44488



DS1 MAX-ELECTRONIC TYPE WITH MOUNTED MN

Type	Product category	Catalogue number	
		400V	230V
DS1 MAX 400/3300 B	B	44483M	44484M
DS1 MAX 630/3300 B	B	44487M	44488M
DS1 MAX 800/3300 B	B	44491M	44492M



DS1-THERMOMAGNETIC TYPE WITH MOUNTED MN

Type	Product category	Catalogue number	
		400V	230V
DS1 125/40*	F	44383	44384
DS1 125/50*	F	44387	44388
DS1 125/100*	F	44399	44402
DS1 160/100*	F	44475	44476
DS1 630/500*	F	44427	44428



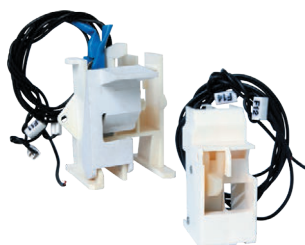
DS1 MAX-THERMOMAGNETIC TYPE WITH MOUNTED MN

Type	Product category	Catalogue number	
		400V	230V
DS1 MAX 125/63	B	44391M	44392M
DS1 MAX 125/80	B	44395M	44396M
DS1 MAX 125/100	B	44399M	44402M
DS1 MAX 125/125	B	44407M	44408M
DS1 MAX 250/160	B	44411M	44412M
DS1 MAX 250/200	B	44415M	44416M
DS1 MAX 250/250	B	44419M	44420M
DS1 MAX 400/400	B	44423M	44424M
DS1 MAX 630/630	B	44431M	44432M
DS1 MAX 800/800	B	44435M	44436M



Documents corresponding to the product:

Standard EN 60947-1
EN 60947-2

**AUXILIARY CONTACT (OF)**

According to the way of mounting the auxiliary devices can be divided into two groups:

- internal devices – accessories for whose mounting it is necessary to dismount the cover of the breakers and fix them in specially designed jacks
- external devices – they are mounted right on the top cover of the breaker

INTERNAL DEVICES**AUXILIARY CONTACT (OF)**

The device changes its condition conformably to the breaker's condition; it has a NO and a NC contactor.

UNTIL SUPPLY
LAST

*Until Supply Last - 3 year standard+0 year extended warranty

TECHNICAL DATA:

- for breakers up to 160A operating current through the auxiliary contact: 3A
- for breakers from 250 to 800A operating current through the auxiliary contact: 6A
- available joining conductors
- labeling of the cables

MOUNTING:

Mounted in a special jack after cover dismounting

NOTE:

The breakers are offered with mounted accessory

CONNECTING:

Connected with the operative system through the provided conductors

7+0
standard
+extended

7 **YEAR TOTAL**
WARRANTY

*for industrial
usage, 3 years
warranty

DS1-THERMOMAGNETIC TYPE WITH MOUNTED OF

Type	Product category	Catalogue number
DS1 125/40*	F	44301
DS1 125/50*	F	44302
DS1 125/100*	F	44305
DS1 630/500*	F	44311

**DS1 MAX-THERMOMAGNETIC TYPE WITH MOUNTED OF**

Type	Product category	Catalogue number
DS1 MAX 125/63	B	44303M
DS1 MAX 125/80	B	44304M
DS1 MAX 125/100	B	44305M
DS1 MAX 125/125	B	44306M
DS1 MAX 250/160	B	44307M
DS1 MAX 250/200	B	44308M
DS1 MAX 250/250	B	44309M
DS1 MAX 400/400	B	44310M
DS1 MAX 630/630	B	44312M
DS1 MAX 800/800	B	44313M

**DS1 -ELECTRONIC TYPE WITH MOUNTED MX+OF**

	Product category	Catalogue number 400V
DS1 630/3300*	F	44457





MCCB WITH AUXILIARY DEVICES MOUNTED (MX+OF) AND (MN+OF)

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

UNTIL SUPPLY
LAST

*Until Supply Last- 3 year standard+0 year extended warranty

DS1-THERMOMAGNETIC TYPE WITH MOUNTED MX+OF

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 125/40*	F	44319	44320
DS1 125/50*	F	44323	44324
DS1 125/100*	F	44338	44339
DS1 160/100*	F	44465	44466
DS1 630/500*	F	44361	



DS1 MAX-THERMOMAGNETIC TYPE WITH MOUNTED MN+OF

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 MAX 125/63	B	44393M	44394M
DS1 MAX 125/80	B	44397M	44398M
DS1 MAX 125/100	B	44405M	44406M
DS1 MAX 125/125	B	44409M	44410M
DS1 MAX 250/160	B	44413M	44414M
DS1 MAX 250/200	B	44417M	44418M
DS1 MAX 250/250	B	44421M	44422M
DS1 MAX 400/400	B	44425M	44426M
DS1 MAX 630/630	B	44433M	44434M
DS1 MAX 800/800	B	44437M	44438M



DS1 MAX-ELECTRONIC TYPE WITH MOUNTED MN+OF

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 MAX 400/3300	B	44485M	44486M
DS1 MAX 630/3300	B	44489M	44490M
DS1 MAX 800/3300	B	44493M	44494M



**DS1 MAX-ELECTRONIC TYPE WITH MOUNTED MX+OF**

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 MAX 400/3300	B	44453M	44454M
DS1 MAX 630/3300	B	44457M	44458M
DS1 MAX 800/3300	B	44461M	44462M

**DS1 MAX- THERMOMAGNETIC TYPE WITH MOUNTED MX+OF**

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 MAX 125/63	B	44328M	44330M
DS1 MAX 125/80	B	44334M	44335M
DS1 MAX 125/100	B	44338M	44339M
DS1 MAX 125/125	B	44342M	44343M
DS1 MAX 250/160	B	44345M	44346M
DS1 MAX 250/200	B	44349M	44350M
DS1 MAX 250/250	B	44353M	44354M
DS1 MAX 400/400	B	44357M	44358M
DS1 MAX 630/630	B	44365M	44366M
DS1 MAX 800/800	B	44369M	44370M

**DS1-THERMOMAGNETIC TYPE WITH MOUNTED MN+OF**

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 125/40	F	44385	44386
DS1 125/50	F	44389	44390
DS1 125/100	F	44405	44406
DS1 125/125	F	44409	44410
DS1 160/100	F	44477	44478
DS1 630/500	F	44429	44430



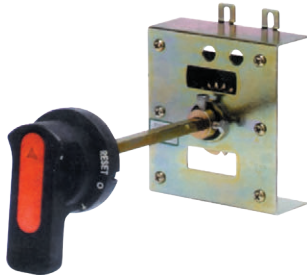
UNTIL SUPPLY
LAST

DS1-ELECTRONIC TYPE WITH MOUNTED MN+OF

	Product category	Catalogue number 400V	Catalogue number 230V
DS1 630/3300	F	44489	44490



UNTIL SUPPLY
LAST



REMOTE CONTROL (MANUAL)

5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

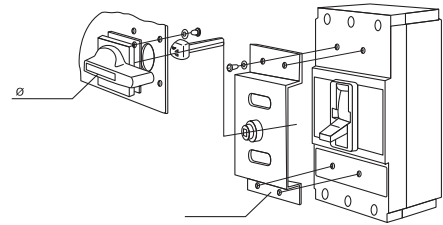
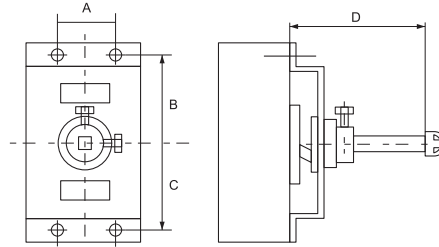
Description:

The device switches off/on the breaker to which manual operative rotary mechanism is mounted

- two operating positions of the executive mechanism fixed at 90°C

Mounting:

The base is mounted with bolts right on the cover (scheme 1 mounting), and the handle is mounted at the door of the distribution box, using an extension axis it is joined to the base



REMOTE CONTROL FOR MCCB, DS1

Type of the breaker	Dimensions (mm)			Dmin	Dmax	Packing/Box (pcs)	Product category	Catalogue number
	A	B	C					
DS1 125A*	25	50	50	65	115	1	F	44967
DS1 160A*	30	50	50	65	115	1	F	44968
DS1 250A*	35	70	70	80	130	1	F	44969
DS1 400A*	45	107	107	85	105	1	F	44970
DS1 630A*	70	119	119	110	110	1	F	44971
DS1 800A*	70	119	119	110	110	1	F	44972

*3 year standard+0 year extended warranty

UNTIL SUPPLY
LAST



REMOTE CONTROL FOR MCCB, DS1 MAX

Type of the breaker	Dimensions (mm)			Dmin	Dmax	Packing/Box (pcs)	Product category	Catalogue number
	A	B	C					
DS1 MAX 63A	25	50	50	65	115	1	B	44966M
DS1 MAX 125A	25	50	50	65	115	1	B	44967M
DS1 MAX 250A	35	70	70	80	130	1	B	44969M
DS1 MAX 400A	45	107	107	85	105	1	B	44970M
DS1 MAX 630/800A	70	119	119	110	110	1	B	44972M





DS1 - 125-160

REMOTE CONTROL (ELECTRICAL)

5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

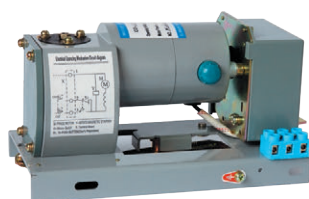
Description:

The device switches off/on the breaker to which manual operative rotary mechanism is mounted

- two operating positions of the executive mechanism fixed at 90°C

Mounting:

The base is mounted with bolts right on the cover (scheme 1 mounting), and the handle is mounted at the door of the distribution box, using an extension axis it is joined to the base



DS1 - 250-800

ELECTRICAL REMOTE CONTROL FOR MCCB DS1

Type of the breaker	Dimensions (mm)					Packing/Box (pcs)	Product category	Catalogue number	
	A	A1	B	B1	H			Operating voltage (V)	
								230V	400V
DS1 125	103.5	110	30	90	92	1	F	44912	44907
DS1 160	103.5	110	35	90	92	1	F	44913	44908
DS1 250	139	-	132	-	105	1	F	44914	44909
DS1 400	226	-	132	-	132	1	F	44915	44910
DS1 630	226	-	132	-	132	1	F		44911
DS1 800	226	-	132	-	132	1	F		44911

*3 year standard+0 year extended warranty

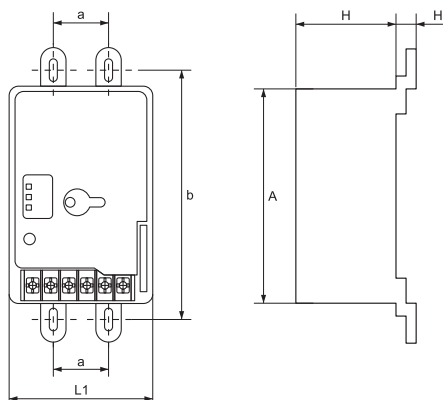
UNTIL SUPPLY
LAST

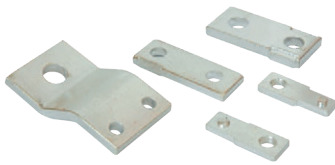


DS1 MAX - 63-250

ELECTRICAL REMOTE CONTROL FOR MCCB DS1 MAX

Type of the breaker	Dimensions (mm)					Packing/Box (pcs)	Product category	Catalogue number	
	L1	B	B	H	H1			Operating voltage (V)	
								230V	400V
DS1 MAX 63A	116	90	50	77	12,5	1	B	44917M	44906M
DS1 MAX 125A	116	90	50	77	12,5	1	B	44912M	44907M
DS1 MAX 250A	116	90	70	77	15	1	B	44914M	44909M
DS1 MAX 400A	176	130	107	115	27	1	B	44915M	44910M
DS1 MAX 630A	176	130	119	115	31	1	B	44916M	44911M
DS1 MAX 800A	176	130	119	115	31	1	B	44916M	44911M





TERMINAL PLATES FOR MCCB - DS1 AND DS1 MAX TYPE

Straight copper electro-tinned extensions enabling cable connection outside the switch terminals and providing excellent contact with the switch terminal base. Terminal extensions with different cross section are available depending on the switch rated power.

MOUNTING:

Extensions are directly bolt mounted to the switch terminal base.

TERMINAL PLATES FOR MCCB - DS1

Type	Product category	Rated current (A)	Catalogue number 3pcs/set
TP 125	F	125	31125
TP 160	F	160	31160
TP 250	F	250	31250
TP 400	F	400	31400
TP 630	F	630	31630
TP 800	F	800	31850

UNTIL SUPPLY
LAST



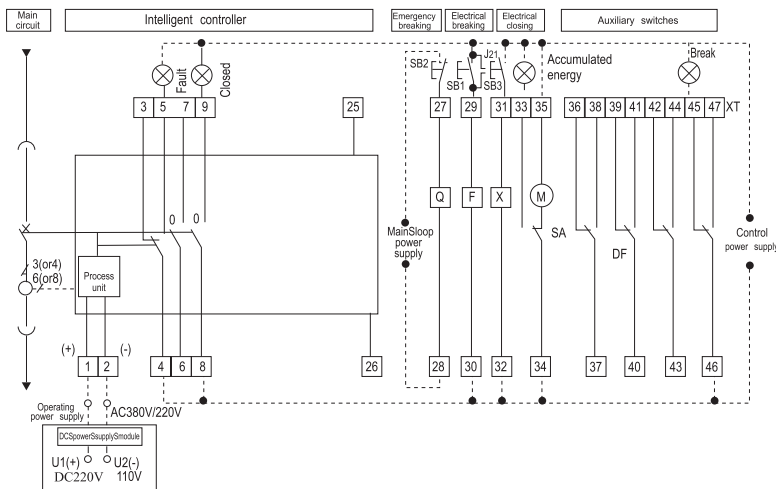
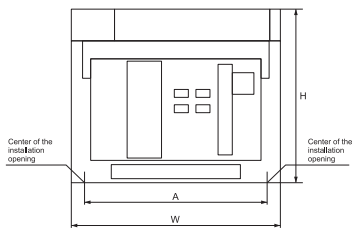
TERMINAL PLATES FOR MCCB - DS1 MAX

Type	Product category	Rated current (A)	Catalogue number 3pcs/set	Catalogue number 4pcs/set
TP 125 MAX	B	125	31125M	-
TP 250 MAX	B	250	31250M	-
TP 400 MAX	B	400	31400M	314400M
TP 630 MAX	B	630	31630M	314630M
TP 800 MAX	B	800	31850M	314850M



Documents corresponding to the product:

Standard EN 60947-1; EN 60947-2; IEC 947-2

**MOULDED CASE CIRCUIT BREAKER(MCCB)
DW1 SERIES**

The DW1 series is an intelligent type circuit breaker used to control and protect low voltage electrical distribution network. Possibility to set the parameters of the circuit protection, built in under voltage release, remote control, earth protection and load monitoring.

FUNCTIONS:

- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics
- motor control
- mounted auxiliary devices for automation - under voltage release, earth protection, intelligent controlling block with a possibility for a choice of the protected function

TECHNICAL DATA:

- Rated operating voltage: 690V; 50/60Hz
- Isolating voltage: 690V
- Surge voltage wear resistance: 2kV

- Joining terminal: bolt connection with 4 bolts to the power supply railConnecting:
 - copper rails
 - busway connection – at the back
- Electrical wear resistance (number of cycles): ≥2000
- Mechanical wear resistance (number of cycles): ≥9000
- IP code: IP54
- Mounting:
 - clamping with bolts
 - mounting position: vertical gradient – maximum 5°
- Test button
- Ambient temperature: -10°C + 65°C
- Installation altitude: up to 2000m

BASIC PROTECTIVE FUNCTIONS:

- Overload protection with long time delay
- Short circuit protection with short time delay, time inversion limit
- Short circuit protection with short time delay, time fixed limit
- Instantaneous short circuit protection
- Earth protection function
- Full stability function
- "Overload alarm" function
- Test function
- Auto diagnostics function

A commutation type of breakers with RS 485 connection for duplex transmission of all function parameters, adjustment and data can also be produced at client's order and delivery terms agreement.

Type	Dimensions		
	A	H	W
DW1-2000 FIXED	362	402	373
DW1-3200 FIXED	422	402	363
DW1-2000 DRAW-OUT	375	432	461
DW1-3200 DRAW-OUT	435	432	494
DW1-4000 DRAW-OUT	550	432	494
DW1-6300 DRAW-OUT	813	452	504

Type	Rated current In (A)	Rated voltage Un (V)	Breaking capacity (kA)		Electrical wear resistance (number of cycles)	Mechanical wear resistance (number of cycles)	Packing/Box (pcs)	Product category	Catalogue number
			400 V	690 V					
DW1-2000 FIXED	1600	AC400V	80	50	2000	9000	1/1	B	44208
DW1-2000 FIXED	2000	AC400V	80	50	2000	9000	1/1	B	44209
DW1-3200 FIXED	2500	AC400V	100	65	2000	9000	1/1	B	44255
DW1-3200 FIXED	3200	AC400V	100	65	2000	9000	1/1	B	44329
DW1-2000 DRAW-OUT	1600	AC400V	80	50	2000	9000	1/1	B	44208DO
DW1-2000 DRAW-OUT	2000	AC400V	80	50	2000	9000	1/1	B	44209DO
DW1-3200 DRAW-OUT	2500	AC400V	100	65	2000	9000	1/1	B	44255DO
DW1-3200 DRAW-OUT	3200	AC400V	100	70	2000	9000	1/1	B	44329DO
DW1-4000 DRAW-OUT	3600	AC400V	100	75	2000	9000	1/1	B	44436DO
DW1-4000 DRAW-OUT	4000	AC400V	100	75	2000	9000	1/1	B	44440DO
DW1-6300 DRAW-OUT	5000	AC400V	120	75	2000	9000	1/1	B	44650DO
DW1-6300 DRAW-OUT	6300	AC400V	120	75	2000	9000	1/1	B	44663DO

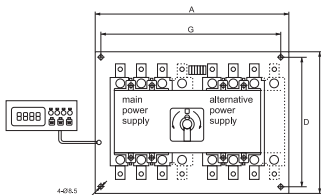
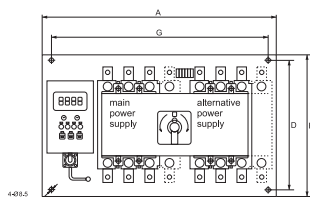


In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

EN 60947-1

EN 60947-2; EN 60947-6-1

**DUAL POWER CHANGE-OVER SWITCH
EQ1 SERIES (ATS)**

The system for dual power change-over switch EQ1 is designed to provide continuous power supply and two electrical sources automatic switch in case of failure or deviation from the set parameters. It switches only when the three phases of the second power supply source are available. The system for dual power change-over switch consists of two molded case circuit breakers mounted on a metal frame connected with common operating mechanism and controlled by a command device that controls the system parameters' correspondence.

FUNCTIONS:

- Switching on/off heavy loaded electrical circuits at main power supply discrepancy
- Switching to dual power change-over at power supply phase lack
- with option to connect to fire alarm controller. In case of fire, the ATS switches off both power supply sources
- Breaking of electrical circuits and control of powerful consumers
- Used as a main breaker in housing or industrial distributing installations supplied with a generator or a second power supply source (hospitals, post offices, military sites, control rooms)
- Remarkable with high reliability of current characteristics
- Control: motor
- Controls the following circuit parameters:
 - presence of the three phases
 - the phase voltage to be in the set limits
 - overload
 - short circuit at the outlet

TECHNICAL DATA:

- Rated operating voltage: 690V; 50/60Hz
- Surge voltage wear resistance: $\geq 6000V$
- Joining terminal: bolt connection with 4 bolts to the power supply rail
- Connecting:
 - copper rails
 - flexible or rigid conductors
- Electrical wear resistance (number of cycles): ≥ 2000
- Mechanical wear resistance (number of cycles): ≥ 6000
- IP code: IP21
- Mounting:
 - clamping with bolts
 - mounting position: vertical gradient, maximum 5°
- Plastic material of the breakers of UV rays and non-flammable
- Ambient temperature: -10°C + 65°C
- Installation altitude: up to 2000m

BASIC FUNCTIONS OF THE CONTROL DEVICE:

- Overload protection
 - Instantaneous short circuit protection
 - Under phase protection
 - Undervoltage protection
 - Possibility for setting the change-over time between the two sources – min 3s
 - Possibility for automatic switch-over to the main power supply source after restoring its parameters
- The system for dual power change-over switch is offered in two types:
- with display (control device) mounted on the mounting plate (integrated type)
 - with separated control display

Type of the breaker	Overall dimensions (mm)				
	A	B	C	D	H
EQ1 - 100	405	365	230	250	<170
EQ1 - 225	450	410	230	250	<190
EQ1 - 400	570	510	300	330	<200
EQ1 - 630	680	620	300	330	<250
EQ1 - 800	750	690	300	330	<250

Type	Rated current In (A)	Max. breaking capacity (kA) Icu	Operating breaking capacity (kA) Ics	Section of the power supply conductor (mm²)	Electrical wear resistance (number of cycles)	Mechanical wear resistance (number of cycles)	Packing / Box (pcs)	Product category	Catalogue number
EQ1 - 100	100	50	35	35	2000	6000	1 / 1	B	44100
EQ1 - 225	225	50	35	70	2000	6000	1 / 1	B	44225
EQ1 - 400	400	100	65	180	2000	6000	1 / 1	B	44403
EQ1 - 630	630	100	65	240	1000	3000	1 / 1	B	44633
EQ1 - 800	800	100	65	240	1000	3000	1 / 1	B	44833
EQ1 - 100*	100	50	35	35	2000	6000	1 / 1	B	44101
EQ1 - 225*	225	50	35	70	2000	6000	1 / 1	B	44226
EQ1 - 400*	400	100	65	180	2000	6000	1 / 1	B	44404
EQ1 - 630*	630	100	65	240	1000	3000	1 / 1	B	44634
EQ1 - 800*	800	100	65	240	1000	3000	1 / 1	B	44834



Note: *Dual power change-over switch with separated control display

Documents corresponding to the product:

EN 61008-1

EN 61008-2; EN 60947-1



TYPE AC FOR AC CURRENT

ELECTRO-MAGNETIC RESIDUAL CURRENT DEVICES (RCD) JEL1

The residual current device works with no extra power supply to the operating mechanism. It compares the magnitude of the currents through the neutral and phase conductors. The conductors are coiled on toroid and together with the secondary winding form a measurement transformer. The power conductors are coiled in such a way that the magnetic fields generated at electrical current flow through them are mutually neutralized. At failure in the insulation of some of the conductors or at presence of a person under voltage, the system is misbalanced and the magnetic fields can not be neutralized. This residual field generates in the secondary current winding, called current leakage. The device breaks when the value of this current exceeds the limit value of the residual current breaker.

FUNCTIONS:

- switching off heavy-loaded electrical circuits at insulation damage of the conductors to the consumers
- switching off heavy-loaded electrical circuits at presence of a person under voltage
- used to protect not only particular consumers/ circuits, but also the whole panel
- remarkable with high reliability of current characteristics
- control: manual switching on and automatic switching off at exit failure

TECHNICAL DATA:

- Rated operating voltage: 230/400V; 50/60 Hz
- Rated current: according to the table
- Responsiveness: 30; 100; 300; 500mA
- Time delay until break: <0.1s at $I_{\Delta n}$ and <0.04s at $2I_{\Delta n}$
- Surge voltage wear resistance: $\geq 2000V$
- Short circuit current wear resistance: 4500A, 6000A

- Joining terminal: flat (tunnel) screw terminal made of 1.5 coldly draw-plated plane Q235A
- Type of the plastic:
 - material: self-extinguishing nylon PA66
 - permittivity strength: >18MV/m
- Contact head: silver graphite CAg(5)
- Static contact: pure copper T2Y2 type
- Electrical wear resistance (number of cycles): ≥ 5000
- Mechanical wear resistance (number of cycles): ≥ 10000
- IP code: IP>20
- Indication for operating (switched on) position
- Plastic material of the breakers of UV rays and non-flammable
- Ambient temperature: -10°C + 65°C
- Installation altitude: up to 2000m

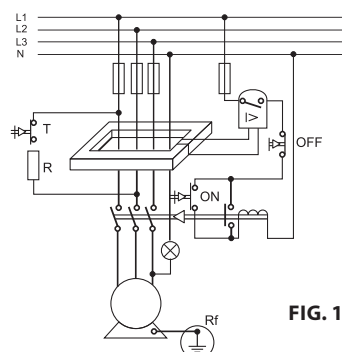
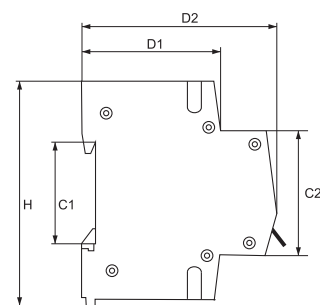
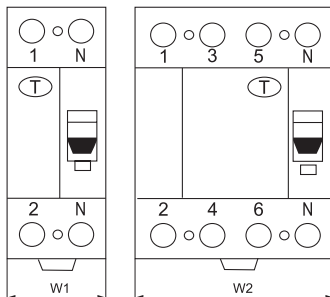
CONNECTING:

- power supply busbar (only for bipolar)
- flexible or rigid conductors with corresponding section

MOUNTING:

- on DIN-rail
- mounting position: vertical

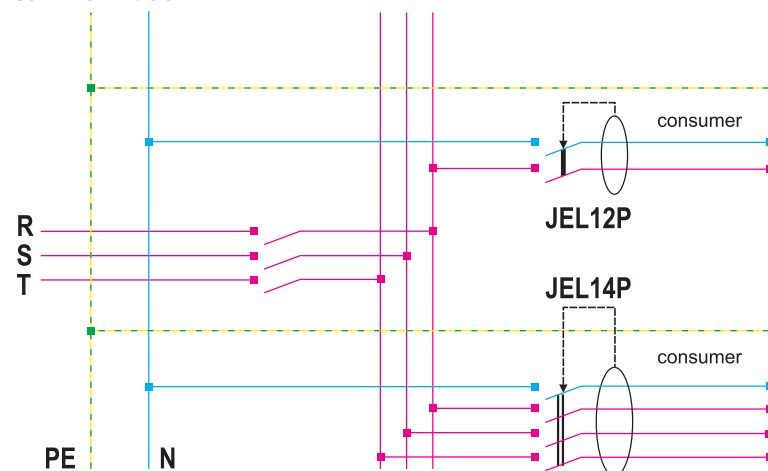
The residual current device is mounted in the distribution box, and after the device the neutral conductor and the earthing conductor must not be connected together. In order to work accurately, the device must have three- or five-conductor grid with separate protective conductor (PE) (e.g. earthing system TN-S or TT with three or five conductors). The corpus of the consumer depending on the grid type must be connected either to the protective conductor or be earthed. (Fig.1)



Dimensions (mm)

W1	W2	H	H1	H2	D1	D2
35	70	81	35	45	50	72

CONNECTING SCHEME



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

ELECTRO-MAGNETIC RESIDUAL CURRENT DEVICES (RCD) JEL1 AND JEF

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

Residual current devices JEL 1, 6kA - Type AC - alternating fault currents sensible. Impulse withstand voltage 2000VAC



TYPE AC FOR AC CURRENT

Type	Number of poles	Breaking capacity (kA)	Rated current In (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I Δ n (mA)			
						30	100	300	500
JEL 1	2P	6	10.0	1 / 60	B	40210	40212	40213	40214
JEL 1	2P	6	16.0	1 / 60	B	40216	40217	40218	40219
JEL 1	2P	6	20.0	1 / 60	B	40292	40293	40294	40295
JEL 1	2P	6	25.0	1 / 60	B	40221	40222	40223	40224
JEL 1	2P	6	32.0	1 / 60	B	40231	40232	40233	40234
JEL 1	2P	6	40.0	1 / 60	B	40241	40242	40243	40244
JEL 1	2P	6	63.0	1 / 60	B	40261	40262	40263	40264
JEL 1	2P	6	80.0	1 / 60	B	40281	40282	40283	40284
JEL 1	2P	6	100.0	1 / 60	B	40291	40296	40297	40298



TYPE AC FOR AC CURRENT

Type	Number of poles	Breaking capacity (kA)	Rated current In (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I Δ n (mA)			
						30	100	300	500
JEL 1	4P	6	10.0	1 / 30	B	40410	40412	40413	40414
JEL 1	4P	6	16.0	1 / 30	B	40416	40417	40418	40419
JEL 1	4P	6	20.0	1 / 30	B	40492	40493	40494	40495
JEL 1	4P	6	25.0	1 / 30	B	40421	40422	40423	40424
JEL 1	4P	6	32.0	1 / 30	B	40431	40432	40433	40434
JEL 1	4P	6	40.0	1 / 30	B	40441	40442	40443	40444
JEL 1	4P	6	63.0	1 / 30	B	40461	40462	40463	40464
JEL 1	4P	6	80.0	1 / 30	B	40481	40482	40483	40484
JEL 1	4P	6	100.0	1 / 30	B	40491	40496	40497	40498



TYPE AC FOR AC CURRENT
UNTIL SUPPLY
LAST

Type	Number of poles	Breaking capacity (kA)	Rated current In (A)	Packing/Box (pcs)	Product category	Leakage current I Δ n (mA)	Catalogue number
JEF*	2P	4.5	10	1/60	F	300	40713JEF
JEF*	2P	4.5	10	1/60	F	30	40710JEF
JEF*	2P	4.5	16	1/60	F	300	40718JEF
JEF*	2P	4.5	20	1/60	F	300	40794JEF
JEF*	2P	4.5	25	1/60	F	300	40723JEF
JEF*	2P	4.5	32	1/60	F	300	40733JEF
JEF*	2P	4.5	63	1/60	F	300	40763JEF

*3 year standard+0 year extended warranty



Documents corresponding to the product:

EN 61008-1

EN 61008-2; EN 60947-1

**TYPE A FOR AC/DC CURRENT****TYPE A FOR AC/DC CURRENT****TYPE A FOR AC/DC CURRENT****ELECTRO-MAGNETIC RESIDUAL CURRENT DEVICES (RCD) JEL1A**

These are Residual Current Devices (RCDs) JEL 1A with enhanced sensibility and fast - operating protection devices applicable in circuits with harmonic or direct pulsating current component presence.

FUNCTIONS:

- switching off electrical circuits on load at conductor insulation breaking to the consumer
- switching off electrical circuits on load at direct and indirect contact
- switching off electrical circuits on load at alternating earth fault currents during consequent light impact
- switching off consumers at harmonic presence due to luminescent lights
- switching off consumers in DC circuits at fault currents presence
- mechanical indicator for ON position

TECHNICAL DATA:

- Rated operating voltage: 230/400V; 50 Hz
- Rated current: according to the table
- Responsiveness: 30; 100; 300; 500mA
- Time delay until break: <0.1s at I Δ n and <0.04s at 2I Δ n
- Short circuit current wear resistance: 6000A
- Electrical wear resistance (number of cycles): ≥5000
- Mechanical wear resistance (number of cycles): ≥10000
- IP code: IP>20

CONNECTING:

- power supply busbar (only for bipolar)
- flexible or rigid conductors with corresponding section

MOUNTING:

- on DIN-rail
- mounting position: vertical

Residual current devices JEL 1A, 6kA - Type A - alternating and pulsating direct fault currents sensible Impulse withstand voltage 2000VAC/ 400VDC

Type	Number of poles	Breaking capacity (kA)	Rated current In (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I Δ n (mA)			
						30	100	300	500
JEL 1A	2P	6	10.0	1 / 60	B	40510	40512	40513	40514
JEL 1A	2P	6	16.0	1 / 60	B	40516	40517	40518	40519
JEL 1A	2P	6	20.0	1 / 60	B	40592	40593	40594	40595
JEL 1A	2P	6	25.0	1 / 60	B	40521	40522	40523	40524
JEL 1A	2P	6	32.0	1 / 60	B	40531	40532	40533	40534
JEL 1A	2P	6	40.0	1 / 60	B	40541	40542	40543	40544
JEL 1A	2P	6	63.0	1 / 60	B	40561	40562	40563	40564
JEL 1A	2P	6	80.0	1 / 60	B	40581	40582	40583	40584
JEL 1A	2P	6	100.0	1 / 60	B	40591	40596	40597	40598



Type	Number of poles	Breaking capacity (kA)	Rated current In (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I Δ n (mA)			
						30	100	300	500
JEL 1A	4P	6	10.0	1 / 30	B	40610	40612	40613	40614
JEL 1A	4P	6	16.0	1 / 30	B	40616	40617	40618	40619
JEL 1A	4P	6	20.0	1 / 30	B	40692	40693	40694	40695
JEL 1A	4P	6	25.0	1 / 30	B	40621	40622	40623	40624
JEL 1A	4P	6	32.0	1 / 30	B	40631	40632	40633	40634
JEL 1A	4P	6	40.0	1 / 30	B	40641	40642	40643	40644
JEL 1A	4P	6	63.0	1 / 30	B	40661	40662	40663	40664
JEL 1A	4P	6	80.0	1 / 30	B	40681	40682	40683	40684
JEL 1A	4P	6	100.0	1 / 30	B	40691	40696	40697	40698



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

ELECTRO-MAGNETIC RESIDUAL CURRENT DEVICES (RCD) JEL2

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY



TYPE AC FOR AC CURRENT

UNTIL SUPPLY
LAST

Residual current devices JEL2, 4,5kA - Type AC - alternating fault currents sensible. Impulse withstand voltage 2000VAC

Type	Number of poles	Breaking capacity (kA)	Rated current I _n (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I _{Δn} (mA)			
						30	100	300	500
JEL 2	2P	4,5	10.0	1 / 60	F				
JEL 2	2P	4,5	16.0	1 / 60	F	40716		40718	
JEL 2	2P	4,5	32.0	1 / 60	F				
JEL 2	2P	4,5	40.0	1 / 60	F			40743	40744
JEL 2	2P	4,5	63.0	1 / 60	F	40761		40763	



TYPE AC FOR AC CURRENT

UNTIL SUPPLY
LAST

Type	Number of poles	Breaking capacity (kA)	Rated current I _n (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I _{Δn} (mA)			
						30	100	300	500
JEL 2	4P	4,5	16.0	1 / 30	F				
JEL 2	4P	4,5	40.0	1 / 30	F				40844
JEL 2	4P	4,5	63.0	1 / 30	F			40863	40864



ELECTRO-MAGNETIC RESIDUAL CURRENT DEVICES (RCD) JEL2 SIGMA

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY



TYPE AC FOR AC CURRENT

UNTIL SUPPLY
LAST

Type	Number of poles	Breaking capacity (kA)	Rated current I _n (A)	Packing/Box (pcs)	Product category	Catalogue number			
						Leakage current I _{Δn} (mA)			
						30	100	300	500
JEL 2 SIGMA	2P	6	10.0	1 / 30	F			40213S	
JEL 2 SIGMA	2P	6	16.0	1 / 30	F				
JEL 2 SIGMA	2P	6	20.0	1 / 30	F	40292S		40294S	40295S
JEL 2 SIGMA	2P	6	25.0	1 / 30	F			40223S	
JEL 2 SIGMA	2P	6	40.0	1 / 30	F			40242S	
JEL 2 SIGMA	2P	6	63.0	1 / 30	F			40262S	40263S
JEL 2 SIGMA	4P	6	20.0	1 / 30	F	40492S		40494S	
JEL 2 SIGMA	4P	6	25.0	1 / 30	F			40423S	
JEL 2 SIGMA	4P	6	32.0	1 / 30	F			40432S	
JEL 2 SIGMA	4P	6	40.0	1 / 30	F			40443S	
JEL 2 SIGMA	4P	6	63.0	1 / 30	F				40464S

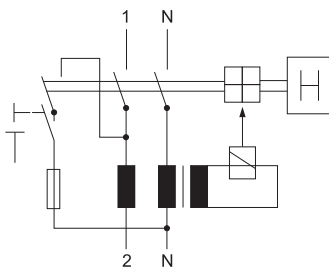
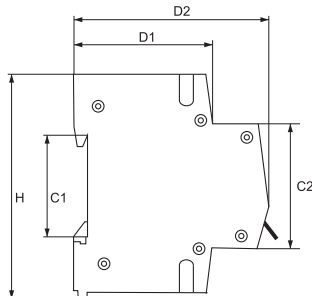
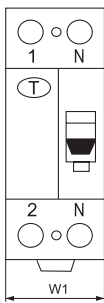


Documents corresponding to the product:

EN 61 009-1; EN 61009-2;



TYPE AC FOR AC CURRENT



TYPE AC FOR AC CURRENT

ELECTRO-MAGNETIC RESIDUAL CURRENT OPERATED CIRCUIT BREAKER (RCBO)- JEL5

7+0 standard +extended
7 YEAR TOTAL WARRANTY
*for industrial usage, 3 years warranty

DESCRIPTION OF THE OPERATING SYSTEM:

It is a combination of automatic circuit breaker and residual current electromagnetic device. It combines the properties of the two elements. The circuit breaker reacts at short circuit or overload in the protected circuit, and the electromagnetic residual current device - at failure in the conductors' insulation. It compares the magnitude of the currents through the neutral and phase conductors. The conductors are coiled on toroid and together with the secondary winding form a measurement transformer. The power conductors are coiled in such a way that the magnetic fields generated at electrical current flow through them are mutually neutralized. At failure in the insulation of some of the conductors or at presence of a person under voltage, the system is misbalanced and the magnetic fields can not be neutralized. This residual magnetic field generates in the secondary current winding, called current leakage. When the value of this current exceeds the limit value of the residual current breaker the device breaks and the residual current device switches off from the power supply grid. The device operates without any extra power supply to the electromagnetic residual current and is not influenced by voltage varying or decreasing.

FUNCTIONS:

- switching off heavy-loaded electrical circuits at short circuit or overload
- switching off heavy-loaded electrical circuits at insulation damage of the conductors to the consumers
- switching off heavy-loaded electrical circuits at presence of a person and animals under voltage
- used to protect not only particular consumers/circuits, but also the whole panel
- remarkable with high reliability of current characteristics
- control: manual switching on and automatic switching off at failure in the insulation after the breaker

TECHNICAL DATA:

- Rated operating voltage: 230V 50 Hz
- Circuit breaker rated current: according to the table
- Residual current responsiveness: 30; 100; 300; 500mA

- Time delay until break:
 - of the residual current device: $<0.1s$ at $I \Delta n$ and $<0.04s$ at $2I \Delta n$
 - of the circuit breaker: $<0.1s$
- Circuit breaker tripping curve: C
- Surge voltage wear resistance: $\geq 2000V$
- Breaking capacity: 10000
- Joining terminal: flat (tunnel) screw terminal made of 1.5 coldy draw-plated plane Q235A
- Type of the plastic:
 - material: self-extinguishing nylon PA66
 - dielectrical strength: $>18MV/m$
- Contact head: silver graphite CAg(5)
- Static contact: pure copper T2Y2 type
- Electrical wear resistance (number of cycles): ≥ 5000
- Mechanical wear resistance (number of cycles): ≥ 10000
- IP code: IP>20
- Indication for operating (switched on) position
- Breakers plastic material of UV rays and non-flammable
- Ambient temperature: $-10^{\circ}C + 65^{\circ}C$
- Installation altitude: up to 2000m

CONNECTING:

- flexible or rigid conductors with corresponding section

MOUNTING:

- on DIN-rail
- mounting position: vertical

The residual current device is mounted in the distribution box, and after the device the neutral conductor and the earthing conductor must not be connected together. In order to work accurately, the device must have three- or five-conductor grid with separate operating neutral conductor (N) and separate protecting conductor (PE) (e.g. earthing system TN-S or TT with three or five conductors).

Dimensions (mm)

W1	H	C1	C2	D1	D2
35	81	35	45	50	72

Combined electromagnetic residual current device and circuit breaker 2P 6kA

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing / Box (pcs)	Product category	Catalogue number			
						Leakage current $I \Delta n$ (mA)			
						30	100	300	500
JEL5	2p	6	10	1 / 60	B	40010	40011	40013	40015
JEL5	2p	6	16	1 / 60	B	40016	40017	40018	40019
JEL5	2p	6	25	1 / 60	B	40025	40021	40023	40026
JEL5	2p	6	32	1 / 60	B	40032	40031	40033	40035
JEL5	2p	6	40	1 / 60	B	40040	40041	40043	40045



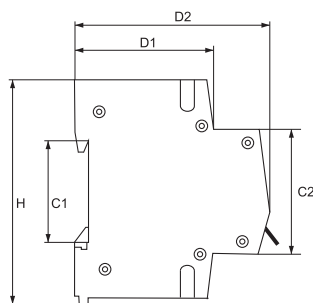
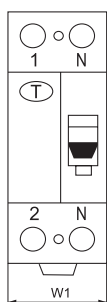
In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding
to the product:

EN 61 009-1; EN 61009-2;



TYPE AC FOR AC CURRENT

ELECTRONIC RESIDUAL CURRENT OPERATED
CIRCUIT BREAKER (RCBO)

DESCRIPTION OF THE OPERATING SYSTEM:

It is a combination of automatic circuit breaker and residual current electromagnetic device. It combines part of the properties of the two elements. The circuit breaker reacts at short circuit in the protected circuit, and the electromagnetic residual current device - at failure in the conductors' insulation. It compares the rate of the currents through the conductors in an electronic comparator. The residual current device operates normally at voltage feed. The voltage is needed for the comparator's energizing - a semi-conductor element with constantly set leakage current rate. This rate is compared with the actual rate. When the margin of the comparison is neutral, the residual current device does not operate, but at failure in the protected circuit insulation when it exceeds the set margin it operates and switches off the protection. For the normal operation of the residual current device, the power supplying circuit voltage must be over 170V and there must be no time variation.

FUNCTIONS:

- switching off heavy-loaded electrical circuits at short circuit or overload
- switching off heavy-loaded electrical circuits at insulation damage of the conductors to the consumers
- switching off heavy-loaded electrical circuits at presence of a person under voltage
- used to protect not only particular consumers/ circuits, but also the whole panel
- remarkable with high reliability of current characteristics
- control: manual switching on and automatic switching off at exit failure

TECHNICAL DATA:

- Rated operating voltage: 230/400V 50 Hz
- Circuit breaker rated current: according to the table
- Residual current responsiveness: 30; 100; 300; 500mA
- Time delay until break:
 - of the residual current device: <0.1s at $I \Delta n$ and <0.04s at $2I \Delta n$
 - of the circuit breaker: <0.1s
- Circuit breaker tripping curve: C
- Surge voltage wear resistance: $\geq 2000V$
- Breaking capacity: 4500A; 6000A; 10000A
- Joining terminal: flat (tunnel) screw terminal
- Electrical wear resistance (number of cycles): ≥ 500
- Mechanical wear resistance (number of cycles): ≥ 2000
- IP code: IP>20
- Indication for operating (switched on) position

CONNECTING:

- power supply busbar (for two- or three polar)
- flexible or rigid conductors with corresponding section

MOUNTING:

- on DIN-rail
- mounting position: vertical
- Breakers plastic material of UV rays and non-flammable
- Ambient temperature: $-10^{\circ}C + 65^{\circ}C$
- Installation altitude: up to 2000m

The residual current device is mounted in the distribution box, and after the device the neutral conductor and the earthing conductor must not be connected together. In order to work accurately, the device must have separate conductors for operational neutral conductor (N) and protective conductor (e.g. earthing system TN-S or TT with three or five conductors).

Dimensions (mm)

W1	H	C1	C2	D1	D2
35	81	35	45	50	72

Combined electronic residual current device with circuit breaker 2P, 6kA

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing / Box (pcs)	Product category	Catalogue number
						Leakage current $I \Delta n$ (mA)
						30
JEL 4 C10	2p	6	10	1 / 60	B	40211E
JEL 4 C16	2p	6	16	1 / 60	B	40215E
JEL 4 C20	2p	6	20	1 / 60	B	40225E
JEL 4 C25	2p	6	25	1 / 60	B	40240E
JEL 4 C32	2p	6	32	1 / 60	B	40265E
JEL 4 C40	2p	6	40	1 / 60	B	40274E



TYPE AC FOR AC CURRENT



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



TYPE AC FOR AC CURRENT

Combined electronic residual current device with circuit breaker 2P, 6kA

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing / Box (pcs)	Product category	Catalogue number	
						Leakage current I _{Δn} (mA)	
						30	
JEL 4 C10	2p	6	10	1 / 60	B		40211CE
JEL 4 C16	2p	6	16	1 / 60	B		40215CE
JEL 4 C20	2p	6	20	1 / 60	B		40225CE
JEL 4 C25	2p	6	25	1 / 60	B		40240CE
JEL 4 C32	2p	6	32	1 / 60	B		40265CE
JEL 4 C40	2p	6	40	1 / 60	B		40274CE



TYPE AC FOR AC CURRENT

ELECTRONIC RESIDUAL CURRENT OPERATED CIRCUIT BREAKER (RCBO) JEL3

7+0
standard
+extended

7 YEAR TOTAL WARRANTY

*for industrial usage, 3 years warranty

Combined electronic residual current device with circuit breaker 2P, 10kA

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing/Box (pcs)	Leakage current I _{Δn} (mA)	Product category	Catalogue number curve B	Catalogue number curve C
JEL 3 C6	1p+N	10	6	5/100	30	B	40906B	40906
JEL 3 C10	1p+N	10	10	5/100	30	B	40910B	40910
JEL 3 C16	1p+N	10	16	5/100	30	B	40916B	40916
JEL 3 C20	1p+N	10	20	5/100	30	B	40920B	40920
JEL 3 C25	1p+N	10	25	5/100	30	B	40925B	40925
JEL 3 C32	1p+N	10	32	5/100	30	B	40932B	40932
JEL 3 C40	1p+N	10	40	5/100	30	B	40940B	40940



TYPE AC FOR AC CURRENT

Combined electronic residual current device with circuit breaker 2P, 6kA

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing/Box (pcs)	Leakage current I _{Δn} (mA)	Product category	Catalogue number curve B	Catalogue number curve C
JEL 3 B6	1p+N	6	6	5/100	30	B	40956B	40956C
JEL 3 B10	1p+N	6	10	5/100	30	B	40960B	40960C
JEL 3 B16	1p+N	6	16	5/100	30	B	40966B	40966C
JEL 3 B20	1p+N	6	20	5/100	30	B	40970B	40970C
JEL 3 B25	1p+N	6	25	5/100	30	B	40975B	40975C
JEL 3 B32	1p+N	6	32	5/100	30	B	40982B	40982C
JEL 3 B40	1p+N	6	40	5/100	30	B	40990B	40990C



ELECTRONIC RESIDUAL CURRENT OPERATED CIRCUIT BREAKER (RCBO) JEL6

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY



UNTIL SUPPLY
LAST

Combined electronic residual current device 2P

Compares the leakage current between the phase and neutral conductors or between two phases.

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing / Box (pcs)	Product category	Catalogue number
						Leakage current I _{Δn} (mA)
						30
JEL 6 C50	2P	6	50	6 / 120	F	40265



UNTIL SUPPLY
LAST

Combined electronic residual current device 3P

Compares the leakage current between the phases

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing / Box (pcs)	Product category	Catalogue number
						Leakage current I _{Δn} (mA)
						30 300
JEL 6 C16	3P	6	16	3 / 60	F	40318
JEL 6 C25	3P	6	25	3 / 60	F	40325 40323
JEL 6 C40	3P	6	40	3 / 60	F	40340 40343



UNTIL SUPPLY
LAST

Combined electronic residual current device 3P+N

Compares the leakage current between the three phases and neutral conductors.

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Packing / Box (pcs)	Product category	Catalogue number
						Leakage current I _{Δn} (mA)
						300
JEL 6 C40	3P+N	6	40	2 / 40	F	40447
JEL 6 C50	3P+N	6	50	2 / 40	F	40436





COMBINED SURGE ARRESTERS TYPE 1 + 2

7+0
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

Combined surge arresters Type 1 + 2 are coordinated in advance. They can manage and prevent the high energy during a thunderbolt and to assure the better level of security of electricity of the electrical equipment

Surge arresters Type 1 is used to catch the energy caused by higher electricity compared to the capacity of direct thunderbolt. The security device has passed a successful test according to the standards with electric wave 10/350 (class 1 test).

Surge arresters Type 2 is used to catch the energy caused by higher electricity, compared to the capacity of indirect strike or commutative overvoltage. The security device has passed a successful test according to the standards with electric wave 8/20 (class 2 test).

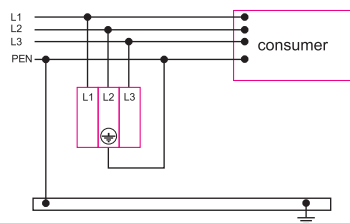
Response time: <25 nS

Voltage protection level: 1,5kV

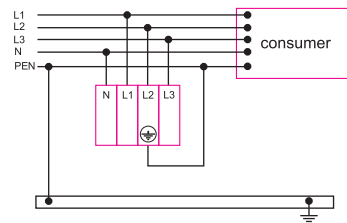
Type of arrester	Max inpluse current limp (10/350µs)	Max discharge current I _{max} (8/20 µs)	Nominal line voltage Un (V)	Earthing system	Product category	Catalogue number
SPD-X/1P+N	12.5kA	50kA	230	TT,TN-S	B	64502
SPD-X/3P	12.5kA	50kA	230/400	TN-C	B	64503
SPD-X/3P+N	12.5kA	50kA	230/400	TT,TN-S	B	64504



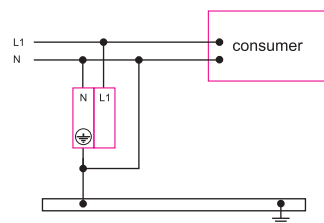
Three phase protection TN-C system



Three phase protection TN-S system



Monophase protection TT system

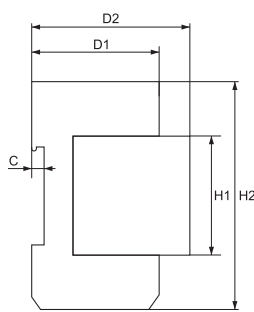


Documents corresponding to the product:

Standard EN61 643-1



TYPE AC FOR AC CURRENT



Dimensions (mm)

C	H1	H2	D1	D2
5	90	45	43,5	58

SURGE ARRESTERS SPD TYPE



The surge arrester consists of a semi-conductor valve element that opens at certain conditions. At normal conditions of the system, the surge arrester has infinitely high resistance between the protected conductors and earthing circuit. At voltage increase due to atmospheric nature or system failure, the valve element opens and leads the excessive voltage to the grounded circuit.

After reversion of the normal voltage the valve element closes. The arrester can endure high momentary overloading.

FUNCTIONS:

- protection of heavy-loaded electrical circuits from overload
- used to protect not only particular consumers/ circuits, but also the whole panel
- remarkable with high reliability of current characteristics
- control: automatic switching off at exit failure and recovery after eliminating the danger

TECHNICAL DATA:

- Rated operating voltage U_c : - the operating voltage of the surge arrester 275/440V; 50Hz
- Surge voltage U_p : the voltage created in surge arrester terminals at rated discharge current running:

according to the tables

- Rated discharge current I_n – the rated value of discharge current with a sinusoid 8/20 μ s, which can be repeatedly led to the ground: according to the tables
- Full discharge current I_{max} – the peak value of the discharge current with a sinusoid 8/20 μ s, which the surge arrester can bear once: according to the table
- Constant operating current: up to 800 μ A for 1P, 2P and 3P; up to 600 μ A for 1P + N, 3P + N
- Indication for damaged surge arrester
- Offered in types: 1P; 1P + N; 3P; 3P + N

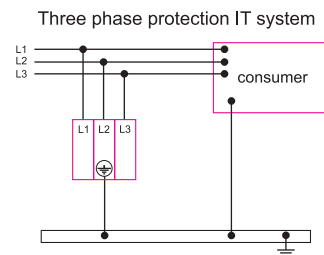
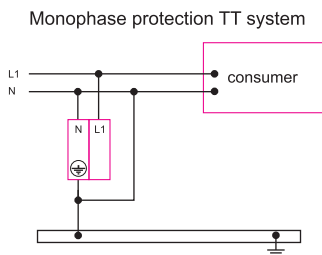
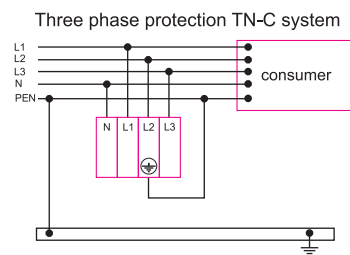
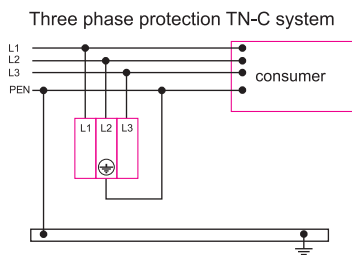
CONNECTING:

- flexible or rigid conductors with corresponding section

MOUNTING:

- on DIN-rail
- mounting position: vertical
- mounting in the distribution box on the front or right before the breaker according to the attached schemes
- Breakers plastic material of UV rays and non-flammable
- Ambient temperature: -10°C + 65°C
- Installation altitude: up to 2000m

COLOUR CODE for all types 5kA - yellow; white – 10kA; green – 20 kA and red 40kA



The surge arrester selection is made according to the overload risk level or atmosphere activity, named B, C or D (from high to low risk level).

THE COMPANY OFFERS THE FOLLOWING MODELS OF ARRESTERS:

Model SPD – Bxxxx – for systems with exceptionally high risk level. Mounted mainly in the beginning of the installation or in the main panel.

Model SPD – Cxxxx – for systems with high or average risk level. Mounted in the beginning of the installation or before the breaker.

Model SPD – Dxxxx – for systems with low risk level. Suitable for secondary protection of consumers in combination with SPD – Bxxxx/SPD – Cxxxx

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-D5/1p	5	10	275	1.2	17 / 170	B	64101
SPD-C10/1p	10	20	275	1.2	17 / 170	B	64102
SPD-C20/1p	20	40	275	1.8	17 / 170	B	64103
SPD-B40/1p	40	60	275	2	17 / 170	B	64104



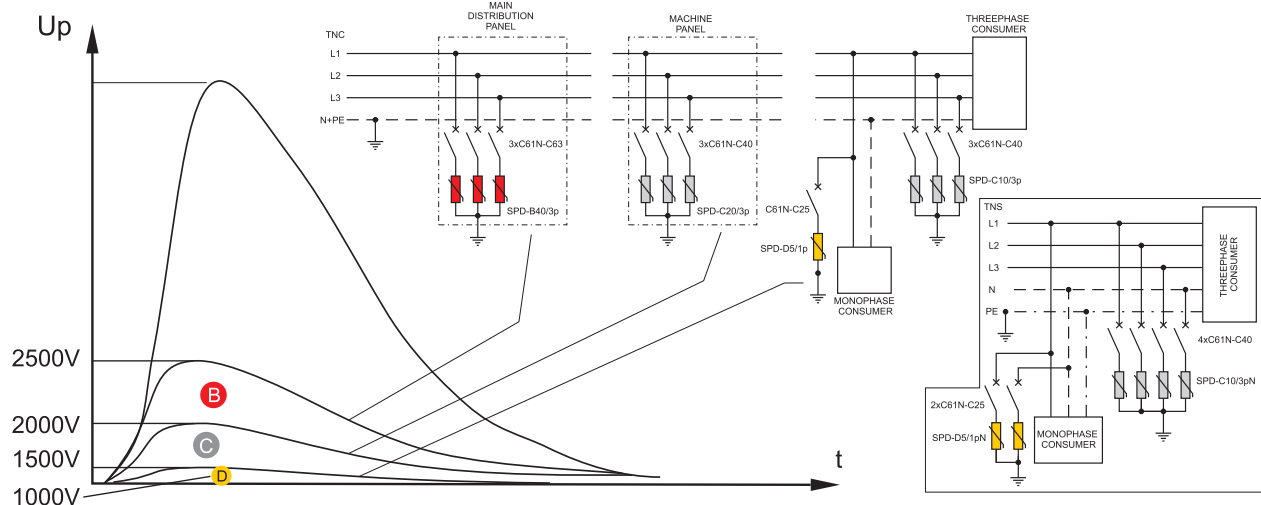
Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-D5/1pN	5	10	275	1.2	8 / 80	B	64201
SPD-C10/1pN	10	20	275	1.2	8 / 80	B	64202
SPD-C20/1pN	20	40	275	1.8	8 / 80	B	64203
SPD-B40/1pN	40	60	275	2	8 / 80	B	64204



Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-D5/3p	5	10	440	1.2	5 / 50	B	64301
SPD-C10/3p	10	20	440	1.2	5 / 50	B	64302
SPD-C20/3p	20	40	440	1.8	5 / 50	B	64303
SPD-B40/3p	40	60	440	2	5 / 50	B	64304



Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-D5/3pN	5	10	440	1.2	4 / 40	B	64401
SPD-C10/3pN	10	20	440	1.2	4 / 40	B	64402
SPD-C20/3pN	20	40	440	1.8	4 / 40	B	64403
SPD-B40/3pN	40	60	440	2	4 / 40	B	64404



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

COMBINED SURGE ARRESTERS AC – DC



Specially designed surge arresters providing protection of solar and photo - voltaic systems; designed to protect system against overvoltages resulting from indirect light impact. They could be installed in earthed and non - earthed systems. They break photo - voltaic generator electric circuit when voltage reaches or over passes limit threshold value, providing photo - voltaic protection against destroying.

COLOUR CODE for all types 5kA - yellow; white – 10kA; green – 20 kA and red 30kA



TYPE AC FOR AC/DC
CURRENT

Type of the arrester	In (kA)	I _{max} (kA)	U _c (V)	U _p (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-DC-D5/1p	5	10	275 AC/440 DC	≤ 1.2	17 / 170	B	64105
SPD-DC-C10/1p	10	20	275 AC/440 DC	≤ 1.5	17 / 170	B	64106
SPD-DC-C20/1p	20	40	275 AC/440 DC	≤ 1.8	17 / 170	B	64107
SPD-DC-B40/1p	30	60	275 AC/440 DC	≤ 2.2	17 / 170	B	64108



TYPE AC FOR AC/DC
CURRENT

Type of the arrester	In (kA)	I _{max} (kA)	U _c (V)	U _p (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-DC-D5/1pN	5	10	275 AC/440 DC	≤ 1.2	8 / 80	B	64205
SPD-DC-C10/1pN	10	20	275 AC/440 DC	≤ 1.5	8 / 80	B	64206
SPD-DC-C20/1pN	20	40	275 AC/440 DC	≤ 1.8	8 / 80	B	64207
SPD-DC-B40/1pN	30	60	275 AC/440 DC	≤ 2.2	8 / 80	B	64208



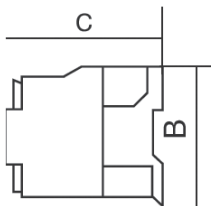
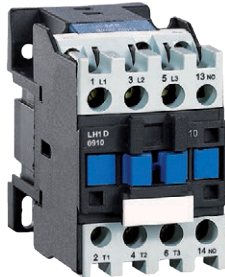
TYPE AC FOR AC/DC
CURRENT

Type of the arrester	In (kA)	I _{max} (kA)	U _c (V)	U _p (kV)	Packing/Box (pcs)	Product category	Catalogue number
SPD-DC-D5/3p	5	10	385 AC/500 DC	≤ 1.2	5 / 50	B	64305
SPD-DC-C10/3p	10	20	385 AC/500 DC	≤ 1.5	5 / 50	B	64306
SPD-DC-C20/3p	20	40	385 AC/500 DC	≤ 1.8	5 / 50	B	64307
SPD-DC-B40/3p	30	60	385 AC/500 DC	≤ 2.2	5 / 50	B	64308

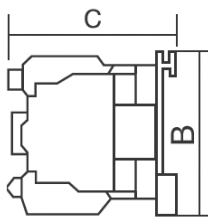
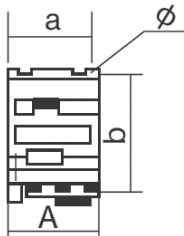


Documents corresponding to the product:

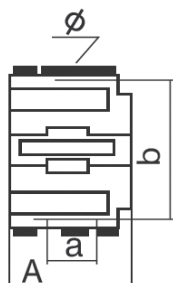
Standard EN 60947-1; EN 60 947-4-1
The products are in accordance with the directives of EC "Low voltage directives (LVD) no. 2006/95/EC" and "Electromagnetic Compatibility Directives (EMC) no. 2004/108/EC".



LH1-D 09~32



LH1-D 40



UNTIL SUPPLY
LAST

LOW VOLTAGE CONTACTORS LH1 - D

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

LH1 D contactors are alternating current contactors for control of circuits and consumers operating in class AC3.

It is suitable for consumers with rated current up to 95A. The contactors are offered in a type with 1 NO contact

for operating circuit making and the models over 40A also have 1NC operating contactor.

FUNCTIONS:

- switching on/off heavy-loaded electrical circuits at controlling signal to the coil
- making of control systems
- used as an operating element in process control panels
- remarkable with high reliability of current characteristics
- reliable separation of power contactors
- secured cover of the movable part of the contactor

TECHNICAL DATA:

- Operation class: AC 3
- Rated operating voltage of power contactors: up to 690V; 50/60Hz

- Composition of the power contact surfaces: unalloyed copper with coating 80% AgSnO
- Surge voltage wear resistance: >6000V
- Rated voltage of the coil: from 12 to 400V AC
- Limits of the controlling coil voltage: from 0.8 to 1.15 U_c
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors
- Electrical wear resistance (number of cycles): ≥ 500000
- Mechanical wear resistance (number of cycles): ≥ 500000
- Number of cycles per hour: 500 UP TO 32A; 600 for 40-95A
- Pole leaking power: up to 10W

MOUNTING:

- on DIN-rail or
- -ith bolts to the surface
- mounting position: vertical gradient – maximum $\pm 5^\circ$
- Ambient temperature: $-10^\circ\text{C} + 60^\circ\text{C}$
- Altitude: up to 2000m

Type	Overall dimensions (mm)					
	a	b	Ø	A	B	C
LH1 - D09-12	34/35	50/60	4.5	47	70	82
LH1 - D2510	40	48	4.5	57	80	95
LH1 - D3210	40	48	4.5	57	80	100
LH1 - D4011	40	100	6.5	77	126	116

Type number	Motor rated capacity (kW)						Coil capacity (VA)		Rated current in AC-3 440V/tp up	Tightening moment (N.m)	Coil voltage	Packing/ Box (pcs)	Product category	Catalogue number
	220V	380V	415V	440V	660V	690V	closed	open						
LH1 - D3210 1NO	7.5	15	15	15	18.5	7.5	90	32A	2.5	230	400	1/50	F	73321 73322
LH1 - D4011 1NO	11	18.5	22	22	30	20	200	40A	5	230	400	1/20	F	73401 73402



Documents corresponding to the product:

Standard EN 60947-1; EN 60 947-4-1

**LOW VOLTAGE CONTACTORS LT1-D/HK**

LT 1 D contactors are alternating current contactors for control of circuits and consumers operating in class AC3. It is suitable for consumers with rated current up to 95A. The contactors are offered in a type with 1 NO contact for operating circuit making and the models over 40A also have 1NC operating contactor.

FUNCTIONS:

- switching on/off heavy-loaded electrical circuits at controlling signal to the coil
- making of control systems
- used as an operating element in process control panels
- remarkable with high reliability of current characteristics
- reliable separation of power contactors
- secured cover of the movable part of the contactor

TECHNICAL DATA:

- Operation class: utilization category AC-3
- Rated operating voltage of power contactors: up to 690V; 50/60Hz
- Composition of the power contact surfaces: unalloyed copper with coating 80% AgSnO
- Surge voltage wear resistance: >8000V
- Rated voltage of the coil: from 12 to 400V AC

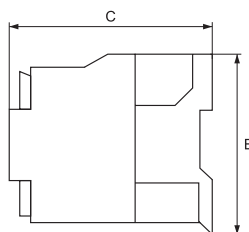
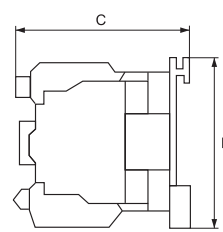
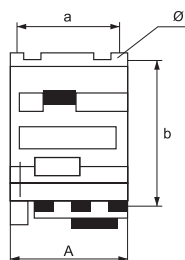
- Coil material: pure copper type QA-1
- Magnetic core material: alloy steel type 360
- Moveable part material: Bakelite
- Limits of the controlling coil voltage: operating range of coil
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors
- Electrical wear resistance (number of cycles): ≥ 1000000
- Mechanical wear resistance (number of cycles): ≥ 10000000
- Number of cycles per hour: 1200 UP TO 32A; 600 for 40-95A
- Pole leaking power: up to 13W

MOUNTING:

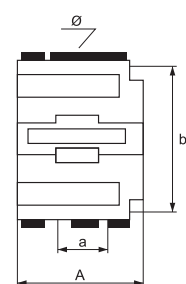
- on DIN-rail
- with bolts to the surface
- mounting position: vertical gradient – maximum ± 5°
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m



Type	Overall dimensions (mm)					
	a	b	Ø	A	B	C
LT1-HK 06~12/LT-1K	34/35	45	4.5	45	50	50
LT-D 09~12	34/35	50/60	4.5	47	70	82
LT1 D18	34/35	50/60	4.5	47	70	87
LT1 D25	40	48	4.5	57	80	95
LT1 D32	40	48	4.5	57	80	100
LT-D 40~65	40	100/110	6.5	77	126	116
LT-D 80~95	40	100/110	6.5	87	126	127

LT1-D 09~32
LT1 - K

LT-D 95~40



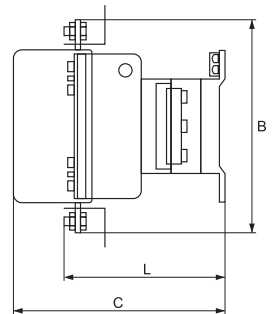
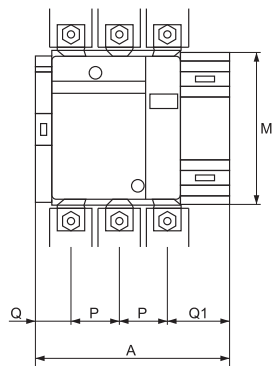
Type number	Rated capacity (kW)					Power consumption of coil (VA)		Rated current in AC-3 440V to up	Tightening moment (N.m)	Section of the power supply conductor	Packing/ Box (pcs)	Product category	Catalogue number according to the coil voltage (V)						
	220V 230V	380V 400V	415V	440V	660V 690V	closed inrush	open hold						230V	400V	12V	24V	36V	48V	110V
LT 1 - HK 0610 1NO	1.5	2.2	2.2	2.2	3	7	60	6A	1.7	0.75-2.5	1 / 100	B	23061E	23062E	23063E	23064E	23065E	23066E	23067E
LT 1 - HK 0910 1NO*	2.2	3.7	3.7	3.7	4	7	60	9A	1.7	0.75-2.5	1 / 100	F	23091E	23092E		23094E	23095E	23096E	23097E
LT 1 - HK 1210 1NO*	3	4	4	4	5	7	60	12A	1.7	0.75-2.5	1 / 100	F	23121E	23122E			23125E	23126E	23127E
LT 1 - HK 0610 1NO*	1.5	2.2	2.2	2.2	3	7	60	6A	1.7	0.75-2.5	1 / 100	F		23062	23063		23065	23066	23067
LT1 - D0910 1NO	2.2	4	4	4	5.5	7	60	9A	1.7	1-4	1 / 50	B	23091	23092	23093	23094	23095	23096	23097
LT1 - D0901 1NC	2.2	4	4	4	5.5	7	60	9A	1.7	1-4	1 / 50	B	23273	23270	23271	23272	23277	23278	23279
LT1 - D1210 1NO	3	5.5	5.5	5.5	7.5	7	60	12A	1.7	1-4	1 / 50	B	23121	23122	23123	23124	23125	23126	23127
LT1 - D1201 1NC	3	5.5	5.5	5.5	7.5	7	60	12A	1.7	1-4	1 / 50	B	23274	23280	23281	23282	23283	23284	23285
LT1 - D1810 1NO	4	7.5	9	9	10	7	60	18A	1.7	1-4	1 / 50	B	23181	23182	23183	23184	23185	23186	23187
LT1 - D1801 1NC	4	7.5	9	9	10	7	60	18A	1.7	1-4	1 / 50	B	23275	23286	23287	23288	23289	23290	23291
LT1 - D2510 1NO	5.5	11	11	11	15	7.5	90	25A	2.5	2.5-10	1 / 50	B	23251	23252	23253	23254	23255	23256	23257
LT1 - D2501 1NC	5.5	11	11	11	15	7.5	90	25A	2.5	2.5-10	1 / 50	B	23276	23292	23293	23294	23295	23296	23297
LT1 - D3210 1NO	7.5	15	15	15	18.5	7.5	90	32A	2.5	2.5-10	1 / 50	B	23321	23322	23323	23324	23325	23326	23327
LT1 - D4011 1NO+1NC	11	18.5	22	22	30	20	200	40A	5	2.5-16	1 / 20	B	23401	23402	23403	23404	23405	23406	23407
LT1 - D5011 1NO+1NC	15	22	25	25	33	20	200	50A	5	6-25	1 / 20	B	23501	23502	23503	23504	23505	23506	23507
LT1 - D6511 1NO+1NC	18.5	30	37	37	37	20	200	65A	5	6-25	1 / 20	B	23651	23652	23653	23654	23655	23656	23657
LT1 - D8011 1NO+1NC	22	37	45	45	45	20	200	80A	9	10-50	1 / 15	B	23801	23802	23803	23804	23805	23806	23807
LT1 - D9511 1NO+1NC	25	45	45	45	45	20	200	95A	9	10-50	1 / 15	B	23951	23952	23953	23954	23955	23956	23957



Note: *Until supply last - 3 year standard+0 year extended warranty

Documents corresponding to the product:

Standard EN 60947-1; EN 60 947-4-1

**LOW VOLTAGE CONTACTORS LT1-F**

The contactors LT 1- F are alternating current contactors used to control circuits and consumers operating in normal working conditions with switching on /off the consumer and dirty working environment. They are suitable for consumers with electrical power consumption from 115A to 800A.

FUNCTIONS:

- frequently switching on/off heavy-loaded electrical circuits at controlling signal to the coil
- making of systems for consumers' control
- used as an operating element in process control panels
- remarkable with high reliability of current characteristics
- reliable separation of power contactors
- secured cover of the movable part of the contactor

TECHNICAL DATA:

- Operation class: utilization category AC-3
- Rated operating voltage of power contactors: up to 1000V; 50/60Hz
- Composition of the power contact surfaces: unalloyed copper with coating 80% AgSnO
- Surge voltage wear resistance: >8000V
- Coil composition: pure coil copper QA-1 type
- Magnetic core composition: steel alloy 360

- Movable part composition: bakelite
- Limits of the controlling coil voltage: operating range of coil
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors
 - rail
- Electrical wear resistance (number of cycles): ≥ 10000000
- Mechanical wear resistance (number of cycles): ≥ 10000000
- Number of cycles (switching on) per hour: 200
- Pole leaking power: from 16 to 80W
- Mounting:
 - with bolts to the surface
 - mounting position: vertical gradient – maximum ± 10°C
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m

Type	Overall dimensions (mm)							
	A	B	C	L	M	Q	Q1	P
LT 1 F150	163.5	170	171	107	150	26	57.5	40
LT 1 F225	168.5	197	181	113.5	172	21	51.5	48
LT 1 F265	201.5	203	181	141	178	39	66.5	48
LT 1 F400	213	206	219	145	182	43	74	48
LT 1 F630	309	304	255	155	264	60	89	80
LT 1 F800	309	304	255	155	264	60	89	80

Type number	Motor rated capacity (kW)							Power consumption of coil (VA)		Rated current in AC-3 440V (N.m) to up	Tightening moment (N.m)	Packing/ Box (pcs)	Product category	Catalogue number according to the coil voltage (V)					
	220V 230V	380V 400V	415V	440V	500V	660V 690V	1000V	closed	open					230V	400V	24V*	36V	48V	110V
LT1 - F115	30	55	59	59	59	80	60	45	550	115 A	18	1 / 4	B	23111	23112	23114	23115	23116	23117
LT1 - F150	40	75	80	80	90	100	65	45	550	150 A	25	1 / 4	B	23151	23152		23155	23156	23157
LT1 - F225	63	110	110	110	129	129	100	55	805	225 A	35	1 / 2	B	23861	23862		23865	23866	23867
LT1 - F265	75	132	140	140	160	160	147	10	700	265 A	35	1 / 2	B	23261	23262		23265	23266	23267
LT1 - F400	110	200	220	250	257	280	185	18	1000	400 A	50	1 / 1	B	23751	23752				
LT1 - F630	200	335	375	400	400	450	450	25	1500	630 A	50	1 / 1	B	23771	23772				
LT1 - F800	250	450	450	450	450	475	450	15	1300	800 A	50	1 / 1	B	23881	23882				



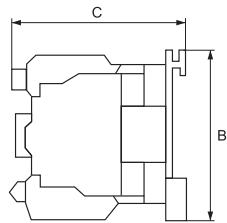
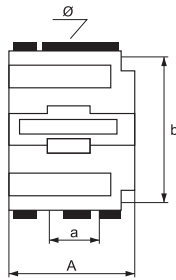
Note: At mounting the containers from the series in control schemes a distance must be provided at the side of the contactor in case of eventual coil change.

*Until Supply Last- Product category F

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN60947-1; EN 60947-4-1

LOW VOLTAGE CONTACTORS WITH DIRECT CURRENT COIL LP1-D


LP1-D 09~95

The contactors LP1 D are alternating current contactors with DC operating of coil for control. The power plugs of the contactor are designed for control of alternating current circuits and consumers operating in normal operating class AC-3 with frequently switching on/off the consumer and dirty working environment. The contactors are suitable for consumers with electrical power consumption from 9A to 225A.

FUNCTIONS:

- switching on/off alternating current consumers in direct current controlling schemes at controlling signal to the coil
- making of systems for consumers' control
- used as an operating element in process control panels
- remarkable with high reliability of current characteristics
- reliable separation of power contacts
- secured cover of the movable part of the contactor

TECHNICAL DATA:

- Rated operating voltage of the coil: from 12V DC to 220V DC
- Rated operating voltage of the power circuit: up to 690V DC
- insulation voltage: 690V

- Surge voltage wear resistance: >8000V
- Limits of the controlling coil voltage: operating range of coil
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors
- Electrical wear resistance (number of cycles): ≥10000000
- Mechanical wear resistance (number of cycles): ≥10000000
- Number of cycles per hour: 1200 up to 32A; 600 for 40-95A
- Pole leaking power: up to 13W

MOUNTING:

- on DIN-rail
- with bolts to the surface
- mounting position: vertical gradient – maximum ± 5°
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m

Type	Overall dimensions (mm)				
	A	B	C	a	b
LP 1 D0910	47	76	95	34/35	50/60
LP 1 D1210	47	76	95	34/35	50/60
LP 1 D1810	47	76	95	34/35	50
LP 1 D2510	57	86	101	40	50
LP 1 D3210	57	86	101	40	50
LP 1 D4011	77	129	176	40	100
LP 1 D5011	77	129	176	40	100
LP 1 D6511	77	129	176	40	100
LP 1 D9511	87	129	182	40	100
LP 1 F115	163.5	170	171	40	150
LP 1 F150	163.5	170	171	40	150
LP 1 F225	168.5	197	181	48	172

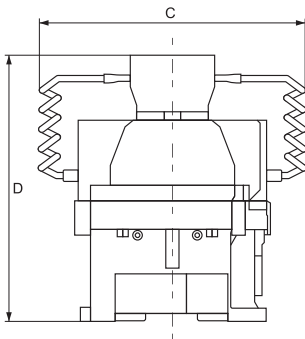
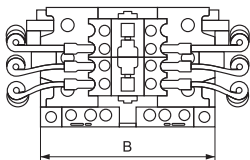
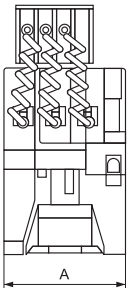
Type	Rated current (A)	Auxiliary contact (pcs.)	Rated capacity of the consumer (kW)					Packing/Box (pcs)	Product category	Catalogue number according to the coil voltage (V DC)					
			230V	400V	415V	440V	690V			12V	24V	36V	48V	110V	230V
LP 1 D0910	9	1NO	2.20	4.00	4.00	4.00	5.50	1/40	B	23962	23098	23130	23971	23980	23139
LP 1 D1210	12	1NO	3.00	5.50	5.50	5.50	7.50	1/40	B	23963	23128	23131	23972	23981	23140
LP 1 D1810	18	1NO	4.00	7.50	7.50	7.50	10.0	1/30	B	23964	23188	23132	23973	23982	23141
LP 1 D2510	25	1NO	5.50	11.0	11.0	11.0	15.0	1/20	B	23925	23258	23133	23974	23983	23142
LP 1 D3210	32	1NO	7.50	15.0	15.0	15.0	18.5	1/30	B	23966	23328	23134	23975	23984	23143
LP 1 D4011	40	1NO+1NC	11.0	18.5	18.5	18.5	30.0	1/10	B	23967	23408	23135	23976	23985	23144
LP 1 D5011	50	1NO+1NC	15.0	22.0	22.0	22.0	33.0	1/10	B	23968	23508	23136	23977	23986	23145
LP 1 D6511	65	1NO+1NC	18.5	30.0	30.0	30.0	37.0	1/10	B	23969	23658	23137	23978	23987	23146
LP 1 D9511	95	1NO+1NC	25.0	45.0	45.0	45.0	45.0	1/10	B	23970	23958	23138	23979	23988	23147
LP 1 F115	115	1NO	30.0	55.0	59.0	59.0	80.0	1/4	B		23118*	23914	23917	23989	23148
LP 1 F150	150	1NO	40.0	75.0	80.0	80.0	100	1/4	B		23158*	23915	23918	23990	23149
LP 1 F225	225	1NO	63.0	110	110	110	129	1/2	B			23916	23919	23994	23201



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN60947-1; EN 60947-4-1

LOW VOLTAGE CONTACTORS FOR SWITCHING ON OF CAPACITOR BANKS CJ19-43

The AC contactors CJ19-43 are specially designed electrical devices for commutation of three phase capacitors used for power correction. They are alternating current contactor LT1 Dxx with mounted a group for peak current lowering from the transitional process of the capacitor's switching on/off. This group is a combination of current limiting resistors, switched on in the beginning of the transitional process (switching on/off of the capacitor group). The contactors are suitable for capacitors with rate up to 50 kVAr.

FUNCTIONS:

- switching on/off of capacitor banks for reactive power compensation
- making of systems for compensation of the energy reactive component
- lowering of the peak transitional currents at switching on/off of the capacitor
- remarkable with high reliability of current characteristics
- reliable separation of power contacts
- secured part of the contactor against consumer contact
- do not allow manual operation

TECHNICAL DATA:

- Operation class: utilization category AC6b
- Rated operating voltage of the controlling coil: 230V

AC; 50/60Hz

- Rated operating voltage of the power circuit: up to 690V AC
- insulation voltage: 690V
- Surge voltage wear resistance: >8000V
- Limits of the controlling coil voltage: from 0.8 to 1.15 U_c
- Number of the contacts: 3 NO power contacts +1NO operative
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors
- Electrical wear resistance (number of cycles): ≥300000
- Mechanical wear resistance (number of cycles): ≥1000000
- Number of cycles (switching on) per hour: up to 600
- Pole leaking power: up to 13W

MOUNTING:

- on DIN-rail or
- with bolts to the surface
- mounting position: vertical gradient – maximum ± 5°
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m

Type	Overall dimensions (mm)			
	A	B	C	D
CJ19-32 DPK	56	74	130	150
CJ19-40 DPK	75	127	180	150
CJ19-65 DPK	85	127	200	157
CJ19-95 DPK	85	127	200	157
CJ19-115 DPK	122	165	230	157
CJ19-150 DPK	122	165	230	157
CJ19-170 DPK	122	165	230	157

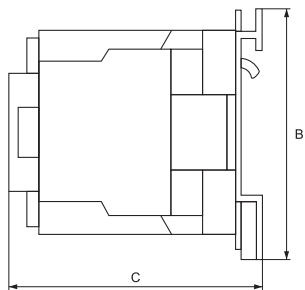
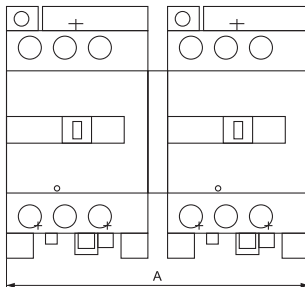
Type	Rated current (A)	Rated capacity of the consumer (kVAr)		Coil voltage (V)	Packing/Box (pcs)	Product category	Catalogue number
		400/440V	690V				
CJ19-32 DPK	32	8	12.5	230	1/20	B	23932
CJ19-32 DPK	32	8	12.5	400	1/20	B	23910
CJ19-40 DPK	40	12.5	15	230	1/16	B	23900
CJ19-40 DPK	40	12.5	15	400	1/16	B	23940
CJ19-65 DPK	65	25	30	230	1/16	B	23961
CJ19-65 DPK	65	25	30	400	1/16	B	23965
CJ19-95 DPK	95	30	36	230	1/16	B	23909
CJ19-95 DPK	95	30	36	400	1/16	B	23995
CJ19-115 DPK	115	35	40	230	1/4	B	23991
CJ19-150 DPK	150	40	50	230	1/4	B	23992
CJ19-170 DPK	170	50	60	230	1/4	B	23993



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN60947-1; EN 60947-4-1



Type	Overall dimensions (mm)		
	A	B	C
LT 4 - D1810	100	70	83
LT 4 - D2510	130	80	98
LT 4 - D3210	130	80	105
LT 4 - D4011	167	126	116
LT 4 - D6511	167	126	116
LT 4 - D9511	182	127	127



Dimensions (mm)					
W	W2	L1	h1	h2	H
33	45	48	22	14	59

REVERSE CONTACTORS LT4-DXX
5+2 standard +extended **7** YEAR TOTAL WARRANTY *for industrial usage, 3 years warranty

LT 4-Dxx series contactors is suitable for across- the line starting and reversing of 3 phase squirrel cage and slip ring motors. It consist of two magnetic contactors LT1D. The contactor is provided whit a built-in interlock safety mechanism. The contactor is used for reverse control of induction motors with shortly rotor. The contactors from the series are offered for consumers up to 95A.

FUNCTIONS:

- switching on of electrical motors in one direction of rotation and reversing of the rotation direction at outside command
- making of control systems
- remarkable with high reliability of current characteristics
- reliable switching on or separation of power contacts
- secured part of the contactors against consumer contact
- secured cover of the movable part of the contactor
- impossibility for simultaneous switching on of the two contactors from the group due to mechanical locking

TECHNICAL DATA:

- Operation class: AC 3
- Rated operating voltage of the controlling coil: 230V AC; 50/60 Hz
- Rated operating voltage of the power circuit: up to 690V AC

- insulation voltage: 690V
- Surge voltage wear resistance: >8000V
- Limits of the controlling coil voltage: from 0.8 to 1.15 U_c
- Number of plugs: 3 NO power contacts +1NO operative (for contactors over 40A there is also additional 1NC contact)
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors

NOTE: The contactors are offered without factory cabling

- Electrical wear resistance (number of cycles): ≥1 000 000
- Mechanical wear resistance (number of cycles): ≥10 000 000
- Number of cycles (switching on) per hour: up to 600
- Pole leaking power: up to 13W

MOUNTING:

- on DIN-rail or
- with bolts to the surface
- mounting position: vertical gradient – maximum ± 5°
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m

Type	Rated current (A)	Rated capacity of the consumer (kW)					Packing/Box (pcs)	Product category	Catalogue number
		230V	400V	415V	440V	690V			
LT 4 D1810	18	4	7.5	7.5	7.5	10	1 / 20	B	23301
LT 4 D2510	25	5.5	11	11	11	15	1 / 20	B	23302
LT 4 D3210	32	7.5	15	15	15	18.5	1 / 20	B	23303
LT 4 D4011	40	11	18.5	18.5	18.5	30	1 / 8	B	23304
LT 4 D6511	65	18.5	30	30	30	37	1 / 8	B	23305
LT 4 D9511	95	25	45	45	45	45	1 / 6	B	23306

**TIME DELAY CONTACT BLOCK LT02-DXX**
5+2 standard +extended **7** YEAR TOTAL WARRANTY *for industrial usage, 3 years warranty

LT02-Dxx is designed to set time intervals from 0.1 to 180s in different control schemes. It is used most frequently in combination with contactors from LT1-Dxx series to form "star/delta" starters for electrical motor control, as it provides the necessary time for motor winding.

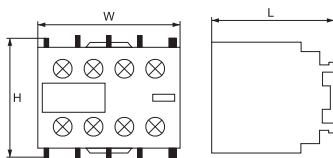
Type	Number of contacts	Time delay	Delay	Product category	Catalogue number
LT02-DT0	NO+NC	0.1~3s	ON	B	23901
LT02-DT2	NO+NC	0.1~30s	ON	B	23902
LT02-DT4	NO+NC	10~180s	ON	B	23903
LT02-DT22	NO+NC	0.1~30s	OFF	B	239022



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60947-4-1



Dimensions (mm)

H	W	L	W1	W2
32	40	35	26	45
H2	L1	L2		
48	6,5	37		

AUXILIARY CONTACTS**AUXILIARY CONTACTS**

At necessity the element provide auxiliary number of contacts. They are specially designed for mounting on the movable part of the magnetic core of the contactors LT 1K/D series.

FUNCTIONS:

- extending the number of the operative contactors up to 4 in different
- Combinations
 - switches on simultaneously with the other contact system of the contactor
- Operation class: AC 3

- insulation voltage: 690V
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors

MOUNTING:

- on the movable cover of the contactor through pinching
- mounting position: vertical gradient – maximum $\pm 5^\circ$
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)

Type	For Contactor Series	Number of contacts	Rated current	Section of the conductor (mm ²)	Product category	Catalogue number
LT01-DN02	LT1-D & LT1-F	2NC	6A	0,5-1	B	23002
LT01-DN11	LT1-D & LT1-F	NO+NC	6A	0,5-1	B	23011
LT01-DN20	LT1-D & LT1-F	2NO	6A	0,5-1	B	23020
LT01-DN22	LT1-D & LT1-F	2NO+2NC	6A	0,5-1	B	23022
LT01-DN40	LT1-D & LT1-F	4NO	6A	0,5-1	B	23040
LT01-DN04	LT1-D & LT1-F	4NC	6A	0,5-1	B	23004
LT01-KN11	LT1-HK	NO+NC	6A	0,5-1	B	23001
LT01-KN22	LT1-HK	2NO+2NC	6A	0,5-1	B	23003

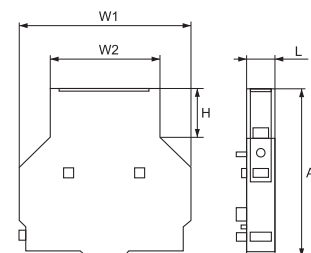
**AUXILIARY CONTACTS LT03-DN11**

Providing on necessity additional number of plug points and are mounted sideward to the movable part of the magnetic cores of contactors of the series LT1D till 65A. Variants with two additional plug points NO and NC are offered.

FUNCTIONS:

- expanding the number of the operational plug points
- switching on simultaneously with the rest of the contact system
- of the contactor

- flexible conductors with or without cable end
- solid conductors
- Mounting method:
 - mounting position – sideward to the contactor
- Plastic: resistant to UV and non-burning (self-extinguishing material)



Dimensions (mm)

W1	W2	H	L	A
73	48	22	12,5	72

TECHNICAL CHARACTERISTICS:

- Environment operational regime: AC 3
- Insulation voltage: 690V
- Double connector: screw connector
- Connection:

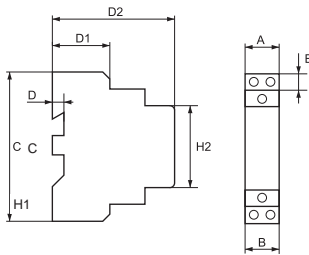
Type	Rated current	Section of the conductor (mm ²)	Product category	Catalogue number
LT03-DN11	6A	0,5-1	B	23311



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

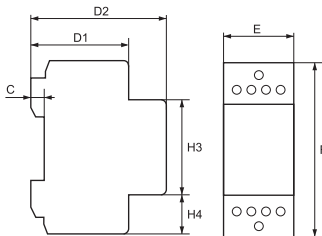
Documents corresponding to the product:

Standard EN 61095



Dimensions (mm)

H1	C	D1	D2	A	E
81	5	31	66	18	9



Dimensions (mm)

C	D1	D2	H3	H4
5	66	48	45	20

E	F
35	85

MODULE CONTACTORS K SERIES
5+2 standard +extended
7 YEAR TOTAL WARRANTY
 *for industrial usage, 3 years warranty

Modular contactors K series are used for commutation of mono-phase and three-phase low power electrical consumers. They provide connection between the consumers in small overall dimensions, silent work, mounting only at DIN-rails.

FUNCTIONS:

- switching on of consumers
- making of control systems
- remarkable with high reliability of current characteristics
- reliable switching on or separation of power contacts

TECHNICAL DATA:

- Operation class: AC 7a
- Rated operating voltage of the controlling coil: 230V

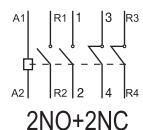
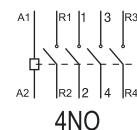
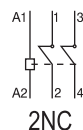
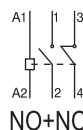
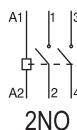
AC; 50/60 Hz

- Rated operating voltage of the power circuit: up to 690V AC
- insulation voltage: 690V
- Surge voltage wear resistance: >8000V
- Joining terminal: screw terminal
- Connecting:
 - flexible conductors with or without cable terminal
 - rigid conductors

MOUNTING:

- on DIN-rail or
- mounting position: vertical gradient – maximum ± 5°
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m

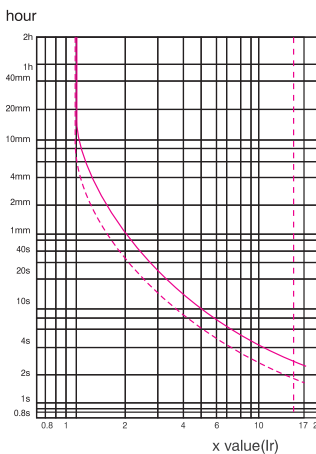
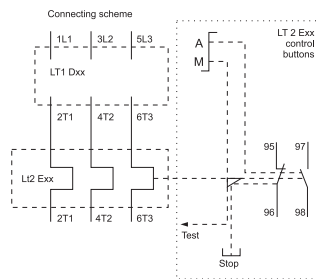
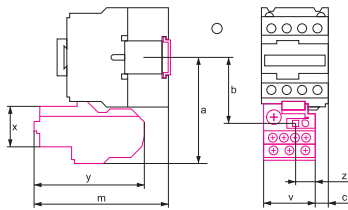
Type	In	Coil voltage (V)	Contacts	Packing/Box (pcs)	Product category	Catalogue number
K20	20A	230V	2NO	1/12/120	B	23008
K20	20A	230V	NO+NC	1/12/120	B	23007
K20	20A	230V	2NC	1/12/120	B	23009
K20	25A	230V	NO+NC	1/12/100	B	23012
K20	25A	230V	2NO	1/12/100	B	23013
K20	25A	230V	2NC	1/10/100	B	23014
K20	40A	230V	NO+NC	1/6/60	B	23015
K20	40A	230V	2NO	1/6/60	B	23016
K20	40A	230V	2NC	1/6/60	B	23017
K20	100A	230V	2NO	1/4/40	B	23080
K20	100A	230V	1NO+1NC	1/4/40	B	23083
K20	100A	230V	2NC	1/4/40	B	23084
K40	25A	230V	2NO+2NC	1/6/60	B	23410
K40	25A	230V	3NO+1NC	1/6/60	B	23411
K40	25A	230V	4NO	1/6/60	B	23412
K40	25A	230V	4NC	1/6/60	B	23413
K40	40A	230V	2NO+2NC	1/4/40	B	23422
K40	40A	230V	3NO+1NC	1/4/40	B	23423
K40	40A	230V	4NO	1/4/40	B	23409
K40	40A	230V	4NC	1/4/40	B	23424
K40	63A	230V	2NO+2NC	1/4/40	B	23425
K40	63A	230V	3NO+1NC	1/4/40	B	23426
K40	63A	230V	4NO	1/4/40	B	23427
K40	63A	230V	4NC	1/4/40	B	23428
K40	80A	230V	4NO	1/2/20	B	23480
K40	80A	230V	2NO+2NC	1/2/20	B	23483
K40	80A	230V	4NC	1/2/20	B	23484
K40	80A	230V	3NO+1NC	1/2/20	B	23485



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60947-1
EN 60947-4-1



THERMAL OVERLOAD RELAYS

The thermal relays LT 2- K/Exx series are three pole relays designed for protection of induction motors from overload or overheat. They are mounted to contactors LT 1 K/Dxx series and an operating circuit for motor control is passed through their NC contacts. They have bimetallic releases /1 per phase/ through them the motors current flows and indirectly mated. The bimetallic releases bend subject to the influence of mating and this results in tripping of the relay. The contacts change switch position. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation.

FUNCTIONS:

- switching off alternating current consumers at current overload
- making of control systems for consumers
- used as a protective operating element in control panels of induction motors
- remarkable with high reliability of current characteristics

TECHNICAL DATA:

- Rated operating voltage: up to 690V AC; 50/60 Hz
- Rated operating current range: up to 690V AC
- insulation voltage: >690V
- Surge voltage wear resistance: ≥6000V
- Joining terminal: screw terminal
- temperature compensation: -25 +55
- tripping category: class 10A

- Connecting:
 - flexible or rigid conductors with or without cable terminal for joining to the consumer
 - to the contactor through the relay terminals
 - the connecting terminals with the consumer can be adjusted according to the type of the contactor
 - Electrical wear resistance (number of cycles): ≥1000000
 - Mechanical wear resistance (number of cycles): ≥10000000
 - Indication for protection activating
 - Possibility for choice of the protection restoring (through the blue button)
 - Possibility for range adjustment of the protection activating
 - Possibility for operation at higher frequency
- MOUNTING:**
- mounting to the contactor: to the terminals of the contactor as it is additionally clamped to its frame through a pin
 - mounting position: vertical gradient – maximum ± 5°
 - Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
 - Ambient temperature: -10°C + 65°C
 - Installation altitude: up to 2000m

NOTE: To protect the consumer from short circuit, before the combination contactor- thermal relay, a suitably measured breaker or safety device should be mounted.

Type	Dimensions (mm)							
	a	b	c	m	x	y	v	z
LT 2 - Kxx	81	50	0	98	47	92	44	17
LT 2 - E13xx	86	55	10.7	108	47	92	44	17
LT 2 - E23xx	86	55	9	109	47	92	44	17
LT 2 - E33xx	115	76	9.5	124	54	109	70	30



For contactor LT1-K06 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-K0303	-	-	-	0.30	0.25 - 0.30	1 / 100	B	13403
LT2-K0306	-	0.37	1.10	1.20	0.80 - 1.20	1 / 100	B	13406
LT2-K0307	0.37	0.75	1.50	1.80	1.20 - 1.80	1 / 100	B	13407
LT2-K0308	0.75	1.10	2.20	2.60	1.80 - 2.60	1 / 100	B	13408
LT2-K0310	1.10	1.50	3.00	3.70	2.60 - 3.70	1 / 100	B	13410
LT2-K0312	1.10	2.20	4.00	5.50	3.70 - 5.50	1 / 100	B	13411
LT2-K0314	2.20	4.00	5.50	8.00	5.50 - 8.00	1 / 100	B	13412
LT2-K0316	3.00	5.00	7.50	11.5	8.00 - 11.5	1 / 100	B	13413



For contactor LT1-K06 type	Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
LT2-K0301*	0.16	0.10 - 0.16	1 / 100	F	13401
LT2-K0302*	0.25	0.16 - 0.25	1 / 100	F	13402
LT2-K0304*	0.54	0.30 - 0.54	1 / 100	F	13404
LT2-K0305*	0.80	0.54 - 0.80	1 / 100	F	13405

*3 year standard+0 year extended warranty



UNTIL SUPPLY
LAST



For contactor LT1-D9 to LT1-D25 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-E1301	-	-	-	0.16	0.10 - 0.16	1 / 100	B	13001
LT2-E1302	-	-	-	0.25	0.16 - 0.25	1 / 100	B	13002
LT2-E1303	-	-	-	0.40	0.25 - 0.40	1 / 100	B	13003
LT2-E1304	-	-	0.37	0.63	0.40 - 0.63	1 / 100	B	13004
LT2-E1305	-	-	0.55	1.00	0.63 - 1.00	1 / 100	B	13005
LT2-E1306	-	0.37	1.10	1.60	1.0 - 1.60	1 / 100	B	13006
LT2-E1307	0.37	0.75	1.50	2.50	1.6 - 2.50	1 / 100	B	13007
LT2-E1308	0.75	1.50	3.00	4.00	2.5 - 4.00	1 / 100	B	13008
LT2-E1310	1.10	2.20	4.00	6.00	4.0 - 6.00	1 / 100	B	13010
LT2-E1312	2.00	3.70	5.50	8.00	5.5 - 8.00	1 / 100	B	13012
LT2-E1314	2.20	4.00	7.50	10.0	7.0 - 10.0	1 / 100	B	13014
LT2-E1316	3.70	5.50	11.0	13.0	9.0 - 13.0	1 / 100	B	13016
LT2-E1321	4.00	7.50	15.0	18.0	12.0 - 18.0	1 / 100	B	13021
LT2-E1322	5.50	9.00	18.5	25.0	17.0 - 25.0	1 / 100	B	13022
LT2-E1353	9.00	11.0	18.5	33.0	23.0 - 32.0	1 / 100	B	13053





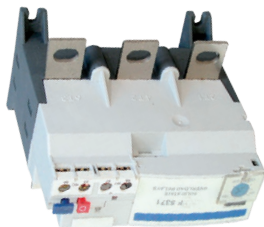
For contactor LT1-D32 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-E2353	11	11	18.5	32	23.0 - 32.0	1 / 100	B	13253
LT2-E2355	15	15	22.0	36	28.0 - 36.0	1 / 100	B	13255



For contactor LT1-D40 to LT1-D95 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-E3355	18.5	18.5	30	40	30.0 - 40.0	1 / 50	B	13355
LT2-E3357	22	22	30	50	37.0 - 50.0	1 / 50	B	13357
LT2-E3359	30	30	37	65	48.0 - 65.0	1 / 50	B	13359
LT2-E3363	45	45	55	80	63.0 - 80.0	1 / 50	B	13363
LT2-E3365	55	55	75	93	80.0 - 93.0	1 / 50	B	13365



For contactor LT1-F115 to LT1-F150	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-F4367	40	75	100	150	90-150	1/30	B	13367



For contactor LT1-F225 to LT1-F400	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-F4368	63	110	129	220	132-220	1/30	B	13368
LT2-F4369	100	160	220	330	200-330	1/18	B	13369
LT2-F4370	147	250	335	500	300-500	1/18	B	13370



For contactor LT1-F630	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	660V 690V					
LT2-F4371	200	335	450	630	380-630	1/18	B	13371



THERMOMAGNETIC AUTOMATIC BREAKER TM2/TM3

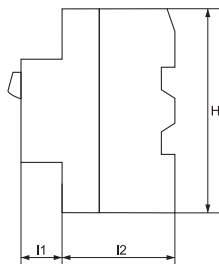
5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

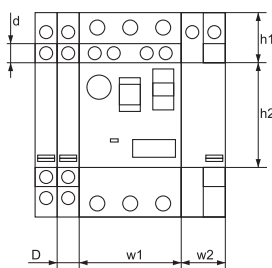


Dimensions



**Auxiliary
contact**

UVR



Dimensions (mm)

H	I1	I2	d	D
89	16	50	10	9,2
w1	w2	h1	h2	
44,5	18	22	45	

The thermomagnetic automatic breakers TM 2-Exx series are devices designed for control and protection of induction motors from overload, overheat or short circuit. The overload motor protection is carried out by the built in the breaker thermal elements, and the short circuit protection is carried out by the magnetic elements. These magnetic elements allow the adjustment of the current leakage which is 13 times the maximum current of the thermal protection. The overload protection elements include automatic compensation for the ambient temperature changes. In combination with under voltage release the thermomagnetic breaker TM 2-Exx also provides protection of the motors from fall out of a phase from the power supply. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation.

FUNCTIONS:

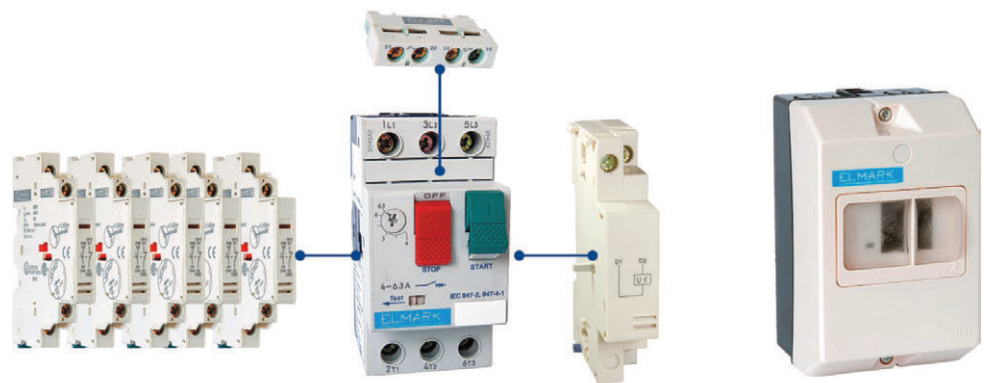
- switching off alternating current consumers at current overload
- switching off the electrical circuit to the consumer at inlet short circuit
- protects the motor at lack/lowering of the phase voltage (if there is under voltage release)
- used as a protective operating element in control panels of induction motors
- remarkable with high reliability of current characteristics
- possibility for change/choice of the protection current (according to the operating current of the motor)
- automatic compensation of the ambient temperature

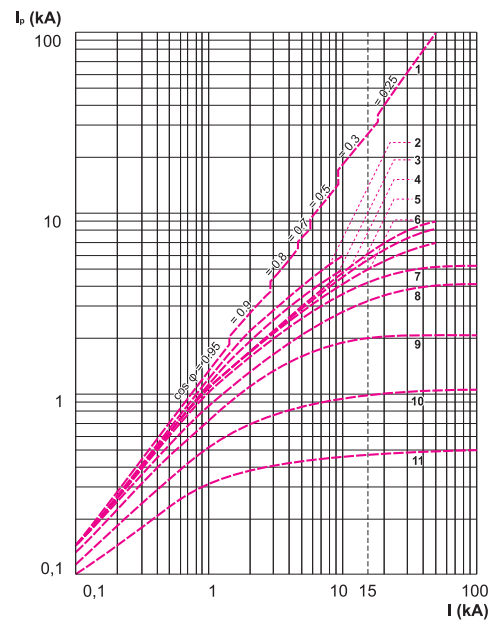
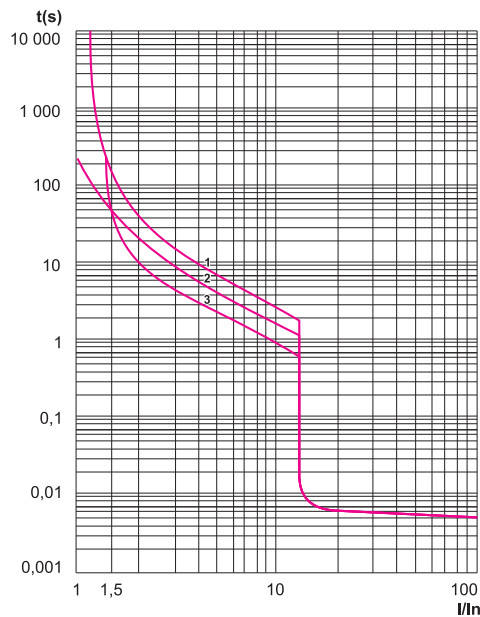
TECHNICAL DATA:

- Rated operating voltage: up to 690V AC; 50/60 Hz
- Rated operating current range: from 0.1 to 80A according to the type in table 1
- insulation voltage: 690V
- Surge voltage wear resistance: $\geq 6000V$
- Joining terminal: screw terminal
- Connecting:
 - flexible or rigid conductors with or without cable terminal for joining to the consumer
 - to the contactor through the relay terminals
 - the connecting terminals with the consumer can be adjusted according to the type of the contactor
- Electrical wear resistance (number of cycles): ≥ 1000000
- Mechanical wear resistance (number of cycles): ≥ 10000000
- Indication for protection activating
- Switching on of the breaker manually with button "I" and switching off with button "O" manually or automatically at failure or after activating of the protection
- Possibility for range adjustment of the protection activating
- Possibility for operation at higher frequency
- Possibility for independent operation or as an element of an automation system
- tripping category: class 10A

MOUNTING:

- mounting to DIN-rail
- mounting position: vertical gradient – maximum $\pm 5^\circ$
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: $-10^\circ C + 65^\circ C$
- Altitude: up to 2000m





Type	Rated capacity of three-phase motor in AC-3 category					instantaneous short-circuit release (A)	Current setting range (A)	Thermal current I _{the} TM2-E (A)	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	400V 410V	440V	500V	690V						
TM2-E01	-	-	-	-	-	1.5	0.1 - 0.16	0.16	1 / 50	B	48001
TM2-E02	-	0.06	0.06	-	-	2.4	0.16 - 0.25	0.25	1 / 50	B	48002
TM2-E03	0.06	0.09	0.09	-	-	5.0	0.25 - 0.40	0.40	1 / 50	B	48003
TM2-E04	-	0.12	0.18	-	0.37	8.0	0.40 - 0.63	0.63	1 / 50	B	48004
TM2-E05	0.09	0.25	0.25	0.37	0.55	13.0	0.63 - 1.00	1	1 / 50	B	48005
TM2-E06	0.18	0.37	0.37	0.37	0.75	22.5	1 - 1.60	1.6	1 / 50	B	48006
TM2-E07	0.37	0.75	0.75	1.10	1.50	33.5	1.6 - 2.50	2.5	1 / 50	B	48007
TM2-E08	0.55	1.10	1.50	1.50	2.20	51.0	2.5 - 4.00	4	1 / 50	B	48008
TM2-E10	1.10	2.20	2.20	3.00	4.00	78.0	4 - 6.30	6.3	1 / 50	B	48010
TM2-E14	1.50	3.00	4.00	4.00	5.50	138	6 - 10.0	9	1 / 50	B	48014
TM2-E16	2.20	5.50	5.50	7.50	9.00	170	9 - 14.0	13	1 / 50	B	48016
TM2-E20	4.00	7.50	7.50	9.00	15.0	223	13 - 18.0	17	1 / 50	B	48020
TM2-E21	5.50	9.00	11.0	11.0	18.5	327	17 - 23.0	21	1 / 50	B	48021
TM2-E22	5.50	11.0	11.0	15.0	22.0	327	20 - 25.0	23	1 / 50	B	48022
TM2-E32	7.50	15.0	15.0	18.5	22.0	416	24 - 32.0	24	1 / 50	B	48032
TM3-E40	11.0	18.5	22.0	25.0	33.0	480	25 - 40.0	32	1 / 15	B	48040
TM3-E63	15.0	30.0	33.0	40.0	55.0	550	40 - 63.0	50	1 / 15	B	48063
TM3-E80	22.0	40.0	45.0	55.0	63.0	665.5	56 - 80.0	64	1 / 15	B	48080



Documents corresponding to the product:

Standard EN 60947-1

EN 60 947-2; EN 60947-4-1



Type	Voltage (V)	Product category	Catalogue number
TM2 AU225	230	B	48099
TM3 AU385	400	B	48098

**VOLTAGE RELEASE (VR) FOR TM2**

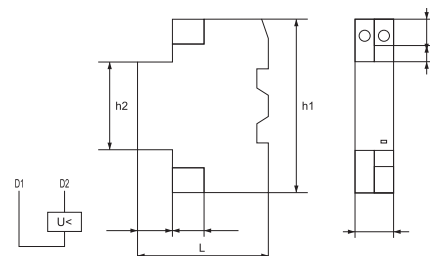
For increasing the effectiveness of the thermomagnetic breakers TM 2-Exx operation, they can be supplied with auxiliary devices, designed for widening the practice range and improving the technical characteristics of the breakers. The release is designed to switch off the thermomagnetic breaker when the controlling voltage falls under breaking level 0.55 to 0.7 UN and does not allow switching on of the breaker unless the voltage is over 0.85 UN.

FUNCTIONS:

- switching off the breaker at power supply voltage fall under 0.55 – 0.7 Un
- does not allow switching on of the breaker when the power supply voltage is under 0.85 Un
- prevents unwarranted secondary start of the breaker at falling off and restoring of the power supply voltage
- protects the motor at lack/lowering of the phase voltage
- used as a protective operating element in control panels of induction motors
- remarkable with high reliability of current characteristics

MOUNTING:

- laterally to a breaker
- At the side of the breaker through special openings

**Documents corresponding to the product:**

Standard EN 60529

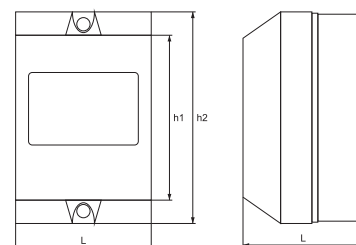


Type	Product category	Catalogue number
TM2 E	B	8083

**WATERTIGHT BOX FOR TM2-E**

Specially designed plastic box with silicon screen for increasing the IP code from dust and moisture to IP 65. Designed for thermal-magnetic circuit breakers of up to 32A

- Mounting:
 - mounting position: vertical gradient, maximum $\pm 5^\circ$
 - mounted to horizontal surfaces (walls) with bolts
 - the breaker TM2 Exx is fixed inside of it on rail
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)





Type	Product category	Catalogue number
TM2 AE11	B	48912



AUXILIARY CONTACT BLOCK TM2 AE11- FRONT MOUNTING

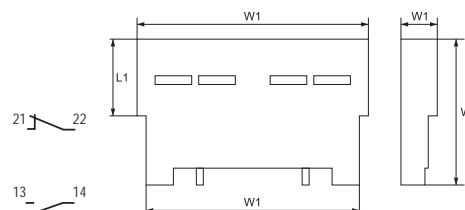
5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

It is designed to switch on operational systems or signalization. Designed with one NO and one NC contact. It changes the position of its contacts according to the position of the breaker (switched on/off) to which it is mounted.

- Mounting:
 - laterally to a breaker TM2-Exx
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m



Type	Product category	Catalogue number
TM2 AN11	B	48911
TM3 AN11	B	48913



AUXILIARY CONTACT BLOCK TM2 AE11- SIDE MOUNTING

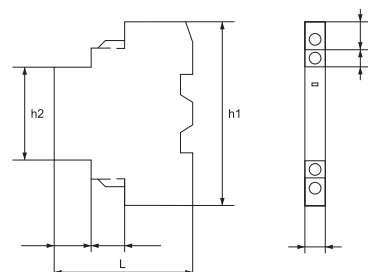
5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

*for industrial
usage, 3 years
warranty

It is designed to switch on operational systems or signalization. Designed with one NO and one NC contact. It changes the position of its contacts according to the position of the breaker (switched on/off) to which it is mounted.

- Mounting:
 - laterally to a breaker TM2-Exx
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m



Documents corresponding to the product:

Standard EN 60947-1

EN 60947-4-1



with thermal overload relays

STARTERS FOR DIRECT START

5+2
standard
+extended

7

**YEAR TOTAL
WARRANTY**

*for industrial
usage, 3 years
warranty

The electromagnetic starters LT 5 Dxx series are devices designed for remote control, direct control and protection of induction motors or other electrical consumers. They are a combination of contactors LT 1 Dxx series and thermal protection LT 2 Exx factory cabled. The starters are offered on the market in metal or plastic boxes with the corresponding IP code from dust and moisture. At mounting there should be provided protection of the device from short circuit through breakers or disconnectors. If necessary, at client's order the factory mounted thermal protection in the pneumatic starter can be substituted. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation.

FUNCTIONS:

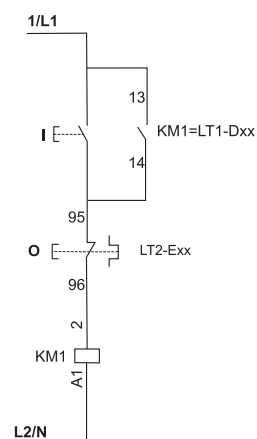
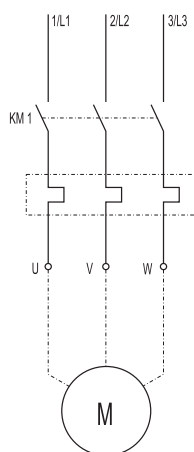
- switching on/off alternating current consumers
- does not allow secondary unwarranted switching on of the starter at transitory lowering of the voltage
- protects the motor from overload in the range of the corresponding thermal protection
- remarkable with high reliability of current characteristics

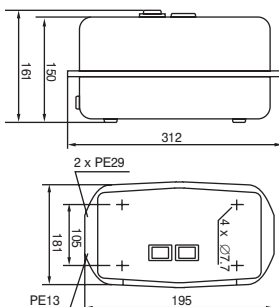
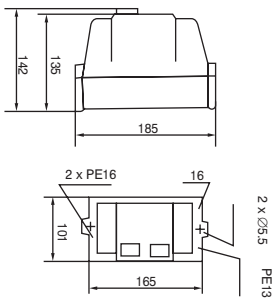
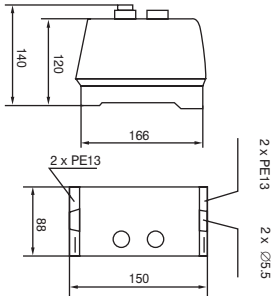
TECHNICAL DATA:

- Rated voltage of the controlling voltage: 230/400V AC; 50/60 Hz

NOTE: In case you need different controlling coils voltage of the starters you can turn to our regional representatives.

- Rated operating voltage: 690V
- Rated operating current range: from 7 to 93 A AC
- insulation voltage: 690V
- Surge voltage wear resistance: $\geq 6000V$
- Joining terminal: screw terminal
- Little power consumption and small dimensions
- Connecting:
 - flexible or rigid conductors with or without cable terminal for joining to the consumer and section according to the motor power
 - two by two inlets/outlets supplied with orifices for the cables
- Possibility for range adjustment of the protection activating
- IP code: IP 44
- Possibility for operation at higher frequency
- Mounting:
 - mounting to a flat surface (wall) with bolts/screws
 - mounting position: vertical gradient, maximum $\pm 5^\circ$
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- Metal corpus: corrosion-proof coating
- Ambient temperature: $-10^\circ C + 65^\circ C$
- Altitude: up to 2000m





Type	Rated capacity of motors 50/60Hz AC-3 category			Rated current (A)	Thermal relay adjustment range	Coil voltage (V)	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	415V 440V						
LT5 D093	2.2	4.0	4.0	9	7 .. 10A	230 400	1 / 16 1 / 16	B B	43091 43092
LT5 D123	3.0	5.5	5.5	12	9 .. 13A	230 400	1 / 16 1 / 16	B B	43121 43122
LT5 D185	4.0	7.5	9.0	18	12 .. 18A	230 400	1 / 16 1 / 16	B B	43181 43182



Note: Upon request the thermal relay will be replaced

Type	Rated capacity of motors 50/60Hz AC-3 category			Rated current (A)	Thermal relay adjustment range	Coil voltage (V)	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	415V 440V						
LT5 D255	5.5	11	11	25	17 .. 25A	230 400	1 / 16 1 / 16	B B	43251 43252
LT5 D325	7.5	15	15	32	23 .. 32A	230 400	1 / 16 1 / 16	B B	43321 43322



Note: Upon request the thermal relay will be replaced

Type	Rated capacity of motors 50/60Hz AC-3 category			Rated current (A)	Thermal relay adjustment range	Coil voltage (V)	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	415V 440V						
LT5 D405	11.0	18.5	22	40	30 .. 40A	230 400	1/6 1/6	B B	43401 43402
LT5 D655	18.5	30.0	37	65	48 .. 65A	230 400	1/6 1/6	B B	43651 43652
LT5 D955	25.0	45.0	45	95	80 .. 93A	230 400	1/6 1/6	B B	43951 43952



Note: Upon request the thermal relay will be replaced

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:

Standard EN 60947-1
EN 60947-4-1

**"STAR/DELTA" STARTER**

The electromagnetic starters LT 3 Dxx series are devices designed for remote control, direct control and protection of induction motors coiled and operating according to a starter scheme "star/delta". They are a combination of three contactors LT 1 Dxx series, time relay and a set of buttons "start" and "stop" factory cabled. They provide the easy motor unwinding giving possibility for setting the time for unwinding in "star" as the time for switching between "star" and "delta" is fixed to 0.5 seconds.

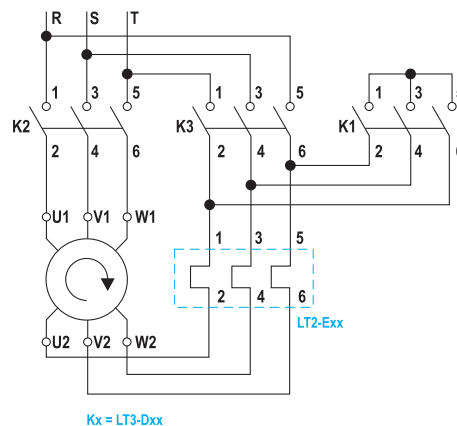
The starters are offered on the market in two types:

- closed type – metal boxes providing the corresponding IP code from dust and moisture (IP 54) as at mounting there should be provided protection of the device from short circuit through breakers or disconnectors
- open type – for mounting in distribution boxes as at mounting there should be provided protection of the device from short circuit through breakers or disconnectors

The starters are offered on the market without mounted thermal protection which is purchased separately according to the motor capacity. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation. If necessary, at client's order the power supply operating voltage of the pneumatic starter can be changed.

FUNCTIONS:

- switching on/off alternating current three phase motors operating according to a scheme "star - delta"
- does not allow secondary unwarranted switching on of the starter at transitory lowering of the voltage



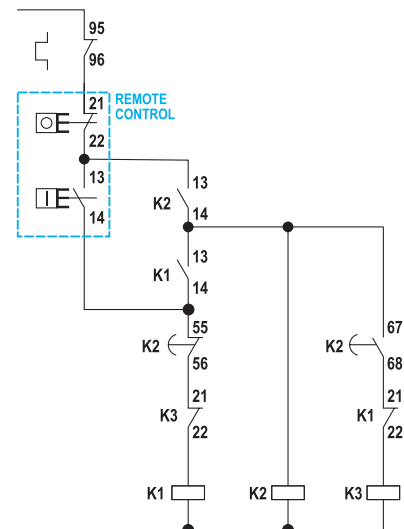
- protects the motor from overload in the range of the corresponding thermal protection
- indication of the operating condition through a valve indicator
- possibility for mounting of additional contacts (for the open type)
- remarkable with high reliability of current characteristics

TECHNICAL DATA:

- Rated voltage of the controlling voltage: 400V AC; 50/60 Hz

NOTE: In case you need different controlling coils voltage of the starters you can turn to our regional representatives.

- Rated operating voltage: 690V
- Rated operating current range: from 7 to 93A AC
- insulation voltage: >690V
- Surge voltage wear resistance: ≥6000V
- Joining terminal: screw terminal
- Little power consumption and small dimensions
- Connecting:
 - flexible or rigid conductors with or without cable terminal for joining to the consumer and section according to the motor power
 - three by three inlets/outlets supplied with orifices for the cables
- Possibility for operation at higher frequency
- IP code: IP54
- Mounting:
 - mounting to a flat surface (wall) with bolts/screws
 - mounting position: vertical gradient, maximum ± 5°
- The metal body is covered with corrosion-proof paint
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m





Type designation (without a box)	Overall dimensions (mm)		
	height	width	depth
LT3-D25A	135	170	160
LT3-D32A	135	170	160
LT3-D40A	150	285	190
LT3-D65A	150	285	190
LT3-D95A	150	310	190

Type designation (without a box)	Rated capacity (kW)				Rated current (A)	Coil voltage (V AC)	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	415V	440V					
LT3-D25A	11	15	15	15	25	400	1 / 6	B	43253
LT3-D32A	15	18.5	18.5	18.5	32	400	1 / 6	B	43323
LT3-D40A	18.5	22	22	22	40	400	1 / 4	B	43403
LT3-D65A	30	55	55	55	65	400	1 / 4	B	43653
LT3-D95A	37	75	75	75	95	400	1 / 4	B	43953



Note: It is necessary that thermal protection with suitable range is mounted to protect the controlled motor. The shown values of magnetic starters are for normal regimes for motor control, for hard operation regimes are chosen starters which correspond to the current rating of the motor.



Type designation (with box)	Overall dimensions (mm)		
	height	width	depth
LT 3 - B - D25A	370	240	160
LT 3 - B - D32A	370	240	160
LT 3 - B - D40A	470	265	160
LT 3 - B - D65A	470	265	160
LT 3 - B - D95A	470	265	160

Type designation (with box)	Rated capacity (kW)				Rated current (A)	Coil voltage (V AC)	Packing/Box (pcs)	Product category	Catalogue number
	220V 230V	380V 400V	415V	440V					
LT 3 - B - D25A	11	15	15	15	25	400	1 / 4	B	43254



Note: It is necessary that thermal protection with suitable range is mounted to protect the controlled motor. The shown values of magnetic starters are for normal regimes for motor control, for hard operation regimes are chosen starters which correspond to the current rating of the motor.

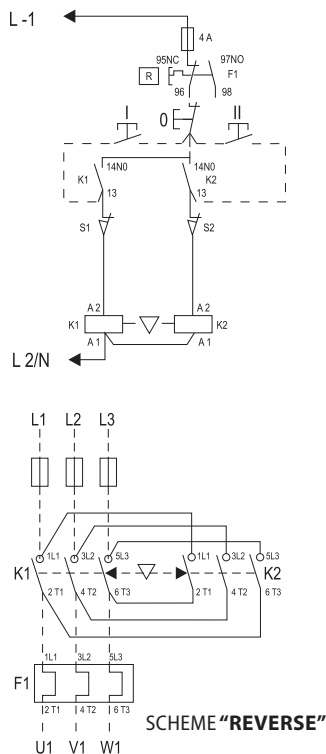
Documents corresponding to the product:

Standard EN 60947-1

EN 60947-4-1



with thermal overload relays

**REVERSE STARTER**

The electromagnetic starters LT4 Dxx series are devices used for direct start, reverse start and protection of induction motors with short connected rotor. They are a combination of two contactors LT1 Dxx series supplied with two buttons "start" and one "stop" factory cabled. They provide the unwinding of the motor in one of the directions with possibility for pushing the button "stop" and giving command from the other "start" for changing the motor winding direction. The two contactors are mechanically blocked and do not allow simultaneous start in both winding directions. The starters are offered – closed type in metal boxes providing the corresponding IP code from dust and moisture (IP54) as at mounting there should be provided protection of the device from short circuit through breakers or disconnectors. The starters are offered with mounted thermal protection which can be substituted according to the motor power. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation.

If necessary, at order the power supply operating voltage of the pneumatic starter can be changed.

FUNCTIONS:

- switching on alternating current three phase motors in one winding direction, switching off and change of the winding direction at giving a signal
- does not allow secondary unwarranted switching on of the starter at transitory lowering of the voltage
- protects the motor from overload in the range of the corresponding thermal protection
- remarkable with high reliability of current characteristics

TECHNICAL DATA:

- Rated voltage of the controlling voltage: 400V AC; 50/60 Hz

NOTE: In case you need different controlling coils voltage of the starters you can turn to our regional representatives.

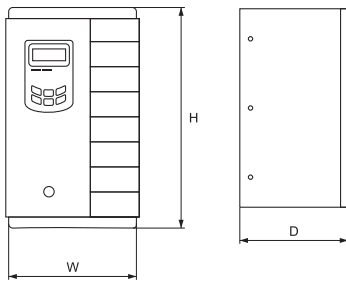
- Rated operating voltage: 690V
- Rated operating current range: from 7 to 93 A AC
- insulation voltage: 690V
- Surge voltage wear resistance: $\geq 6000V$
- Joining terminal: screw terminal
- Little power consumption and small dimensions
- Connecting:
 - flexible or rigid conductors with or without cable terminal for joining to the consumer and section according to the motor power
 - three by three inlets/outlets supplied with orifices for the cables
- Possibility for operation at higher frequency
- IP code: IP 44
- Mounting:
 - mounting to a flat surface (wall) with bolts/screws
 - mounting position: vertical gradient, maximum $\pm 5^\circ$
- The metal body is covered with corrosion-proof paint
- Ambient temperature: $-10^\circ C + 65^\circ C$
- Altitude: up to 2000m

Type designation (with a box)	Rated capacity (kW)				Overall dimensions (mm)			Rated current (A)	Coil voltage (V AC)	Packing/ Box (pcs)	Product category	Catalogue number
	220V	380V	415V	440V	height	width	depth					
	230V	400V										
LT 4 - B - D25A	11.0	15.0	15.0	15.0	240	240	160	25	400	1 / 8	B	43001
LT 4 - B - D40A	18.5	22.0	22.0	22.0	270	265	160	40	400	1 / 2	B	43003
LT 4 - B - D95A	37.0	75.0	75.0	75.0	270	265	160	95	400	1 / 4	B	43005
LT 4 - B - D25A	11.0	15.0	15.0	15.0	240	240	160	25	230	1 / 4	B	43006
LT 4 - B - D32A	15.0	18.5	18.5	18.5	240	240	160	32	230	1 / 4	B	43007
LT 4 - B - D40A	18.5	22.0	22.0	22.0	270	265	160	40	230	1 / 4	B	43008
LT 4 - B - D65A	30.0	55.0	55.0	55.0	270	265	160	65	230	1 / 4	B	43009
LT 4 - B - D95A	37.0	75.0	75.0	75.0	270	265	160	95	230	1 / 4	B	43010



Documents corresponding to the product:

Standard EN61800-3
EN61800-5-1



ELM 2000+ FREQUENCY INVERTERS

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

High-tech motor control concept, based on advanced DSP-technology - ready for V/Hz, SENSORLESS VECTOR, CLV and PMM motor control - intelligent AUTOTUNING functions for easy setup

Flexible inverter control, dual high resolution analogue inputs, free mappable digital I/O channels

Ready for all commonly used fieldbus systems

Universal function-set for all kind of industrial and residential applications, including integrated PID/pump controller routines

Smart PC-tools, for inverter control, parametrization and troubleshooting. Parameter-duplication stick

Brake chopper integrated

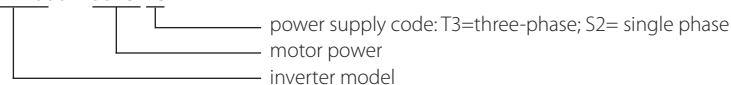
TECHNICAL FEATURES:

- Power range:
 - 0,4.....400 kW
- Power input:
 - Rated input voltage- 1-Phase 220V~240V~±15%); 3-Phase 380V-460V (+/-)15%
 - Input frequency- 44....67 Hz
- Motor output:
 - Output frequency- 0-650 Hz
 - Frequency resolution- 0,01 Hz
 - Overload capability- 150% - 60 sec. / 10 min
- Control mode:
 - Motor control algorithm- V/Hz-SpaceVector, SLV-SENSORLESS VECTOR,Torque/Speed control
 - mode CLV-Closed loop vector,Permanent Magnet Synchronous Motor
 - Chopper frequency- 0.8...16 kHz (fixed / random)
 - V/Hz curve- Linear, exponential, and user-programmable curve
 - Starting torque- 150% rated torque at 0,5 Hz (in SLV Mode)
 - Torque compensation- Automatic / Manual
 - Motor data input- Manual, from nameplate / AUTOTUNING
 - Control range- 1:100 in SLV mode,1:1000 in CLV mode,1:20 in PMSM mode
 - Speed precision +/- 0,5% (SLV),+/- 0.02% (CLV)
 - Torque precision +/- 5% (SLV)
 - DC-Brake- User programmable functions
 - Brake chopper- Chopper transistor integrated (up to 90 kW)

- Display:
 - 7 segment, 4 characters
 - Config-Parameters and -value, programmable to display various working parameters
- I/O Channels and control functions:
 - Inverter control- Via terminals / Keypad / Serial link (or combination of all)
 - Digital inputs- 6 (8) Dig. inputs (NPN-PNP selectable) pulstrain-input
 - Speed reference input- Potentiometer (on keypad unit, external), analogue signal (terminals), keypad, internal programmable value, pulsetrain, serial link
 - Analogue channels- analogue channels - 12 BIT: 0...10V, 0...5V, -10V...0...10V, 0...(4)20 mA,
 - all free scalable in gain and offset, and mathematically concatenable
 - Analogue outputs- 2 analogue outputs, programmable in gain and function (0...10V, 0(4)...20 mA)
 - Digital outputs- 2 digital outputs (free mapping to different functions)
 - Relais output- 1 switchover contact 3A 250VAC/30VDC (programmable assignment)
 - Data link- Serial link RS 485 (MODBUS)
 - Special functions- 24V / 50 mA auxiliary power supply on terminals, 10V potentiometer power supply, 5V/100 mA power supply on modbus connector Simple PTC / KLIXON motor protection
- Protection:
 - Electrical- Overvoltage, undervoltage
 - Overcurrent, overload, motor-overload, output short-circuit
 - Thermal- Heatsink overtemperature, I²t motorprotection
- Operating conditions:
 - Protection class IP20
 - Working temperature -10+50 °C
 - Humidity- 0 to 95% RH, non-condensing, non-corrosive
 - Altitude- 1000 m, above 1% derating / 100m
 - Vibration- Max. 0,5 g

Type of sign

ELM2000+ 0015 T3





LCD REMOTE FRAME SIZE
KEYPAD FOR CABINET IP66
423432P



CABLE FOR REMOTE KEYPAD
IP66 - 1.5meter
423433P



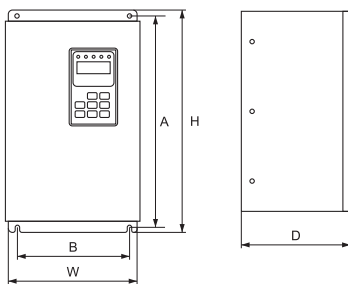
PARAMETER
COPY STICK
423434P

Type	Input voltage (V)	Maximum output power (kW)	Maximum current output (A)	Dimensions (WxDxH-mm)	Weights (kg)	Product category	Catalogue number
E2000-0004 S2B	230	0.4	2.5A	80x140x135	1.40	B	423400P
E2000-0007 S2B	230	0.7	4.5A	80x140x135	1.50	B	423401P
E2000-0015 S2B	230	1.5	7A	106x180x150	2.00	B	423402P
E2000-0022 S2B	230	2.2	10A	106x180x150	2.10	B	423403P
E2000-0007 T3	400	0.7	2A	106x180x150	2.00	B	423404P
E2000-0015 T3	400	1.5	4.6A	106x180x150	2.10	B	423405P
E2000-0022 T3	400	2.2	6.5A	106x180x170	2.20	B	423406P
E2000-0030 T3	400	3.0	7A	138x235x152	2.50	B	423407P
E2000-0040 T3	400	4.0	9A	138x235x152	3.00	B	423408P
E2000-0055 T3	400	5.5	12A	156x265x170	3.50	B	423409P
E2000-0075 T3	400	7.5	17A	156x265x170	4.50	B	423410P
E2000-0110 T3	400	11.0	23A	205x340x196	4.80	B	423411P
E2000-0150 T3	400	15.0	32A	205x340x196	8.00	B	423412P
E2000-0185 T3	400	18.5	38A	205x340x196	8.50	B	423413P
E2000-0220 T3	400	22.0	44A	270x435x235	9.00	B	423414P
E2000-0300 T3	400	30.0	60A	315x480x235	22.50	B	423415P
E2000-0370 T3	400	37.0	75A	315x480x235	24.00	B	423416P
E2000-0450 T3	400	45.0	90A	360x555x265	24.50	B	423417P
E2000-0550 T3	400	55.0	110A	360x555x265	41.50	B	423418P
E2000-0750 T3	400	75.0	150A	410x650x300	42.00	B	423419P
E2000-0900 T3	400	90.0	180A	410x650x300	56.00	B	423420P
E2000-1100 T3	400	110.0	220A	516x765x326	56.50	B	423421P
E2000-1320 T3	400	132.0	265A	560x910x342	87.00	B	423422P
E2000-1600 T3	400	160.0	320A	560x910x342	123.00	B	423423P
E2000-1800 T3	400	180.0	360A	400x1310x385	124.00	B	423424P
E2000-2000 T3	400	200.0	400A	535x1340x380	125.00	B	423425P
E2000-2200 T3	400	220.0	440A	535x1340x380	185.00	B	423426P
E2000-2500 T3	400	250.0	480A	600x1465x380	186.00	B	423427P
E2000-2800 T3	400	280.0	530A	600x1465x380	225.00	B	423428P
E2000-3150 T3	400	315.0	580A	600x1465x380	230.00	B	423429P
E2000-3550 T3	400	355.0	640A	600x1600x388	233.00	B	423430P
E2000-4000 T3	400	400.0	690A	600x1600x388	234.00	B	423431P



Documents corresponding to the product:

Standard EN60898-1
EN 60947-2



Type	Overall dimensions (mm)					
	H	W	A	B	D	d
G0007S2B	150	105	139	94	120	Ø4
G0015S2B	170	125	160	114	140	Ø5
G0022S2B	170	125	160	114	140	Ø5
G0007T3B	170	125	160	114	140	Ø5
G0015T3B	170	125	160	114	140	Ø5
G0022T3B	170	125	160	114	140	Ø5
G0037T3B	250	162	233	145	150	Ø6
G0040T3B	250	162	233	145	150	Ø6
G0055T3B	300	200	282	182	160	Ø6
G0075T3B	300	200	282	182	160	Ø6
G0110T3C	340	225	322	160	220	Ø6
G0150T3C	380	230	362	186	225	Ø6

UNTIL SUPPLY
LAST

ELM 1000 FREQUENCY INVERTERS

Frequency inverters are designed to control three-phase induction motors with short-circuited rotor. They provide for the implementation of some control laws, thus becoming an indispensable part of the control systems for conveyors and packaging machines, pumps, air conditioning systems, etc. The ELM 1000 inverter provides the so-called no-sensor control, V/f control and impulse control while the output load can reach up to 150% within 60 seconds. It features easy definition of curves and easy parameters setting of inverter through the use of control panel buttons. The inverter can auto calibrate according to the motor power, i.e. if the inverter is connected to a motor with power different from that set by the inverter manufacturer, it automatically adjusts its programmable parameters to suit the motor parameters.

FUNCTIONS:

- rotation speed increase – automatic and manual
- sliding compensation: from 0 to 20%
- no-sensor control of the motor
- adjustment of the V/F control curve – linear or quadratic
- energy saving through automatic optimization of the V/F curve
- PID control law implementation option
- omission of resonance frequencies
- JOG function
- 'counter' function
- automatic restart option in case of power supply failure
- fifteen speed degrees control option
- control choice from the control panel; external or COM terminal
- frequency control from the control panel, external potentiometer by current or by voltage
- auto-calibration in accordance with the switched motor
- incoming signals on clockwise or counter-clockwise rotation, multi-step control, restart, etc.
- outgoing discrete control signal 24V
- outgoing analogue control signal 0 – 10V
- DC brake in static mode
- dynamic braking with external braking resistor – used in inert electric motor load
- output voltage adjustment option

- activation of output safety functions option
- electronic motor protection

TECHNICAL FEATURES:

- Rated working voltage: 230/400V AC; 50 Hz
- Permissible working voltage deviation: $\pm 10\%$
- Unbalance of phases: $< 3\%$
- Frequency fluctuation: $< 5\%$
- Output frequency: 0 – 400 Hz
- Output voltage: from 0 to U_{bx} max
- Overload capacity:
 - constant: up to 110%
 - momentary: up to 150%
- Precision of output frequency adjustment: 0.1%
- Type of connection:
 - the connection of the inverter to the power supply should always be done through a circuit breaker of the MCB or MCCB type
 - connection of consumer to power terminals: through conductors suitable for the power
 - connection of control circuits: flexible conductor up to 1.5 mm²

NOTE: It is not recommendable to mount contactors or other commutation devices between the frequency inverter and the motor, except as described in the product passport.

- Mounting:
 - mounting to a flat surface by means of bolts
 - mounting position – vertical gradient maximum $\pm 5^\circ$

NOTE: When more than one inverter is mounted in a board, it is recommendable to mount them side by side and when this is not possible, the appropriate cooling conditions should be provided.

- Plastic: UV-rays resistant and fire resistant (self-extinguishing material)
- Ambient temperature: -10° to 65° C
- Altitude : up to 2000 m
- Function enhancement option: through the inclusion of additional modules

Type	Input voltage (V)	Maximum output power (kW)	Maximum current output (A)	Packing/Box (pcs)	Product category	Catalogue number
ELM1000-G0007T3B	400	0.75	2	1 / 4	F	423307M
ELM1000-G0040T3B	400	4.0	9	1 / 1	F	423340M
ELM1000-G0110T3C	400	11	23	1 / 1	F	423391M
ELM1000-G0150T3C	400	15	32	1 / 1	F	423392M



Type of sign

ELM1000- G -0150 T3 C

- lid type code: C=metal clips; B=plastic lid
- power supply code: T3=three-phase; S2= single phase
- motor power
- inverter type: G=constant momentum
- inverter model

Documents corresponding to the product:

Standard EN60947-4-2

EN 60947-1

**SOFT STARTER ELM 2500**
3+2
 standard
 +extended **5** YEAR TOTAL WARRANTY

Soft starters are designed to control the start of three-phase induction motors with short-circuited rotor. A number of motor control issues are avoided through them, and namely: prolonged start moments, auto-ignition of motor, there is no need of stardelta switching, auto-transformer switching, resistant switching, etc. The ELM 2500 soft starter pertains to the AC53b type of starters as per the standard requirements and it provides rotation of motor and once the operation mode is set, a shunt contactor of the LT 1 D/F series is switched to control motor operation as the soft starter is not designed to control motors in a set mode. Under a stop command in accordance with the selected control scheme, the soft starter can or can not be included in shutting the motor down.

- Control functions
 - output faults
 - motor faults diagnostics
 - keyboard or outward control
 - delayed start option
 - faults memory

TECHNICAL FEATURES:

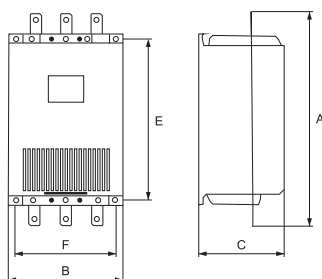
- Rated working voltage: 230/400V AC; 50 Hz
- Permissible working voltage deviation: $\pm 10\%$
- Unbalance of phases: $< 3\%$
- Frequency fluctuation: $< 5\%$
- Obligatory bypass contactor installation
- Mounting :
 - mounting to a flat surface through bolts
 - mounting position – vertical gradient maximum $\pm 5^\circ$

FUNCTIONS:

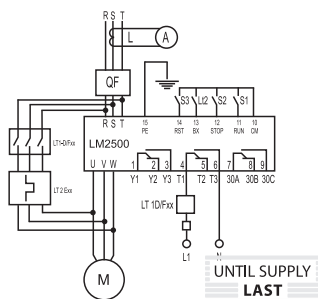
- System functions
 - over-voltage protection – motor will switch off when power supply exceeds the preset limits
 - overload protection – protects the motor from overloading
 - phase loss protection
 - temperature overload protection

NOTE: When more than one soft starter is mounted in a board, it is recommendable to mount them side by side and when this is not possible, the appropriate cooling conditions should be provided.

- Plastic: UV-rays resistant and fire resistant (self-extinguishing material)
- Altitude : up to 2000 m



Type	Overall dimensions (mm)					
	A	B	C	E	F	d
EL M25015	250	153	162	219	140	Ø6
EL M25022	250	153	162	219	140	Ø6
EL M25037	250	153	162	219	140	Ø6
EL M25045	250	153	162	219	140	Ø6
EL M25055	250	153	162	219	140	Ø6
EL M25075	510	260	194	389	232	Ø8



Type	Power of motor (kW)	Rated current (A)	Type of bypass contactor	Section of power supply conductors	Packing/Box (pcs)	Product category	Catalogue number
EL M25015	15	30	LT 1-D 50	10	1 / 1	F	42225015
EL M25045	45	90	LT 1-D 95	25	1 / 1	F	42225045
EL M25055	55	110	LT 1-F 115	25	1 / 1	F	42225055
EL M25075	75	150	LT 1-F 150	35	1 / 1	F	42225075





COMPLEX COMPENSATING DEVICES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The use of electrical energy in industry is invariably connected with its transformation. The development of semiconductor elements and the broader coming of semi-conductor transformers, frequency control, welding machines and electrical arc furnaces in industrial projects have a negative impact over the electrical power quality in the electro distributing systems. Induction machines need reactive energy to create electromagnetic field. The reactive component of current is taken from the electro distributing systems but it leads to additional losses in the power supply system and makes shorter the exploitation term of electrical devices. This leads to curving of the sinusoid form of current and voltage and interferences with harmonic character. Compensating the reactive power means to fill up the system in such a way that the needed reactive power to be created from the compensating device instead of being taken from the electro transportation system. This leads to killing the voltage fall and cable losses and increasing the outlet power of the power transporters and cutting down the bills for overconsumption of reactive energy paid by consumers to the electricity supply company. In practice compensating the reactive energy and high harmonics through LC filters combined in compensating installations has the broadest spreading.

THERE ARE SEVERAL TYPES OF COMPENSATION ACCORDING TO THEIR LOCATION:

individual compensation – when to every single motor or consumer is mounted a compensating system. It is applied to powerful motors and transformers with fixed capacity.

installation compensation – when the consumers from the whole section (workshop) are grouped and compensation is accomplished for the whole section.

overall compensation – accomplished at full compensation in the inlet of the installation.

ACCORDING TO THE TYPE OF THE COMPENSATING DEVICES COMPENSATION CAN BE:

- passive – when the system supplies constant reactive power. In this case the system does not react to changes in the size and nature of the harmonic components and also to the per cent increase of the reactive energy in time.

- active – broader spread. The system controls the form of the consumed current and generates different capacity depending on the load changes.

When designing the electro distributing system of industrial projects the following tasks are taken into consideration:

- defining the factor of non-sinusoid of the consumers and the voltage harmonic components
- defining the additional loading of the capacitor batteries from the harmonic components and calculating the filtering elements if needed

The calculation of the compensating device capacity is done by reading the reactive energy of the system and the working time of the system. Compensating devices represent a device of one or several metal boxes with common rail system, automatic regulator for $\cos\phi$ control RPSF-xx series, different number of capacitor batteries (according to the capacity of the device) with different capacity HY 111 series, contactors for capacitor batteries control CJ 19-43 series, protective elements, etc.

The broadest spreading of compensation has acquired the compensation of harmonics and reactive energy with capacitors for high voltage. Capacitors HY 111 series are voltage remeasured and are able to endure overload from harmonic components up to 7% from the basic harmonics. They are used in systems with high harmonics foul up to 25%.

The high harmonics composition is defined after measuring the influence rate of each separate harmonics compared to the first one. In Bulgaria mostly spread are 5, 7, 9, 11 and 13 harmonics. The capacitors are remeasured for voltage 415V and are normally mounted right in the compensation systems.

When the high harmonics are over 25% the system is taken to be foul and in this case except using capacitors, filters for leveling the harmonics are to be used as well. These filters are calculated on the basis of the corresponding voltage harmonics and differ for the different harmonics. They are calculated using complex mathematical programme which reads the foul rate, the significance per cent of the voltage harmonic component, etc.

Documents corresponding to the product:

Standard EN 60831-1

EN 60831-2

**CAPACITOR BATTERIES FOR REACTIVE ENERGY COMPENSATION**
2+0
 standard
 +extended
2 YEAR TOTAL
 WARRANTY

Capacitor batteries HY 111 series are specially designed three phase dry capacitors for compensation of reactive energy and correction of the capacity factor. It represents an aluminum cylindrical body in which a metal polypropylene folio is mounted which does not require special impregnation. The permittivity characteristics are acquired through filling with a special mixture on a vegetable base (resins). The capacitor battery is constructed in such a way that at failure (overload from voltage, current or temperature) breaks the connection to the upper cover where are the connections to the power supply. This is done by a specially constructed valve for overpressure mounted right above the capacitor element. The breaking of the inner couplings provides protection to the staff and environment from damage due to capacitor element failure. There is a three phase capacitor in the cylindrical body with built in resistor for rarefying the

capacitors.

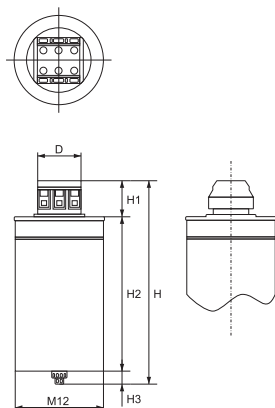
The capacitor battery can be used both for passive and active compensation.

TECHNICAL DATA:

- Rated operating voltage: 450V; 50Hz
- insulation voltage: 690V
- Surge voltage wear resistance: 6kV per minute
- Capacity: from 5,0 to 100,0 kVar at 450V
- Tolerance: ±5%
- Operating temperature: -40°C - +65°C
- Capacity losses: 0.5W/kVar
- Built in discharging resistance
- Admissible current overload: twice as much the peak current
- Discharge time: <50V per minute
- Altitude: 2000m

MOUNTING:

- With bolt M12 or M16 to a flat horizontal base



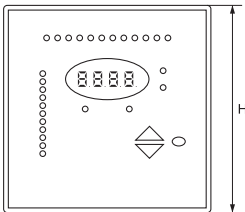
Dimensions (mm)

D	H1	H3
30	35	16

Type of the battery	Dimensions H / Ø (mm)	Operating voltage (V)	Battery capacity (kVar)	Capacity (µF)	Packing/Box (pcs)	Product category	Catalogue number
HY 11A5	210/76	450	5.0	3X26.2	6	B	49005
HY 11A7	210/76	450	7.5	3X39	6	B	49007
HY 11A8*	230/80	450	8.0	3X39	6	F	49008
HY 11A10	240/76	450	10.0	3X52.4	6	B	49010
HY 11A15	240/86	450	15.0	3X78.9	6	B	49015
HY 11A20	240/116	450	20.0	3X105	6	B	49020
HY 11A30	280/160	450	30.0	3X157	6	B	49030
HY 11A50	345/180	450	50.0	3X262	6	B	49050
HY 11A100	300/300	450	100.0	3X524	6	B	49100
HY 11A12**	230 / 85	690	12.5	3X27.9	6	B	49031
HY 11A25**	280 / 115	690	25	3X55.7	6	B	49032



Note: *Until supply last, **Suitable for wind generators



CONTROLLER FOR AUTOMATIC REGULATION OF THE CAPACITY FACTOR (COSΦ REGULATOR)

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The automatic regulators of the capacity factor RPCF-xx series are devices for monitoring of low voltage systems and control of switching on of capacitor batteries for the capacity factor compensation. There is possibility for adjustment of the system parameters and control. Manufactured by the latest CMOS technology, they are distinguished with high degree of data security, easy programming and secure control of the outlets. There is possibility for indication and setting the parameters of the power supply system as: capacity coefficient, display of the system parameters such as voltage, current and capacity, losses, protection against overload, overload indication or lack of voltage, etc.

The change of parameters is performed through a combination of buttons on the front panel. There is light diode to indicate which parameter is being displayed on the screen and which outlets are in operation. The display is four digital. There is possibility for choice of the working conditions: manual or automatic.

TECHNICAL DATA:

- Rated operating voltage: 230/400V
- Operating frequency: 45 – 65Hz
- insulation voltage: 690V
- Surge voltage wear resistance: 6kV per minute
- Measurement range: from 0 to 9999kVAr
- Measurement accurateness:
 - voltage: $\pm 1.0\%$
 - current: $\pm 1.0\%$
 - capacity coefficient: $\pm 1.0\%$
 - reactive energy: $\pm 2.0\%$
- Operating temperature: $-10+65^{\circ}\text{C}$
- Humidity: 30 – 60%
- Display: 4 digital
- Responsiveness: 20mA
- Outlet: 7A
- Number of outlets: 12 and 16
- Altitude: up to 2500m

MOUNTING:

On the front panel of the box through cutting an opening

Type	Number of steps	Dimensions H (mm)	Packing/Box (pcs)	Product category	Catalogue number
HY-RPCF12	12	122x122	8	B	49120
HY-RPCF16	16	144x144	8	B	49160



SOLAR POWER OFF-GRID SYSTEMS



The Solar Home Power system is a fixed installation designed for domestic application. They are powered by solar energy using solar cells that convert solar energy (sunlight) directly to electricity. The Solar Home Power system are the perfect compact solution for an independent power supply in remote locations where electricity is unavailable, unreliable or expensive. Can be used in houses, Huts & Cottages, holiday areas, offices and etc. The Solar Home Power system can achieve energy independence - no accession contracts, monthly charges and the need to build an energy grid to your home. The Solar Home Power Systems are compact, portable and easily mountable. They are an economical solution to all your power problems.

HOME SOLAR POWER OFF-GRID SYSTEM 500W SET

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY



FUNCTION:

- Solar power supply

SOLAR PANEL:

- Type: Polycrystalline 18V 150W
- Optimum Operating Voltage: 18V
- Optimum Operating Current: 8.33A
- Open- Circuit Voltage: 20.88V
- Short- Circuit Current: 9.57A
- Power: 150W
- Sizes LxWxH(mm): 1490x680x5

INVERTER:

- 500W
- Output
 - USB 5V
 - 12V DC
 - 220V AC: Universal socket
- Size LxWxH (mm): 200x94x228

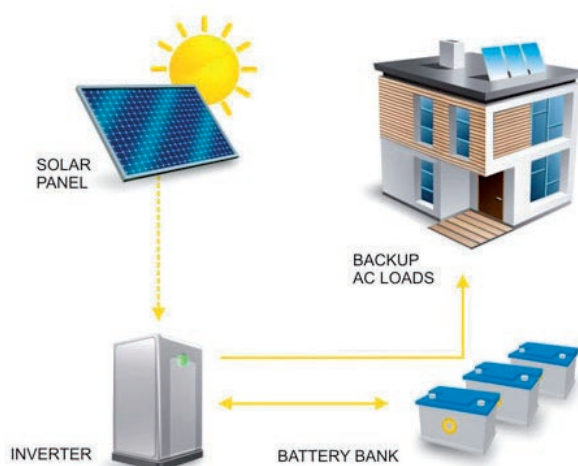
SET INCLUDED:

- Solar panel 18V 150W: 1 pc
- Inverter 500W: 1 pc

Type	Solar panel	Inverter	Battery	Packing/Box (pcs)	Product category	Catalogue number
ELM- 500SOL	18V 150W	500W	100Ah Not included	1	E	98SOL500

Recommended with a battery 100Ah with a catalog number: 98BAT100

Discharging time at 75% consumption from total Inverter power (about 375W) by using 100Ah battery: 3.2h



HOME SOLAR POWER OFF-GRID SYSTEM 800W SET

3+2
 standard
 +extended
5 YEAR TOTAL
 WARRANTY
**FUNCTION:**

- Solar power supply

SOLAR PANEL:

- Type: Polycrystalline 18V 150W
- Optimum Operating Voltage: 18V
- Optimum Operating Current: 8.33A
- Open- Circuit Voltage: 20.88V
- Short- Circuit Current: 9.57A
- Power: 150W
- Sizes LxWxH(mm): 1490x680x5

INVERTER:

- 800W
- Output
 - USB 5V
 - 12V DC
 - 220V AC: Universal socket
- Size LxWxH (mm): 300x100x220

SET INCLUDED:

- Solar panel 18V 150W: 1 pc
- Inverter 800W: 1 pc



Type	Solar panel	Inverter	Battery	Packing/Box (pcs)	Product category	Catalogue number
ELM- 800SOL	18V 150W	800W	100Ah Not included	1	E	98SOL800

Recommended with a battery 100Ah with a catalog number: 98BAT100

Discharging time at 75% consumption from total Inverter power (about 600W) by using 100Ah battery: 2h



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

HOME SOLAR POWER OFF-GRID SYSTEM 2000W SET

3+2
 standard
 +extended
5 YEAR TOTAL
 WARRANTY
**FUNCTION:**

- Solar power supply

SOLAR PANEL:

- Type: Polycrystalline 36V 250W
- Optimum Operating Voltage: 36V
- Optimum Operating Current: 13.89A
- Short-Circuit Current: 15.97A
- Power: 2x250W

INVERTER:

- 2000W
- Output
 - USB 5V
 - 12V DC
 - 220V AC: Universal socket
- Size LxWxH (mm): 300x100x220

SET INCLUDED:

- Solar panel 36V 250W: 2 pc
- Inverter 2000W: 1 pc

Type	Solar panel	Inverter	Battery	Packing/Box (pcs)	Product category	Catalogue number
ELM- 2000SOL	36V 250Wx2	2000W	2x250Ah Not included	1	E	98SOL2000

Recommended with two battery 250Ah with a catalog number: 98BAT250

Discharging time at 75% consumption from total Inverter power (about 1500W) by using 2 battery 250Ah: 4h



2+0
standard
+extended

2 YEAR TOTAL
WARRANTY



98BAT100

VRLA BATTERY ULTRACELL 100AH

APPLICATION:

- Golf Trolleys
- Garden Equipment
- Portable Equipment
- Solar/Wind Mill Units
- Medical Equipment
- Traffic Lights

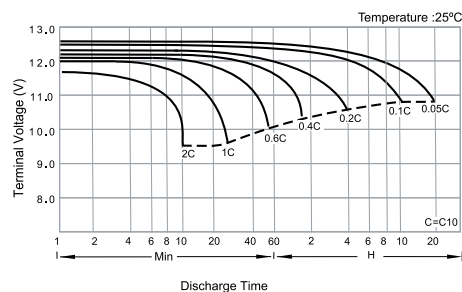
TECHNICAL DATA:

- Nominal Voltage: 12V
- Nominal Capacity (10HR): 100Ah
- Cycle Life in Relation to Depth of Discharge:
 - Extracted Capacity 50%: 1200 Cycles
 - Extracted Capacity 20%: 3600 Cycles
- Rated Capacity:
 - 20HR 1.80V/cell, 25°C- 103 Ah/5.15A
 - 10HR 1.80V/cell, 25°C- 100 Ah/10.0A

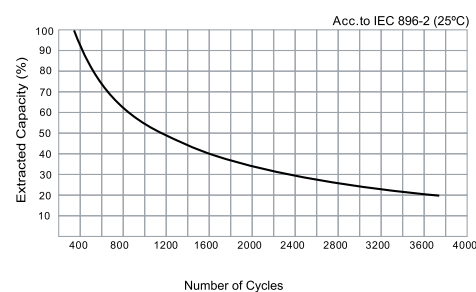
5HR 1.75V/cell, 25°C- 85 Ah/17.0A
 3HR 1.75V/cell, 25°C- 73.8 Ah/24.6A
 1HR 1.60V/cell, 25°C- 59.7 Ah/59.7A

- Max Discharge Current: 1200A (5s)
- Internal resistance: Approx 5mΩ
- Operating Temp Range:
 - Discharge: -15 ~ 50°C
 - Charge: 0 ~ 40°C
 - Storage: -15 ~ 40°C
- Nominal Operating Temp Range: 25 ± 3°C
- Container Material: ABS
- Indoor use
- Dimension LxWxH (mm):
 - 330±3mmx173±3mmx232±3mm
- Weight: 30.4 kg
- Catalogue number: 98BAT100
- Product category: E

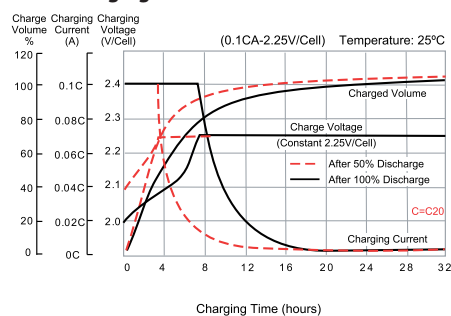
Discharge Characteristics



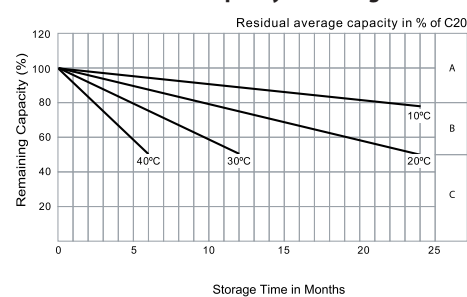
Cycle Life in Relation to Depth of Discharge



Float Charging Characteristics



General Relation of Capacity vs. Storage Time





98BAT250

VRLA BATTERY ULTRACELL 250AH

2+0
standard
+extended
2 YEAR TOTAL
WARRANTY

APPLICATION:

- UCG Series VRLA batteries can be used for:
- Golf Trolleys
- Garden Equipment
- Portable Equipment
- Solar/Wind Mill Units
- Medical Equipment
- Traffic Lights

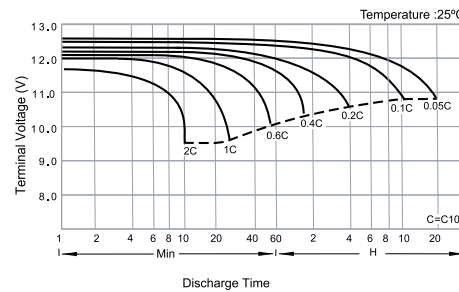
TECHNICAL DATA:

- Nominal Voltage: 12V
- Nominal Capacity (10HR): 250Ah
- Cycle Life in Relation to Depth of Discharge:
Extracted Capacity 50%: 1200 Cycles
Extracted Capacity 20%: 3600 Cycles
- Rated Capacity:
20HR 1.80V/cell, 25°C- 258 Ah/12.9A
10HR 1.80V/cell, 25°C- 250 Ah/25A

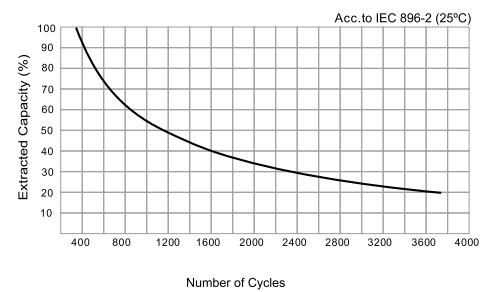
5HR 1.75V/cell, 25°C- 212.5 Ah/42.5A
3HR 1.75V/cell, 25°C- 184.5 Ah/61.5A
1HR 1.60V/cell, 25°C- 149.3 Ah/149.3A

- Max Discharge Current: 2500A (5s)
- Internal resistance: Approx 2.5mΩ
- Operating Temp Range:
Discharge: -15 ~ 50°C
Charge: 0 ~ 40°C
Storage: -15 ~ 40°C
- Nominal Operating Temp Range: 25 ± 3°C
- Container Material: ABS
- Indoor use
- Dimension LxWxH (mm):
522±3MMx268±3MMx226±3MM
- Weight: 70 kg
- Catalogue number: 98BAT250
- Product category: E

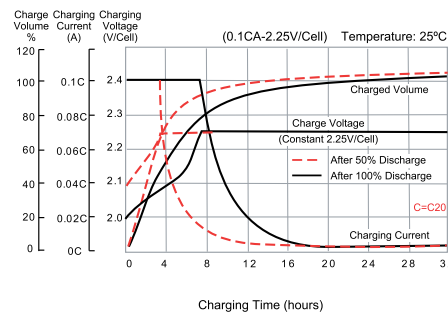
Discharge Characteristics



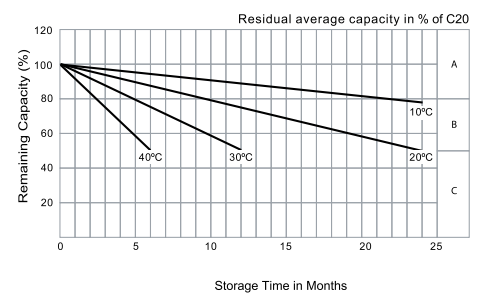
Cycle Life in Relation to Depth of Discharge

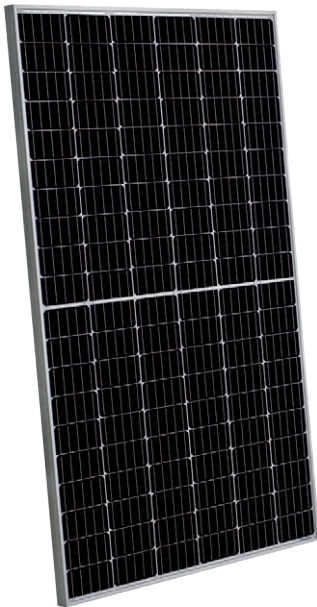


Float Charging Characteristics



General Relation of Capacity vs. Storage Time





MONOCRYSTALLINE HALF CUT CELL SOLAR PANEL

10+0
standard
+extended

10 YEAR TOTAL
WARRANTY

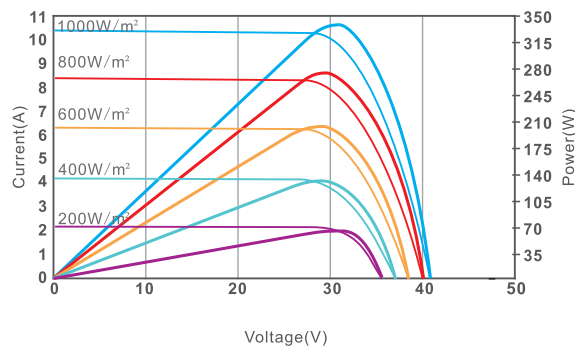
Mono half cut cells Solar Panel that are cut in half. That improves the module's performance and durability. When solar cells are halved, their current is also halved, so resistive losses are lowered and the cells can produce a little more power. Smaller cells experience reduced mechanical stresses, so there is a decreased opportunity for cracking. Half-cell modules have higher output ratings and are more reliable than traditional panels.

Catalogue number: 98SOL380M

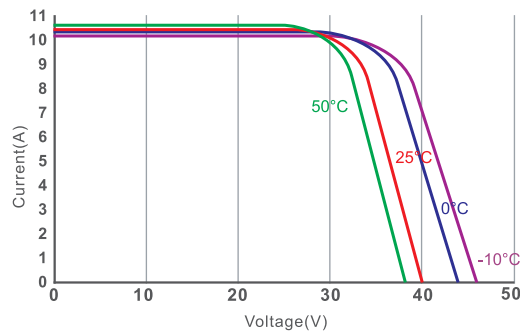
SPECIFICATION

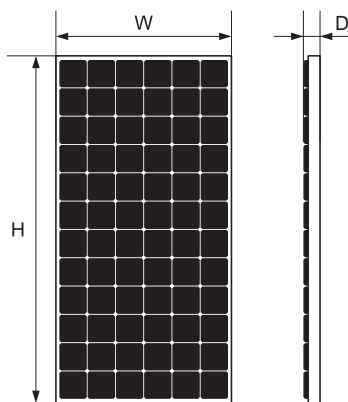
- irradiance 1000 W/m², AM 1.5, and cell temperature of 25°C
- Peak power (P_{max}): 340
- Maximum power voltage (V_{mp}): 34.40
- Maximum power current (I_{mp}): 9.90
- Open circuit voltage (V_{oc}): 40.50
- Short circuit current (I_{sc}): 10.50
- Module efficiency (%): 20.2
- Maximum system voltage (V): 1500
- Power tolerance (W): 0-5
- Cell type: 158.75mm, 9BB
- Number of cells: 120 (6x10+6x10)
- Dimensions HxWxD (mm): 1689x996x35
- Weight (kg): 19.5
- Max. load (Pa): 5400
- EC Declaration of conformity

CHARACTERISTICS AT DIFFERENT IRRADIATIONS



CHARACTERISTICS AT DIFFERENT TEMPERATURES





Dimensions (mm)

H	W	D
1689	996	35

MECHANICAL DATA

Cell Type: 158.75mm, 9BB
 Number of Cells: 120 cells (6x10+6x10)
 Weight: 19.5kg
 Dimension: 1689x996x35mm
 Max Load: 5400 Pascals
 Junction Box: IP68 rated
 Connector: MC4 Compatible
 Wire Type: PV Wire

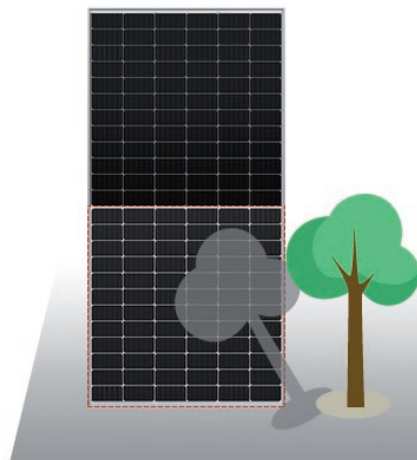
TEMPERATURE CHARACTERISTICS

Temp. Coeff. of Isc (TK Isc): 0.04% /°C
 Temp. Coeff. of Voc (TK Voc): -0.28% /°C
 Temp. Coeff. of Pmax (TK Pmax): -0.37% /°C

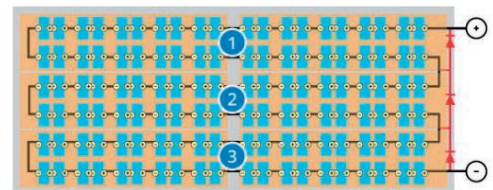
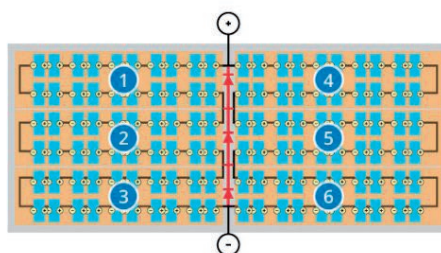
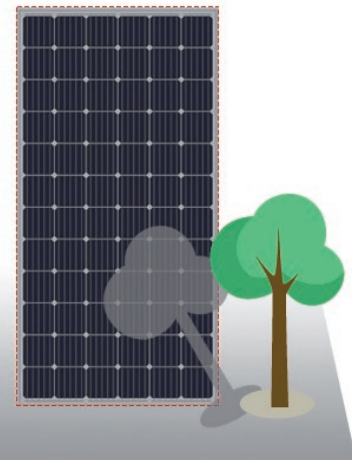
ADVANTAGES OF HALF CELL SOLAR PANELS:

- It is superior in low sunlight performance.
- It is not affected by shade as much as standard panels.
- It is more durable for long life performance
- It is less susceptible to micro cracking. (cracks that develop in cells over time)
- They perform better under high heat conditions than standard solar panels.
- They are less susceptible to hot spots, a major cause of panel failure.
- They are much higher efficiency than standard panels.

HALF CELL MODULE



STANDART MODULE





SOLAR MOUNTING STRUCTURE

Since solar panels are designed for outdoor installation and are subject to continuous weather conditions, the type of material that makes the structure is important for the reliability of the entire system. Due to the envisaged long service life of more than 25 years, the construction and attachment of the panels to it must be secure. The mounting structure are available for ground and in different variants according to the type of the roof - metal, bitumen or tile, flat or pitched.

1 | TILE ROOF MOUNTING STRUCTURE FOR PITCHED ROOF, SET

TECHNICAL DATA:

- Installation Site: tile roof
- Panel type: framed
- Roof Slope: Up to 60 degree
- Wind Speed: Up to 60 m/s
- Snow load: 1.4 KN/m²

FEATURES:

- You can choose your own configuration of elements or the proposed ready-made variants of kits for different power
- Variuos roof hooks for different tile roofs
- Suitable for all framed PV modules
- Easy and fast installation
- Pre-assembled components save the installation time and cost

SUITABLE COMPONENTS FOR PITCHED TILE ROOF



Description	Material	Product category	Catalogue number
Rails- 2100mm	Aluminium 6005-T5	E	423200



Description	Material	Product category	Catalogue number
Rail connector- 140mm	Aluminium 6005-T5	E	423201



Description	Material	Product category	Catalogue number
Mid clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423202



Description	Material	Product category	Catalogue number
End clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423203



Description	Material	Product category	Catalogue number
Tile Roof Hook 1	stainless steel	E	423204



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Description	Material	Product category	Catalogue number
Tile Roof Hook 2	stainless steel	E	423205



Description	Material	Product category	Catalogue number
Tile Roof Hook 13	stainless steel	E	423206



Description	Material	Product category	Catalogue number
Tile Roof Hook 14	stainless steel	E	423207



Description	Material	Product category	Catalogue number
Grounding Clip	stainless steel	E	423208



Description	Material	Product category	Catalogue number
Earth lug	Aluminium	E	423209

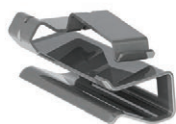


Description	Material	Product category	Catalogue number
Cable clip 1- 2x4/6mm ²	stainless steel	E	423210

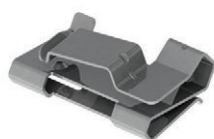


Description	Material	Product category	Catalogue number
Cable clip 2- 4x90°4/6mm ² /3x90°10mm ²	stainless steel	E	423211





Description	Material	Product category	Catalogue number
Cable clip 8- 2x90°4/6mm²	stainless steel	E	423212



Description	Material	Product category	Catalogue number
Cable clip 9- 2x90°4/6mm²	stainless steel	E	423213



BASIC ELEMENTS QUANTITY CALCULATION FOR EACH SOLAR POWER SYSTEMS STRUCTURE SETS FROM 3.6 TO 30KW:

Quantity from each elements are calculated for solar panel with dimensions 1689x996x35mm and peak power 340W with catalogue number 98SOL380M.

ELEMENT		ELEMENT QTY					
Description	Catalogue number	at 3.6 kW	at 5 kW	at 10 kW	at 15 kW	at 20 kW	at 30 kW
Rails- 2100mm	423200	12	16	30	46	60	90
Rail connector- 140mm	423201	8	12	22	34	45	67
Mid clamp for framed panel 30-50mm	423202	18	26	66	78	102	154
End clamp for framed panel 30-50mm	423203	24	32	60	92	120	180
Tile Roof Hook 1	423204	26	34	64	98	126	190
Grounding Clip	423208	18	26	66	78	102	154
Earth lug	423209	12	16	32	48	60	92



SETS CATALOGUE NUMBERS:

The quantity elements for each structure set is to described in the table upper.

Solar power systems (kW)	Product category	Catalogue number
3.6	E	423270P/TR
5	E	423271P/TR
10	E	423272P/TR
15	E	423273P/TR
20	E	423274P/TR
30	E	423275P/TR



TILE ROOF MOUNTING STRUCTURE FOR PITCHED ROOF



2 | SANDWICH ROOF MOUNTING STRUCTURE FOR PITCHED ROOF, SET

TECHNICAL DATA:

- Installation: tin roof mounting brackets
- Panel type: framed
- Panel orientation: landscape or portrait
- Roof slope: up to 60 degree
- Max wind speed: up to 60 m/s
- Snow load: 1.4 KN/m²

FEATURES:

- Universal roof brackets for different tin roofs
- Suitable for all framed PV modules
- Easy and fast installation
- Pre-assembled components save the installation time and cost

SUITABLE COMPONENTS FOR PITCHED SANDWICH ROOF:



Description	Material	Product category	Catalogue number
Rails- 2100mm	Aluminium 6005-T5	E	423200



Description	Material	Product category	Catalogue number
Rail connector- 140mm	Aluminium 6005-T5	E	423201



Description	Material	Product category	Catalogue number
Middle clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423202



Description	Material	Product category	Catalogue number
End clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423203



Description	Material	Product category	Catalogue number
L-feet for tin roof	stainless steel	E	423216



Description	Material	Product category	Catalogue number
Tin Roof Hook 2	stainless steel	E	423217



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Description	Material	Product category	Catalogue number
Tin Roof Hook 3	stainless steel	E	423218



Description	Material	Product category	Catalogue number
Grounding Clip	stainless steel	E	423208



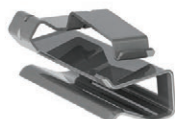
Description	Material	Product category	Catalogue number
Earth lug	Aluminium	E	423209



Description	Material	Product category	Catalogue number
Cable clip 1- 2x4/6mm²	stainless steel	E	423210



Description	Material	Product category	Catalogue number
Cable clip 2- 4x90°4/6mm²/3x90°10mm²	stainless steel	E	423211



Description	Material	Product category	Catalogue number
Cable clip 8- 2x90°4/6mm²	stainless steel	E	423212



Description	Material	Product category	Catalogue number
Cable clip 9- 2x90°4/6mm²	stainless steel	E	423213



BASIC ELEMENTS QUANTITY CALCULATION FOR EACH SOLAR POWER SYSTEMS STRUCTURE SETS FROM 3.6 TO 30KW:

Quantity from each elements are calculated for solar panel with dimensions 1689x996x35mm and peak power 340W with catalogue number 98SOL380M.

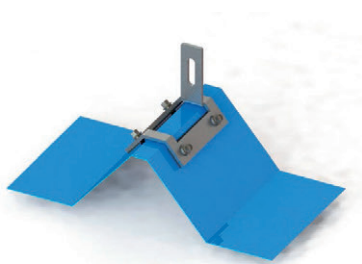


ELEMENT		ELEMENT QTY					
Description	Catalogue number	at 3.6 kW	at 5 kW	at 10 kW	at 15 kW	at 20 kW	at 30 kW
Rails- 2100mm	423200	12	16	30	46	60	90
Rail connector- 140mm	423201	8	12	22	34	45	67
Middle clamp for framed panel 30-50mm	423202	18	26	66	78	102	154
End clamp for framed panel 30-50mm	423203	24	32	60	92	120	180
L-feet for tin roof	423216	26	34	64	98	126	190
Grounding Clip	423208	18	26	66	78	102	154
Earth lug	423209	12	16	32	48	60	92

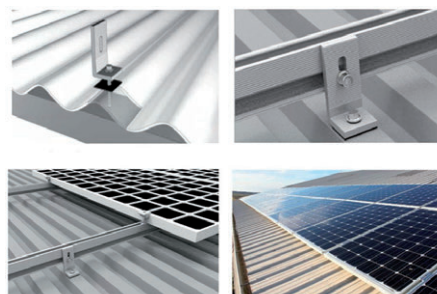
SETS CATALOGUE NUMBERS:

The quantity elements for each structure set is to described in the table upper.

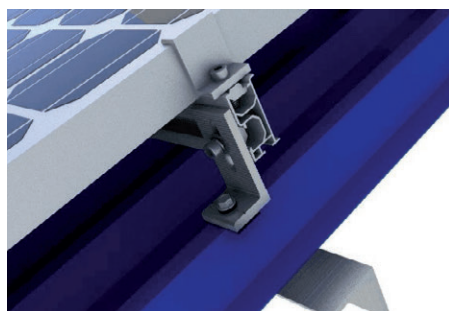
Solar power systems (kW)	Product category	Catalogue number
3.6	E	423270P/DR
5	E	423271P/DR
10	E	423272P/DR
15	E	423273P/DR
20	E	423274P/DR
30	E	423275P/DR



SANDWICH ROOF MOUNTING OPTION 1



SANDWICH ROOF MOUNTING OPTION 2



SANDWICH ROOF MOUNTING STRUCTURE FOR PITCHED ROOF



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



3 | SHINGLE ROOF MOUNTING STRUCTURE FOR PITCHED ROOF, SET

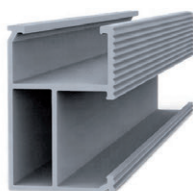
TECHNICAL DATA:

- Installation Site: shingle roof
- Panel type: framed
- Roof Slope: Up to 60 degree
- Wind Speed: Up to 60 m/s
- Snow load: 1.4 kN/m²

FEATURES:

- Suitable for all framed PV modules
- Easy and fast installation
- Pre-assembled components save the installation time and cost

SUITABLE COMPONENTS FOR PITCHED SHINGLE ROOF:



Description	Material	Product category	Catalogue number
Rails- 2100mm	Aluminium 6005-T5	E	423200



Description	Material	Product category	Catalogue number
Rail connector- 140mm	Aluminium 6005-T5	E	423201



Description	Material	Product category	Catalogue number
Middle clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423202



Description	Material	Product category	Catalogue number
End clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423203



Description	Material	Product category	Catalogue number
L-feet with cone hole	stainless steel	E	423214



Description	Material	Product category	Catalogue number
Flashing plate 280x280	stainless steel	E	423215



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



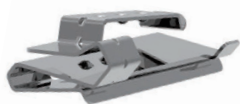
Description	Material	Product category	Catalogue number
Grounding Clip	stainless steel	E	423208



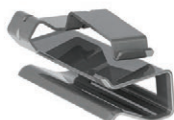
Description	Material	Product category	Catalogue number
Earth lug	Aluminium	E	423209



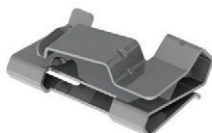
Description	Material	Product category	Catalogue number
Cable clip 1- 2x4/6mm ²	stainless steel	E	423210



Description	Material	Product category	Catalogue number
Cable clip 2- 4x90°4/6mm ² /3x90°10mm ²	stainless steel	E	423211



Description	Material	Product category	Catalogue number
Cable clip 8- 2x90°4/6mm ²	stainless steel	E	423212



Description	Material	Product category	Catalogue number
Cable clip 9- 2x90°4/6mm ²	stainless steel	E	423213





BASIC ELEMENTS QUANTITY CALCULATION FOR EACH SOLAR POWER SYSTEMS STRUCTURE SETS FROM 3.6 TO 30KW:

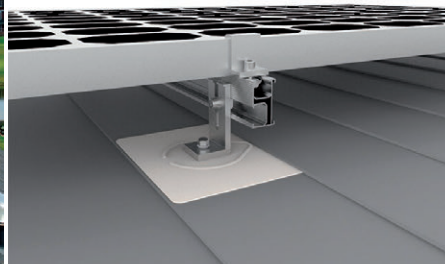
Quantity from each elements are calculated for solar panel with dimensions 1689x996x35mm and peak power 340W with catalogue number 98SOL380M.

ELEMENT		ELEMENT QTY					
Description	Catalogue number	at 3.6 kW	at 5 kW	at 10 kW	at 15 kW	at 20 kW	at 30 kW
Rails- 2100mm	423200	12	16	30	46	60	90
Rail connector- 140mm	423201	8	12	22	34	45	67
Middle clamp for framed panel 30-50mm	423202	18	26	66	78	102	154
End clamp for framed panel 30-50mm	423203	24	32	60	92	120	180
L-feet with cone hole	423214	26	34	64	98	126	190
Flashing plate 280x280	423215	26	34	64	98	126	190
Grounding Clip	423208	18	26	66	78	102	154
Earth lug	423209	12	16	32	48	60	92

SETS CATALOGUE NUMBERS:

The quantity elements for each structure set is to described in the table upper.

Solar power systems (kW)	Product category	Catalogue number
3.6	E	423270P/SR
5	E	423271P/SR
10	E	423272P/SR
15	E	423273P/SR
20	E	423274P/SR
30	E	423275P/SR



SHINGLE ROOF MOUNTING STRUCTURE FOR PITCHED ROOF





4 | TRIANGULAR MOUNTING STRUCTURE FOR GROUND AND FLAT ROOF, SET

TECHNICAL DATA:

- Installation Site: flat roof
- Panel type: framed
- Wind Speed: Up to 60 m/s
- Snow load: 1.4 kN/m²

FEATURES:

- Triangular mounting brackets with stable structure, it can be installed directly on rooftop, ground or pre-made cement blocks as your option
- Suitable for all framed PV modules
- Easy and fast installation
- Pre-assembled components save the installation time and cost

SUITABLE COMPONENTS FOR TRIANGULAR MOUNTING STRUCTURE FOR GROUND AND FLAT ROOF:



Description	Material	Product category	Catalogue number
Rails- 2100mm	Aluminium 6005-T5	E	423200



Description	Material	Product category	Catalogue number
Rail connector- 140mm	Aluminium 6005-T5	E	423201



Description	Material	Product category	Catalogue number
Middle clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423202



Description	Material	Product category	Catalogue number
End clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423203



Description	Material	Product category	Catalogue number
15° Triangular mounts	Aluminium 6005-T5	E	423223



Description	Material	Product category	Catalogue number
30° Triangular mounts	Aluminium 6005-T5	E	423227



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Description	Material	Product category	Catalogue number
L-connector for rail	stainless steel	E	423224



Description	Material	Product category	Catalogue number
Hex nut anchor	Galvanized steel	C	M517215



Description	Material	Product category	Catalogue number
Grounding Clip	stainless steel	E	423208



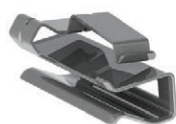
Description	Material	Product category	Catalogue number
Earth lug	Aluminium	E	423209



Description	Material	Product category	Catalogue number
Cable clip 1- 2x4/6mm ²	stainless steel	E	423210



Description	Material	Product category	Catalogue number
Cable clip 2- 4x90°4/6mm ² /3x90°10mm ²	stainless steel	E	423211



Description	Material	Product category	Catalogue number
Cable clip 8- 2x90°4/6mm ²	stainless steel	E	423212



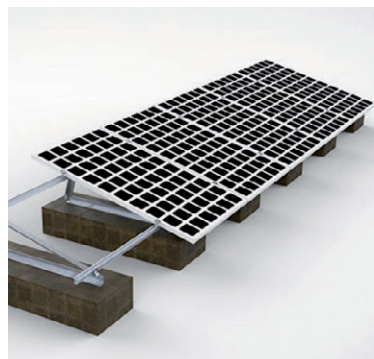


Description	Material	Product category	Catalogue number
Cable clip 9- 2x90°4/6mm ²	stainless steel	E	423213



BASIC ELEMENTS QUANTITY CALCULATION FOR EACH SOLAR POWER SYSTEMS STRUCTURE SETS FROM 3.6 TO 30KW:

Quantity from each elements are calculated for solar panel with dimensions 1689x996x35mm and peak power 340W with catalogue number 98SOL380M.



TRIANGULAR MOUNTING STRUCTURE
FOR GROUND AND FLAT ROOF

ELEMENT		ELEMENT QTY					
Description	Catalogue number	at 3.6 kW	at 5 kW	at 10 kW	at 15 kW	at 20 kW	at 30 kW
Rails- 2100mm	423200	12	16	30	46	60	90
Rail connector- 140mm	423201	8	12	22	34	45	67
Middle clamp for framed panel 30-50mm	423202	18	26	66	78	102	154
End clamp for framed panel 30-50mm	423203	24	32	60	92	120	180
30° Triangular mounts	423227	12	16	30	46	60	90
L-connector for rail	423224	24	32	60	92	120	180
Hex nut anchor	M517215	26	34	64	98	126	190
Grounding Clip	423208	18	26	66	78	102	154
Earth lug	423209	12	16	32	48	60	92

SETS CATALOGUE NUMBERS:

The quantity elements for each structure set is to described in the table upper.

Solar power systems (kW)	Product category	Catalogue number
3.6	E	423270F/TR
5	E	423271F/TR
10	E	423272F/TR
15	E	423273F/TR
20	E	423274F/TR
30	E	423275F/TR





5 | BALLASTED TRIANGULAR MOUNTING STRUCTURE FOR FLAT ROOF, SET

TECHNICAL DATA:

- Installation Site: flat roof
- Panel type: framed
- Wind Speed: Up to 60 m/s
- Snow load: 1.4 kN/m²

FEATURES:

- Triangular mounting brackets with stable structure, it can be installed directly on rooftop, ground or pre-made cement blocks as your option
- Suitable for all framed PV modules
- Easy and fast installation
- Pre-assembled components save the installation time and cost

SUITABLE COMPONENTS FOR BALLASTED TRIANGULAR MOUNTING STRUCTURE FOR FLAT ROOF:



Description	Material	Product category	Catalogue number
Rails- 2100mm	Aluminium 6005-T5	E	423200



Description	Material	Product category	Catalogue number
Rail connector- 140mm	Aluminium 6005-T5	E	423201



Description	Material	Product category	Catalogue number
Middle clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423202



Description	Material	Product category	Catalogue number
End clamp for framed panel 30-50mm	Aluminium 6005-T5	E	423203



Description	Material	Product category	Catalogue number
15° Triangular mounts	Aluminium 6005-T5	E	423223



Description	Material	Product category	Catalogue number
30° Triangular mounts	Aluminium 6005-T5		423227



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Description	Material	Product category	Catalogue number
L-connector for rail	stainless steel	E	423224



Description	Material	Product category	Catalogue number
Angle Plate	stainless steel	E	423225



Description	Material	Product category	Catalogue number
Grounding Clip	stainless steel	E	423208



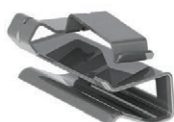
Description	Material	Product category	Catalogue number
Earth lug	Aluminium	E	423209



Description	Material	Product category	Catalogue number
Cable clip 1- 2x4/6mm ²	stainless steel	E	423210



Description	Material	Product category	Catalogue number
Cable clip 2- 4x90°4/6mm ² /3x90°10mm ²	stainless steel	E	423211



Description	Material	Product category	Catalogue number
Cable clip 8- 2x90°4/6mm ²	stainless steel	E	423212



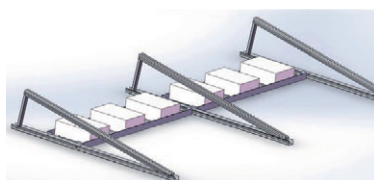


Description	Material	Product category	Catalogue number
Cable clip 9- 2x90°4/6mm ²	stainless steel	E	423213



BASIC ELEMENTS QUANTITY CALCULATION FOR EACH SOLAR POWER SYSTEMS STRUCTURE SETS FROM 3.6 TO 30KW:

Quantity from each elements are calculated for solar panel with dimensions 1689x996x35mm and peak power 340W with catalogue number 98SOL380M.



BALLASTED TRIANGULAR MOUNTING STRUCTURE FOR FLAT ROOF

ELEMENT		ELEMENT QTY					
Description	Catalogue number	at 3.6 kW	at 5 kW	at 10 kW	at 15 kW	at 20 kW	at 30 kW
Rails- 2100mm	423200	12	16	30	46	60	90
Rail connector- 140mm	423201	8	12	22	34	45	67
Middle clamp for framed panel 30-50mm	423202	18	26	66	78	102	154
End clamp for framed panel 30-50mm	423203	24	32	60	92	120	180
30° Triangular mounts	423227	12	16	30	46	60	90
L-connector for rail	423224	24	32	60	92	120	180
Angle Plate	423225	12	16	30	46	60	90
Grounding Clip	423208	18	26	66	78	102	154
Earth lug	423209	12	16	32	48	60	92

SETS CATALOGUE NUMBERS:

The quantity elements for each structure set is to described in the table upper.

Solar power systems (kW)	Product category	Catalogue number
3.6	E	423270F/BTR
5	E	423271F/BTR
10	E	423272F/BTR
15	E	423273F/BTR
20	E	423274F/BTR
30	E	423275F/BTR





H1Z2Z2-K UNIPOLAR CABLE FOR PHOTOVOLTAIC AND SOLAR PLANTS WITH UV RESISTANT SHEATH

5+2
standard
+extended

7 YEAR TOTAL
WARRANTY

TECHNICAL CHARACTERISTICS:

- Operating voltage: AC- 1.0KV; DC- 1.5KV
- Max. operating voltage: AC- 1.2KV; DC- 1.8KV
- Test voltage: AC- 6.5KV for 5 min; DC- 15KV for 5 min
- Ambient work temperature: from -40 to + 90 °C
- Max. short circuit temperature: +250 °C for 5s
- Maximum pulling stress: 15 N/mm² in operation, 50 N/mm² during installation

TECHNICAL DATA:

- Conductor: Tinned copper multi-wires class 5
- Insulation: LSZH reticulated elastomeric compound with neutral colour
- Outer sheath: LSZH reticulated elastomeric compound
- UV resistant
- Colour: Black and red
- Reaction to fire - Performance: EN 50575:2016 Eca

Cross section (n x mm ²)	Colour	Outer diameter (mm)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
4	black	5,6	58	100	E	M411079/BL
4	red	5,6	58	100	E	M411079/R



SOLAR CABLE LENGTH, INCLUDED TO EACH SET

3.6kW	5kW	10kW	15kW	20kW	30kW	Catalogue number
x50m	x50m	x50m	x75m	x100m	x100m	M411079/BL
x50m	x50m	x50m	x75m	x100m	x100m	M411079/R

SINGLE MALE/FEMALE CABLE COUPLER IP67 SET, MC4 COMPATIBLE

TECHNICAL DATA:

- Rated voltage: 1000V
- Rated current: 30A
- Test voltage: 6KV(50Hz)
- Contact material: Copper, silver plated
- Operating temperature: -40 to +125°C
- Suitable cable cross section: 2.5mm²; 4mm² and 6mm²

Type	Range of cable glands (mm)	Conductor cross section (mm ²)	Packing (m)	Product category	Catalogue number
Single male/female couplers, SET	3-6	4/6	1/5	E	411078/MF

EC Declaration of conformity





DOUBLE MALE SINGLE FEMALE CABLE COUPLER IP67, MC4 COMPATIBLE

Type	Range of cable glands (mm)	Conductor cross section (mm²)	Packing (m)	Product category	Catalogue number
2 male/ 1 female coupler	3-6	4/6	E	1	411080/M

EC Declaration of conformity



DOUBLE FEMALE SINGLE MALE CABLE COUPLER IP67, MC4 COMPATIBLE

Type	Range of cable glands (mm)	Conductor cross section (mm²)	Packing (m)	Product category	Catalogue number
2 female/ 1 male coupler	3-6	4/6	E	1	411080/F

EC Declaration of conformity



DC PHOTOVOLTAIC ISOLATOR FOUR POLES SWITCH 1200V, IP66

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



DC switches shall be installed between the solar arrays and solar inverter for isolation the PV array during system installation or any maintenance.

TECHNICAL DATA:

- Rated insulation voltage (Ui): 1200V
- Rated heating current (Ith): 32A
- Poles: 4P
- Mechanical life: 10 000 cycles
- Operating temperature: -25 to +70°C
- Storage temperature: -40 to +70°C
- IP code: IP66
- Handle colour: Black

FEATURES:

- Vertical and horizontal installation
- UV resistance
- Flame retardant material
- Breathe valve
- Lockable at off position

Model	Poles	Rated insulation voltage (V)	Rated heating current (A)	IP code	Packing/Box (pcs)	Product category	Catalogue number
EL-DC4P	4	1200	32	66	1/20	E	98SOL4P/DC



DC SWITCH QUANTITY, INCLUDED TO EACH SET

3.6kW	5kW	10kW	15kW	20kW	30kW	Catalogue number
1	2	2	2	2	3	98SOL4P/DC

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

PV ON-GRID TIE INVERTERS, SOLIS

5+0
 standard
 +extended
5 YEAR TOTAL
 WARRANTY


Converts the variable direct current (DC) output of a photovoltaic (PV) solar panel into a utility frequency alternating current (AC) that can be fed into a commercial electrical grid. The output current has a standard output of 220/230V for single phase and 220/380V, 230/400V for three phase. Inverters (3.6-30)kW are reliable preferred equipment for residential, industrial and commercial pv power stations. Smaller size, higher efficiency, huge large color display for visual inspection of product operation.

FEATURES

- Super high frequency switching technology
- Wide voltage range and low startup voltage
- Precise MPPT algorithm
- Intergrated Export Power Manager (EPM)
- Friendly and adaptable connection to the grid
- IP protection: IP65

PROTECTION:

- DC reverse-polarity protection
- Short circuit protection
- Output over current protection
- Surge protection
- Grid monitoring
- Anti-islanding protection
- Temperature protection

COMMUNICATION

- RS485
- Wi-Fi- optional with WI-FI stick with cat. number 423050

CERTIFICATION

- TÜV Rheinland CERTIFICATED
- Compliance Document
- Certificate of Conformity

Model	Recommended max. PV power	Rated output power	Operation phase	MPPT number	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
Solis-mini-3600-4G	4kW	3.6kW	Single	1	310	373	160	E	423001
Solis-1P5K-4G	5.8kW	5kW	Single	2	310	543	160	E	423002
Solis-3P10K-4G	12kW	10kW	Three	2	310	563	219	E	423020
Solis-3P15K-4G	18kW	15kW	Three	2	310	563	219	E	423021
Solis-3P20K-4G	24kW	20kW	Three	2	310	563	219	E	423022
Solis-3P30K-5G	36kW	30kW	Three	3	530	700	356.5	E	423023





ENERGY STORAGE INVERTER, SOLIS

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

The AC-Coupled inverter is used for upgrade the existing SOLIS single phase on-grid power generation system to a hybrid system which can work with batteries to optimize self-consumption. Energy storage inverter is a good choice for ON- GRID and OFF-GRID integrated storage solutions.

FEATURES

- Compatible with any existing SOLIS single phase grid-tied PV system, option to upgrade
- Compatible with both lead-acid battery and li-ion battery
- Off-grid backup function
- Emergency Power Supply function (EPS)
- Intelligent Energy Management System (EMS)
- Natural cooling without external fan
- Intelligent debugging APP which support one-click inverter configuration
- Various work mode for different application scenario
- IP protection: IP65

PROTECTION:

- Battery reverse protection
- Battery over and under voltage protection
- Short circuit protection
- Output over current protection
- Temperature protection

COMMUNICATION

- RS485
- CAN
- Wi-Fi- optional with WI-FI stick with cat. number 423050

CERTIFICATION

- TÜV SÜD CERTIFICATED
- Attestation of Conformity
- Certificate

Model	Max. charging power (W)	Operation phase	Battery type	Battery voltage range (V)	Battery capacity (Ah)	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
SOLIS-RAI-3K-48ES-5G	3000W	Single	Li-ion/ Lead- acid*	40-60V	50-2000Ah	403	525	170	E	423040

*Battery voltage range: 42-58V | Battery type: Li-ion/Lead-acid | Battery capacity: 50 - 2000Ah | Battery not included | Compatible with Pylontech US2000





SINGLE PHASE HYBRID INVERTER SOLIS, 5KW

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

This inverter is used for residential hybrid system, which can work with batteries to optimize self consumption. This unit is a good choice for ON- GRID and for OFF-GRID integrated storage solutions. Can operate in both ON- GRID and in OFF-GRID mode.

FEATURES

- Uninterrupted power supply, 20ms reaction
- 5kW backup power to support more important loads
- With shifting and peak shaving capabilities friendly to grid
- Multiple working modes to make maximize self-consumption, increase benefit
- Higher charge-discharge efficiency, improving the economic benefits
- Compatible with lithium & lead-acid batteries, increased more choice in different markets
- Fanless design, long lifespan
- Intelligent BMS function, improving battery's reliability
- With high-frequency isolation technology, making system safer and long lifespan
- 24-hour fully intelligent energy management, Real-time grasp of PV plant status
- Remotely control & upgrade function, making digital power plant maintenance at your fingertips

PROTECTION:

- Ground fault monitoring
- Battery over and under voltage protection
- Short circuit protection
- Output over current protection
- Temperature protection
- DC reverse-polarity protection

COMMUNICATION

- RS485
- Wi-Fi- optional with WI-FI stick with cat. number 423050

CERTIFICATION

- TÜV SÜD CERTIFICATED
- Attestation of Conformity
- Certificate
- Compliance Document
- Bestätigung

Model	Recommended max. PV power	Rated output power	Operation phase	MPPT number	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
SOLIS-RHI-5K-48ES-5G	8kW	5kW	Single	2	333	505	249	E	423041

*Battery voltage range: 42-58V | Battery type: Li-ion/Lead-acid | Battery capacity: 50 - 2000Ah | Battery not included | Compatible with Pylontech US2000



WIFI STICK FOR INVERTERS

3+0 standard
+extended **3** YEAR TOTAL WARRANTY


Solar power system can be monitored remotely via WIFI to provide you accurate and comprehensive data analysis and fault alarm at any time and place, make product operation more stable and reliable, and realize stable and intelligent operation and maintenance management services. This is possible with WIFI stick, which you need to connect to your inverter.

FEATURES

- Quick installation and easy operation
- Easy visualization of data and other information via Internet
- Enabling local and remote monitoring
- WIFI communication supporting remote monitoring

Model	Max.number of inverters	Remote communication	Firmware updates	Data storage	Preferences setting	Protection class	Product category	Catalogue number
EL-WIFI 1	1	WiFi(802.11/b/g/n)	Wireless	8MBYTE FLASH	Web Sever	IP65	E	423050

* WiFi communication range: 100m in outdoor open area without obstruction.



SINGLE AND THREE PHASE MULTIFUNCTION SMART DIN KWH METERS

3+0 standard
+extended **3** YEAR TOTAL WARRANTY


DTSD1352 is a smart meter designed for power supply system, industrial and mining enterprises and utilities to calculate the electricity consumption and manage the electric demand. It features the high precision, small size and simple installation. It integrates the measurement of all electrical parameters with the comprehensive electricity metering and management provides various data on previous 12 months, checks the 31st harmonic content and the total harmonic content, realizes the remote communication and the remote control with switching input and relay output and boasts the alarm output. It is fitted with RS485 communication port and adapted to MODBUS-RTU. DTSD1352 can be used in all kinds of control systems, SCADA systems and energy management systems

FEATURES

- 8 bits lcd display
- Measure parameters: Voltage, current, active power, reactive power, apparent power, power factor and frequency (U,I ,P,Q,S,PF,F)
- Optional communication protocol and functions: Modbus RTU RS485
- Multi-tariff :frozen KWH historical, KWH in 3 months, adapt 4 time zones, 2 time interval lists, 14 time interval by day and 4 tariff rates

Model	Type	Measuring range	Overall dimensions (mm)	Product category	Catalogue number
DDSD1352	Single phase	10 (60A)	88x36x70	E	423060
DTSD1352	Three phase	10 (80A)	80x126x70	E	423061





SOLIS EXPORT MANAGER EPM3-5G

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

The Solis export power manager is the ideal solution for smart energy management for both residential and commercial systems. The unit allows you to adjust export values to satisfy local network regulatory requirements. Energy management with the Solis export power manager allows for higher self-consumption and efficient use of the locally generated PV power.

FEATURES

- Smart & strong: Simultaneous control of 80 X Solis inverters
- Saving & high precision: Simultaneously monitor the operating data of the 80 X Solis inverter, saving the cost of the monitoring system
- Friendly & compatible: Saving & high precision: Support "Δ" and "Y" grid systems
- Realizing reactive compensation of the system, which ensure the power factor of the system is up to standard
- The control accuracy is up to 3%, which improves the system's spontaneous use rate
- Supports simultaneous access of Solis inverters with different power

COMMUNICATION:

- With inverter: Modbus RS485
- Maximum communication inverter numbers: 10
- Maximum communication distance: 1000m
- Monitoring: Wi-Fi stick or GPRS stick for single inverter connection Wi-Fi box or GPRS box for 2-10 inverters connection

TECHNICAL DATA

- Input frequency range: 45-65 Hz
- Input voltage range: L to N: 100-277 V
- Ambient temperature: -25°C to +60°C
- Ingress protection: IP65
- Relative humidity: 5%-95%
- CT connection: Plug terminal
- Weight: 2.1 kg

Model	Rated voltage (V)	Input current (A)	Maximum communication inverter numbers	Length (mm)	Width (mm)	Height (mm)	Product category	Catalogue number
Solis-EPM3-5G	400V, 3/N/PE or 3/PE	5	10	364	276	114	E	423051



SOLIS EXPORT MANAGER EPM3-5G-PLUS

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY



The Solis export power manager is the ideal solution for smart energy management for both residential and commercial systems. The unit allows you to adjust export values to satisfy local network regulatory requirements. Energy management with the Solis export power manager allows for higher self-consumption and efficient use of the locally generated PV power.

FEATURES

- Smart & strong: Simultaneous control of 80 X Solis inverters
- Saving & high precision: Simultaneously monitor the operating data of the 80 X Solis inverter, saving the cost of the monitoring system
- Friendly & compatible: Saving & high precision: Support "Δ" and "Y" grid systems
- Realizing reactive compensation of the system, which ensure the power factor of the system is up to standard
- The control accuracy is up to 3%, which improves the system's spontaneous use rate
- Supports simultaneous access of Solis inverters with different power

COMMUNICATION:

- With inverter: Modbus RS485
- Maximum communication inverter numbers: 80
- Maximum communication distance: 1000m
- Monitoring: Wi-Fi box (Built in)

TECHNICAL DATA

- Input frequency range: 45-65 Hz
- Input voltage range: L to N: 320-480V
- Display: LCD
- Ambient temperature: -25°C to +60°C
- Ingress protection: IP65
- Relative humidity: 5%-95%
- CT connection: Plug terminal
- Weight: 5.4 kg

Model	Rated voltage (V)	Input current (A)	Maximum communication inverter numbers	Length (mm)	Width (mm)	Height (mm)	Product category	Catalogue number
Solis-EPM3-5G-PLUS	400V, 3/N/PE	5	80	488	446	149	E	423052



PYLONTECH LITHIUM BATTERY, US2000 SERIES

7+3
 standard
 +extended
10 YEAR TOTAL
 WARRANTY


Lithium battery US2000 series is the latest generation lithium iron phosphate battery module and is a perfect solution for residential storage facilities. The easy in modulating makes it possible to create storage systems of small or large capacities. The first installation can be expanded depending on the change in energy requirements in time latter.

FEATURES

- The whole module is non-toxic, non-polluting and environmentally friendly.
- Cathode material is made from LiFePO4 with safety performance and long cycle life.
- Battery management system (BMS) has protection functions including over-discharge, over-charge, over-current and high/low temperature.
- Vertical industry integration ensures more than 6000 cycles with 90% DoD.
- The system can automatically manage charge and discharge state and balance current and voltage of each cell.
- Flexible configuration, multiple battery modules can be in parallel for expanding capacity and power.
- Adopted self-cooling mode rapidly reduced system entire noise.
- The module has less self-discharge, up to 6 months without charging on shelf.
- No memory effect, excellent performance of shallow charge and discharge.
- Working temperature range is from -10° to 50°C, (Charging 0~50°C; discharging -10~50°C) with

excellent discharge performance and cycle life.

- Compact and fashionable design fits in your home environment.
- Compatible with most of the available Hybrid inverters.

TECHNICAL DATA:

- Nominal voltage: 48V
- Nominal capacity: 2400Wh
- Usable capacity: 2200Wh
- Dimension: 442x410x89mm
- Charge voltage: 52.5- 53.5V
- Discharge voltage: 45- 53.5V
- Communication port: RS485, CAN
- Configuration (max. in 1 battery group): 8pcs
- IP code: IP20
- Cooling type: Natural cooling
- Working temperature: Charge: from 0 to 50°C, Discharge: from -10 to 50°C
- Humidity: 5-85%
- Weight: 24Kg
- Altitude: up to 2000m
- Cycle life: > 4500, 25°C

Model	Nominal voltage (V)	Nominal capacity (Wh)	Usable capacity (Wh)	Product category	Catalogue number
US2000	48	2400	2200	E	98BAT2000US

Up to 6 months without charging.



MOUNTING BRACKETS FOR PYLONTECH LITHIUM BATTERY, US2000 SERIES

Mounting brackets keep a few batteries in one pile. It is an essential accessorie because it improves the cooling of the batteries and allows easy circulation of air around the batteries.

Set of 2 mounting brackets.

INSTALLATION REQUIREMENT:

- We do not recommend to stack batteries one on top of the other without the brackets.
- Maximum 4 batteries can be athwart stacked
- One or two batteries can be sidelong stacked

SET: 2 mounting brackets

SET catalogue number: 98BAT2000BR



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

ON GRID SOLAR SYSTEMS - SET WITH MONOCRYSTALLINE HALF CELLS SOLAR PANEL

10+0
standard
+extended

10 YEAR TOTAL WARRANTY

Solar power systems (kW)	Phase	Panel QTY	Product category	Catalogue number
3.6	1	11	E	98SOL3600M
5	1	15	E	98SOL5000M/TB
10	3	30	E	98SOL10000M
15	3	45	E	98SOL15000M
20	3	60	E	98SOL20000M
30	3	90	E	98SOL30000M

*SET Included: Solar panels, inverter, DC power cables and DC 4P Switch 32A | Warranty: 10+0, Inverter: 5+0



HYBRID SOLAR SYSTEMS - SET WITH MONOCRYSTALLINE HALF CELLS SOLAR PANEL

10+0
standard
+extended

10 YEAR TOTAL WARRANTY

Solar power systems (kW)	Phase	Panel QTY	Product category	Catalogue number
5	1	15	E	98SOL5000HM

*SET Included: Solar panels, inverter, DC power cables, 1x2.4kW battery US2000 and DC 4P Switch 32A | Warranty: 10+0, Inverter: 5+0



ENERGY STORAGE INVERTER SOLIS SOLIS-RAI-3K-48ES-5G WITH BATTERY PYLONTECH US2000

10+0
standard
+extended

10 YEAR TOTAL WARRANTY

Solar power systems (kW)	Phase	Panel QTY	Product category	Catalogue number
3	1	Not included	E	98SOL3000EM

*SET Included: Inverter and 1x2.4kW battery US2000 | Warranty: 10+0, Inverter: 5+0
Compatible with any existing SOLIS single phase ON-grid-tied PV system, option to upgrade

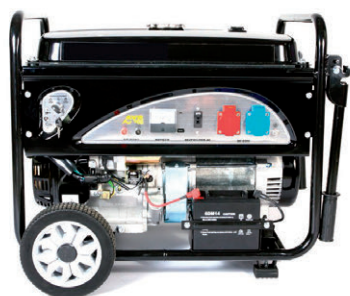


In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

RECOMMENDED SOLAR PANEL STRING INSTALLATION OF EACH SET

Number of strings MPPT-1	Number of strings MPPT-2	Number of strings MPPT-3	QTY of panels per Strings MPPT-1	QTY of panels per Strings MPPT-2	QTY of panels per Strings MPPT-3	Solar power systems (kW)
1			11			3.6
1	1		8	7		5
1	1		15	15		10
2	1		12	21		15
2	2		15	15		20
2	2	2	15	15	15	30





ELECTRICAL GASOLINE GENERATORS EL-GF SERIES

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

Generators are machines that provide electricity when power from the local grid is unavailable. Electrical generators are used as a primary power source in areas where a local electrical grid is unavailable or difficult to access such as mining and farming operations or even new developments and construction and to supply backup power to facilities, businesses, or homes during power outages. Electrical generators don't create electricity. They convert mechanical energy into electrical power. Capturing the power of motion and turning it into electrical energy by forcing electrons from the external source through an electrical circuit. A generator is an electrical motor working in reverse. Once an electrical current has been established, it is directed through copper wires to power machines, devices, or electrical systems.

FEATURES:

Automatic voltage regulator (AVR): An automatic voltage regulator (AVR) is a electronic device for automatically maintaining generator output terminal voltage at a set value under varying load and operating temperature. It controls output by sensing the voltage Vout at a power-generating coil and comparing it to a stable reference. The error signal is then used to adjust an average value of the field current.

Switch for electric start: no included by EL-3GF-6

Two power supply voltage: 220 and 380V AC (all models without EL-3GF-6)

Four stroke engine: more fuel efficient as compared to 2-stroke generators. They consume the fuel on every 4th cycle. Moreover 4 stroke engine is and more durability A 2-stroke engine works more as compared to a 4 stroke engine for a specific time. It is evident from the fact that a 2-stroke engine produces more heat and more exhaust in one hour as compared to a 4-stroke engine

Less sound: A 4-stroke engine produces less sound and makes less pollution. It is safe for the environment. This is due to the fact that you do not have to add oil in the gas and hence no oil is burned during the combustion process

No Extra Oil in Fuel: There is no need to add extra oil along with the fuel in the fuel tank. Separate engine oil is used which needs to be replaced after every 500 hours of activity

Compact design. User-frendly in operations

Model	Rated power (kW)	Max. power (kW)	Fuel tank capacity (L)	Fuel consumption (g/(kW·h))	Running time (h)	Product category	Catalogue number
EL-2.8GF-6	2.8	3	15	≤530	10	E	45GF36
EL-5GF-2-4	5	5.5	25	≤480	9.5	E	45GF524
EL-7GF-2-4	7	7.5	25	≤515	5.8	E	45GF724



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ELECTRICAL DIESEL GENERATORS EL-DF SERIES



A diesel generator is machinery that converts the chemical energy in diesel to electrical energy and is used to power electrical equipment. They can be used to supply a range of applications such as homes, schools, factories, hospitals and other.

Diesel generators are available with and without canopy. Canopies are made of galvanized 3 mm metal sheets. The painting is done by nano technologic electronic powder coating technic. Galvanized metal sheets are durable against rust. On the doors of canopies are used stainless steel hinges and locks.

In canopies, high levels of sound muting type of silence are located in an isolated area to insulate heat which included exhaust pipes and exhaust itself.

ELECTRICAL DIESEL GENERATORS EL-DF SERIES WITH CANOPY



Model	Power stand by (kVA/kW)	Power prime (kVA/kW)	Output voltage (V)	Length (mm)	Width (mm)	Height (mm)	Product category	Catalogue number
EL-DF15C	12/10	11/9	400/230	1350	850	1080	E	45DG15/12C
EL-DF25C	25/20	23/18	400/230	2000	950	1450	E	45DG25/20C
EL-DF55C	55/44	50/40	400/230	2400	1000	1800	E	45DG55/44C
EL-DF75C	75/60	68/55	400/230	2400	1000	1800	E	45DG75/60C
EL-DF94C	94/75	85/68	400/230	2700	1100	1800	E	45DG94/75C
EL-DF110C	110/88	100/80	400/230	3100	1100	1880	E	45DG110/88C
EL-DF150C	150/120	136/109	400/230	3100	1100	1880	E	45DG150/120C
EL-DF175C	175/140	159/127	400/230	3100	1100	1880	E	45DG175/140C



ELECTRICAL DIESEL GENERATORS EL-DF SERIES WITHOUT CANOPY



Model	Power stand by (kVA/kW)	Power prime (kVA/kW)	Output voltage (V)	Length (mm)	Width (mm)	Height (mm)	Product category	Catalogue number
EL-DF15	12/10	11/9	400/230	1350	850	1050	E	45DG15/12
EL-DF25	25/20	23/18	400/230	1650	950	1400	E	45DG25/20
EL-DF55	55/44	50/40	400/230	2000	1000	1700	E	45DG55/44
EL-DF75	75/60	68/55	400/230	2000	1000	1800	E	45DG75/60
EL-DF94	94/75	85/68	400/230	2150	1100	1800	E	45DG94/75
EL-DF110	110/88	100/80	400/230	2500	1100	1780	E	45DG110/88
EL-DF150	150/120	136/109	400/230	2500	1100	1780	E	45DG150/120
EL-DF175	175/140	159/127	400/230	2500	1100	1780	E	45DG175/140





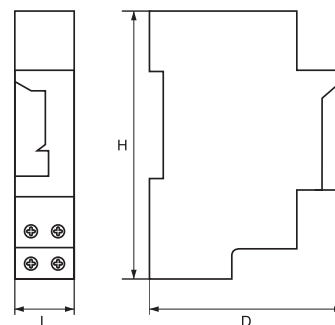
QUARZ TIME SWITCH WITH POWER RESERVE TM 180 MINI

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The mechanic relay for time is supposed to be used for managing chains with maximum capacity of 3500W. After the setting, the timer executes the functions we required in 24 hours regime. The minimum period for setting is 15 minutes as it is executed within 96 pcs segments which the timing of the work and rest of the consummator is being set. The timer is accomplished with a battery which assures the work by 70 hours after power failure.

TECHNICAL DATA:

- Rated voltage: 230-240V AC 50/60Hz
- Time range: 24 hours
- Min. programmable interval: 15 minutes
- Time adjustment: manual
- Battery power reserve: 70 hours
- Time deviation: ± 1 s (at 20°C)
- Consumption: 2.5VA
- Contact: 1NO
- Contact capacity:
- 16A/250V (COS Φ =1)
- 4A/250V (COS Φ =0.6)
- Electrical endurance: 10^5 times
- Mechanical endurance: 10^7 times
- Section of the conductor: rigid conductors up to 6mm²



Type	Packing/Box (pcs)	Product category	Catalogue number
TM 180	1 / 200	B	50137



Dimensions (mm)

H	L	D
90	18	60

MOUNTING:

- DIN-rail



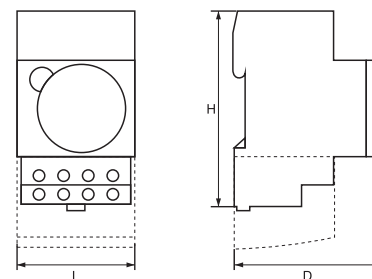
QUARZ TIME SWITCH WITH POWER RESERVE TM 181

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The mechanic relay for time is supposed to be used for managing chains with maximum capacity of 3500W. After the setting, the timer executes the functions we required in 24 hours regime. The minimum period for setting is 30 minutes as it is executed within 48 pcs segments which the timing of the work and rest of the consummator is being set. The timer is accomplished with a battery which assures the work by 150 hours after power failure.

TECHNICAL DATA:

- Rated voltage: 110-240V AC 50/60Hz
- Time range: 24 hours
- Min. programmable interval: 30 minutes
- Time adjustment: manual
- Battery power reserve: 150 hours
- Time deviation: ± 1 s (at 20°C)
- Consumption: 2.5VA
- Contact: 1NO
- Contact capacity: 16A
- Electrical endurance: 10^5 times
- Mechanical endurance: 10^7 times
- Section of the conductor: rigid conductors up to 6mm²



Type	Packing/Box (pcs)	Product category	Catalogue number
TM 181	1 / 100	B	50138



Dimensions (mm)

H	L	D
90	53.5	65.5

MOUNTING:

- DIN-rail



24 HOURS PLUG-IN MECHANICAL TIMER

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

Mechanical german plug-in timer with children protector. Two position switch for permanent and time control.

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Min. setting time: 15 mins
- Max. setting time: 24 hours
- active load: up to 16A
- IP20
- Size (mm): 82x84x56

Type	Packing/Box (pcs)	Product category	Catalogue number
EL-PMT-1	1/24/48	B	50140



PROGRAMMABLE WEEKLY TIMER

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The product according to the time set by the user, automatically turn On/Off the variety of electrical equipment. Included Li-ion battery

TECHNICAL DATA:

- Power supply voltage: 220-250V; 50/60Hz
- Adjustment range: 1 min
- Commutating capacity:
- active load: up to 30A
- Operations: 17 switching ON/OFF per day, up to 119 ON/OFF per week
- Operating temperature: 0 ÷ +55°C
- Size (LxWxH)mm: 60x32.5x60

MOUNTING:

- With bolts to the surface

Type	Packing/Box (pcs)	Product category	Catalogue number
EL-PWT-1	1/200	B	50139





WEEKLY PLUG-IN DIGITAL TIMER

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Digital german plug-in timer with countdown function and rechargeable NI-MH battery. Two outlets for permanent and time control.

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Min. setting time: 1 min
- Max. setting time: 7 days
- Program per day: 16 ON/OFF
- active load: up to 16A
- IP20
- Size (mm): 68.4x73x77.2

Type	Packing/Box (pcs)	Product category	Catalogue number
EL-WDT-2	1/24/48	B	50141



WEEKLY PLUG-IN DIGITAL TIMER

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Digital german plug-in timer with children protector and rechargeable NI-MH battery. Two outlets for permanent and time control.

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Min. setting time: 1 min or 1 sec
- Max. setting time: 7 days
- Program per day: 8 or 20 ON/OFF
- active load: up to 16A
- IP20
- Size (mm): 130x75x70

Type	Packing/Box (pcs)	Product category	Catalogue number
EL-WDT-3	1/24/48	B	50142





PROGRAMMABLE DIGITAL ONE-CHANNEL TIMER TE 15A

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The timer is manufactured under the CMOS technology with a quartz minicontroller which makes it reliable for operation. The timer is adjusted for DIN-rail mounting. It can memorize up to eight ON/OFF programs (ON/OFF cycles). Each program setting is done through the push buttons. Programming starts with selection of the days of the week (you can choose among a whole week cycle, work days cycle, weekend cycle, or a specific day of the week); then the cycle start time and end time are set. If you have selected work days cycle, then the program will start and stop at the set times each work day of the week. This is one ON/OFF program. Where necessary, other programs can be memorized up to the limit of eight possible programs. If you continue setting new programs the first memorized program will be deleted. The minimal interval for cycle programming is 1 minute.

Type	Packing/Box (pcs)	Product category	Catalogue number
TE 15A	1 / 100	B	50036



Dimensions (mm)

H	L	D
85	36	64

TECHNICAL DATA:

- Display: LCD
- Power supply voltage: 230V; 50Hz
- Operations: 16 switching ON/OFF
- Minimum setting unit: 1 min
- Time setting range: 1 min- 168 hours
- Time deviation: <2s (at 25°C)
- Battery for programme storing: up to 15 days
- Power consumption: <4.5VA
- Switched on indicator
- Electrical wear resistance: 105 cycles

- Mechanical wear resistance: 107 cycles
- Operating temperature: -10°C ÷ +65°C
- Humidity: 35 – 85%RH
- Number of contacts: 1NO + 1NC
- Commutating capacity:
 - active load: up to 16A
- Weight: 125g

MOUNTING:

- DIN-rail



PROGRAMMABLE DIGITAL ONE-CHANNEL TIMER TE 15B

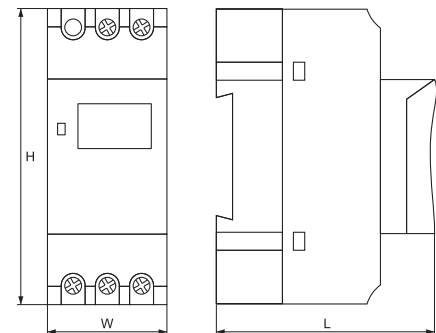
UNTIL SUPPLY
LAST

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The timer is manufactured under the CMOS technology with a quartz minicontroller which makes it reliable for operation. The timer is adjusted for DIN-rail mounting. It can memorize up to six ON/OFF programs (ON/OFF cycles). Each program setting is done through the push buttons. Programming starts with selection of the days of the week (you can choose among a whole week cycle, work days cycle, weekend cycle, or a specific day of the week); then the cycle start time and end time are set. If you have selected work days cycle, then the program will start and stop at the set times each work day of the week. This is one ON/OFF program. Where necessary, other programs can be memorized up to the limit of eight possible programs. If you continue setting new programs the first memorized program will be deleted. The minimal interval for cycle programming is 1 minute. There is possibility for automatic correction of the time according to the seasonal sun variations.

TECHNICAL DATA:

- Display: LCD
- Automatic adjustment of the current time (time correction winter/summer)
- Power supply voltage: 230V; 50Hz
- Operations: 6 switching ON/OFF
- Time deviation: <2s (at 25°C)
- Battery for programme storing: up to 15 days
- Power consumption: <5VA
- Switched on indicator
- Electrical wear resistance: 10⁵ cycles
- Mechanical wear resistance: 10⁷ cycles
- Operating temperature: -10 ÷ +65°C
- Humidity: 35 – 85%RH
- Number of contacts: 1NO + 1NC
- Commutating capacity:
 - active load: up to 6A
 - inductive load: up to 2.5
- Weight: 120g



MOUNTING:

- DIN-rail



Type	Packing/Box (pcs)	Product category	Catalogue number
TE 17	1/240	B	35007



Dimensions (mm)

H	W	L1	L2	D
82	17.5	40	65	45

STARCASE DELAY TIMER

3+2
standard
+extended **5** YEAR TOTAL WARRANTY

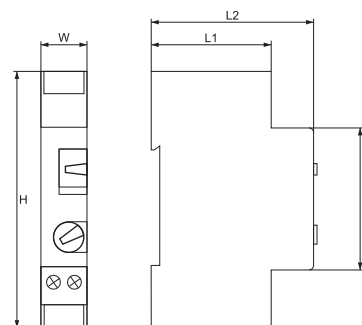
The timer is adjusted for DIN-rail mounting. Provide control of lighting circuits with automatic switch Off after pre-set time. Two position switch for permanent and time lighting control and choose for time delay setting from 30 sec to 10 minutes. Compact 1-mode design- 17.5mm

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Adjustment range: 0.5 to 10 min
- Power consumption: <2.5VA
- Operating temperature: -10 ÷ +60°C
- Humidity: 45 – 95%RH
- Number of contacts: 1NO
- Commutating capacity:
- active load: up to 16A
- inductive load: up to 10 A

MOUNTING:

- DIN-rail



Type	Packing/Box (pcs)	Product category	Catalogue number
TE19	1 / 200	B	50102



Dimensions (mm)

H	W	L1	L2	H1	H2
85	24	34	66	45	60

TIME RELAY "STAR/DELTA" TE 19

3+2
standard
+extended **5** YEAR TOTAL WARRANTY

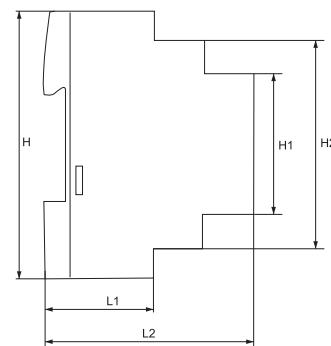
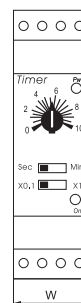
The time relay is manufactured under the most modern methods of qualitative and reliable materials. The timer is adjusted for DIN-rail mounting. It is used to provide reliable and safe time hold at "star/delta" starters and it is used for setting fixed time intervals. Programming is done through selection of the time unit (seconds or minutes) and rate (x 0.1 or x1) by the slide switches, and then selection of a value from the timer knob (from 0 to 10). Whenever timer circuit receives a signal, it executes the set cycle and then stops until a new signal is available. It gives possibility for time adjustment for motor unwinding in star up to 600s and time change to delta according to the consumer's need.

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Adjustment range for operation in star: 1 to 600 seconds
- Repetition accuracy: ±5% from the whole scale
- Adjustment accuracy: ±5% from the whole scale
- Zeroing time: <0.5s
- Power consumption: <5VA
- Electrical wear resistance: 100 000 cycles
- Mechanical wear resistance: 1 000 000 cycles
- Operating temperature: -10 ÷ +65°C
- Humidity: 45 – 85%RH
- Commutating capacity: up to 5A
- Indication:
 - at operation in "star": red indication
 - at operation in "delta": green indication
- Weight: 150g

MOUNTING:

- DIN-rail





TIMER TE8A – 1A, TE8A – 2A

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

The timer is manufactured under the most modern technology CMOS with a quartz minicontroller which makes it precise, qualitative and reliable. It has a built in battery which allows operation of the timers without charging up to 150 hours. The timer is adjusted for DIN-rail mounting. Timer programming is done through selection of the operational day(s) of the week, followed by selection of the start time and end time. You may choose out of ten modes (one for each day of the week, one for the work days, one for the weekends and one for the whole week). When setting the time, you should start first with the hours and then continue with the minutes.

TE8A - 1a - Up to eight programs can be memorized. The on/off time resolution is 1 minute.

TE8A - 2a - It has two operating channels, each of which can adjust four programmes for a day or a week with minimal interval of 1 minute for switching on and off.

Indication on LCD display with high resolution and showing the time in hours, minutes and seconds.

Type	Packing/Box (pcs)	Product category	Catalogue number
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TE8A - 1a	1 / 75	B	50113
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TE8A - 2a	1 / 75	B	50114
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Dimensions (mm)

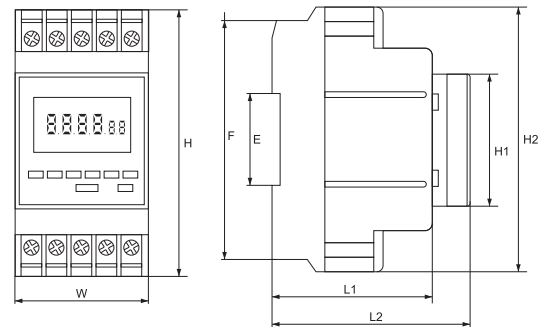
H	H1	H2	W
100	50	68	50
E	L1	L2	F
36	60	74	90

Technical data:

- Power supply voltage: 230V; 50Hz
- Power consumption: <5VA
- Electrical wear resistance: 10⁷ cycles
- Mechanical wear resistance: 10⁵ cycles
- Operating temperature: -10°C ÷ +65°C
- Temperature of storage: up to 70°C
- Humidity: 45 – 85%RH
- Commutating capacity: up to 16A
- Two outlet relays
- Li-Ion battery: 150h
- Weight: 150g

Mounting:

- DIN-rail



IMPULSE RELAY

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

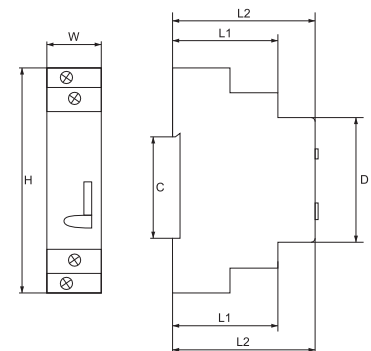
Impulse relays allow circuit remote control. They can be operated manually, remotely, from several control points, or by impulses. Impulse relays are most frequently used for the control of lighting circuits in various public places with multiple control points.

TECHNICAL DATA:

- Control voltage: 230V
- Rated current of the power circuit: 16A
- Electrical endurance: 200000 cycles
- Maximum switching frequency: 5 operations/minute
- Impulse duration: 50ms

CONNECTION:

- tunnel terminals



Type	Packing/Box (pcs)	Product category	Catalogue number
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EPN510	8 / 160	B	50300
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Dimensions (mm)

H	W	C	D	L1	L2
85	24	36	45	34	66



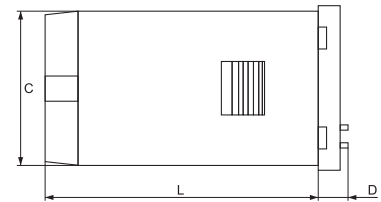
TIMER TE6B

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The timer is manufactured under the most modern technology CMOS with a quartz minicontroller which makes it precise, qualitative and reliable. The timer is modulated to be mounted on the front panel of boards. The direction of operation is adjusted – direct or reverse. There is possibility to adjust the time range from 0.01 second to 99 hours 59 minutes, possibility for correction of the set values during operation. Indication on LCD display with high resolution and showing the time in hours, minutes and seconds.

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Possibility for choice of operating range:
 - from 0.01 second to 99.99 seconds
 - from 1 second to 99.59 minutes
 - from 1 minute to 99.59 hours
- Error: $<0.01\% \pm 0.05s$
- Minimal duration of the input pulse: 20ms
- Power consumption: $<5VA$
- Electrical wear resistance: 10^7 cycles
- Mechanical wear resistance: 10^5 cycles
- Operating temperature: $-10 \div +65^\circ C$
- Temperature of storage: up to $70^\circ C$
- Humidity: 45 – 85%RH
- Commutating capacity at active load: 3A
- Weight: 300g



Type	Packing/Box (pcs)	Product category	Catalogue number
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TE6B	1 / 100	B	50104
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Dimensions (mm)

D	W	L
8.5	45	80

MOUNTING:

- on the front panel of the board



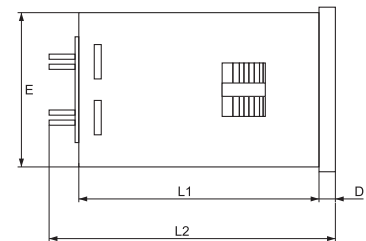
TIMER TE48S-S

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The timer is manufactured under the most modern technology CMOS with a quartz minicontroller which makes it precise, qualitative and reliable. The timer is modulated to be mounted on the front panel of boards. The direction of operation is adjusted – direct or reverse. It represents two separate operating channels, each of which can operate independently with time range adjustment from 1 second to 99 minutes. Possibility for correction of the set values during operation. First, select the time unit (seconds or minutes) and then set the time. Depending on the timer coupling, it can be used as a cyclic timer relay, i.e. it initially counts the first time set, then counts the second time set, then starts counting over the first time again, etc. until a stop signal is received. In another mode, the timer can count the set time and stop until a new signal is received to count the next cycle. Indication on LCD display with high resolution and showing the time in hours, minutes and seconds.

TECHNICAL DATA:

- Power supply voltage: 230V; 50Hz
- Admissible variation of the input voltage: 85-110%U
- Possibility for choice of operating range:
 - from 1 to 99 seconds
 - from 1 minute to 99 minutes
- Error: $<0.01\% \pm 0.05s$
- Minimal duration of the input pulse: 20ms
- Power consumption: $<5VA$
- Electrical wear resistance: 10^7 cycles
- Mechanical wear resistance: 10^5 cycles
- Operating temperature: $-10 \div +65^\circ C$
- Temperature of storage: up to $70^\circ C$
- Humidity: 45 – 85%RH
- Commutating capacity at load: 3A
- Weight: 300g



Type	Packing/Box (pcs)	Product category	Catalogue number
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TE48S-S	84	B	50105
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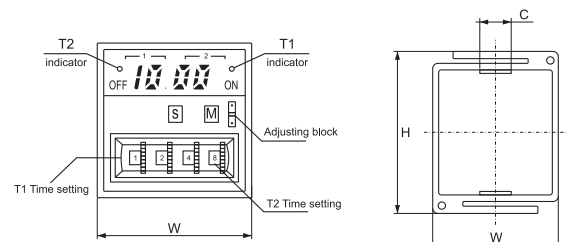


Dimensions (mm)

D	E	L1	L2
5	44.8	74	95
C	H	W	
15	58	48	

MOUNTING:

- on the front panel of the board





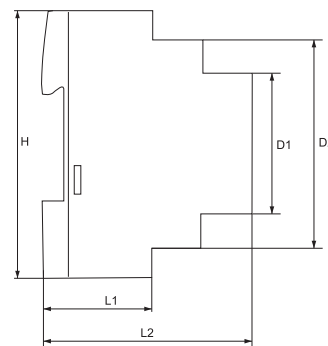
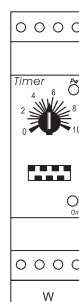
TIMER TE 19M

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Timer is developed using modern technologies from quality and reliable materials and is adapted for mounting on DIN rail. It is used for providing time intervals in eight time programs, which are assigned by combinations of the keys. There is an option for it to operate in time ranges (assigned by the keys K4, K5, K6): seconds, minutes or hours depending on the necessity of the user. Power contact up to 3A.

TECHNICAL CHARACTERISTICS:

- Input voltage: 230V; 50Hz
- Range of setting: from 0.6 sec to 100 hours
- Accuracy of setting: $\pm 5\%$ from the whole scale
- Time for nullifying: < 0.5 seconds
- Consumed capacity: < 5 VA
- Electrical endurance (number of cycles): 100 000 cycles
- Mechanical endurance (number of cycles): 1 000 000 cycles
- Operation temperature: $-10 \div +65^{\circ}\text{C}$
- Humidity: 45 - 85%RH
- Computing option: up to 5A
- Indication:
 - ▶ on power supply: red indication
 - ▶ on operational output relay: green indication
- Weight: 150 gr.
- Time functions: according to the programming guide



Type	Packing/Box (pcs)	Product category	Catalogue number
TE 19M	1 / 200	B	50102M



Dimensions (mm)

H	W	H1	H2	L1	L2
85	24	45	60	34	66

MOUNTING METHOD:

- DIN rail



UNIVERSAL DIGITAL COUNTER CE2J

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

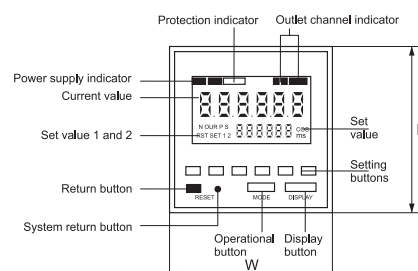
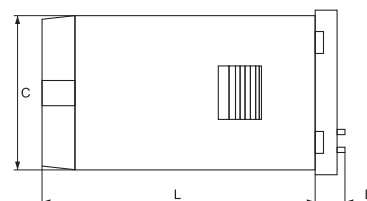
The device is manufactured under the modern technology CMOS which allows high speed of counting and high counting reliability. It has a built in battery which allows data storing for more than 10 years. It is supplied with a digital display with black lighting digits, providing excellent visibility at different lighting. The counter is to be mounted on the front panel of the boards. It is used for impulse sequence counting with accumulation or deduction. There is possibility for relay outlet operation at reaching beforehand set value, and also a possibility for changing the position of the decimal point.

TECHNICAL DATA:

- Display: LCD
- Power supply voltage: 230V; 50Hz
- Counting range: 0 - 99999
- Counting speed: 30/3k cps
- Zeroing: outside impulse
- Battery for programme storing: up to 10 years
- Power consumption: < 5 VA
- Operating temperature: $-10 \div +65^{\circ}\text{C}$
- Humidity: 35 - 85%RH
- Commutating capacity: relay outlet with active load: up to 3A
- Weight: 250g

MOUNTING:

- on the front panel
- opening with dimensions: 45x45



Documents corresponding to the product:

Standard EN 61010-1

Type	Packing/Box (pcs)	Product category	Catalogue number
CE2J	1 / 45	B	50111



Dimensions (mm)

H	W	C	D	L
68	68	65	8.5	90

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Documents corresponding to the product:

Standard EN 61010-1

Type	Packing/Box (pcs)	Product category	Catalogue number
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CE10J 1 / 45 B 50120



Dimensions (mm)

H	W	C	D	L
68	68	65	6	90



Documents corresponding to the product:

EN 61010-1

Type	Packing/Box (pcs)	Product category	Catalogue number
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CE15J 1 / 100 B 50112



COMBINED DIGITAL COUNTER/TIMER CE10J

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

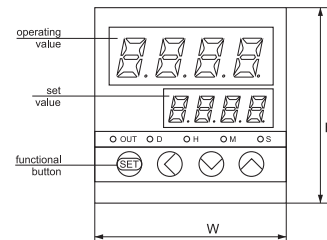
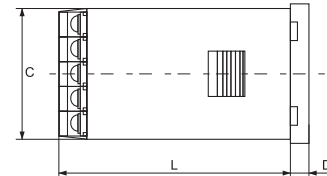
The device is for front mounting in the board. It can be used as a counter or timer choosing a definite combination from keys. It is manufactured under the modern technology CMOS which allows high speed of counting, precision at operation as a timer and high reliability. It has a built in battery which allows data storing for more than 10 years. It is supplied with a digital display providing excellent visibility at different lighting. It is used for impulse sequence counting with accumulation or deduction. There is possibility for relay outlet operation at reaching beforehand set value, and also a possibility for changing the position of the decimal point.

TECHNICAL DATA:

- Display: LCD
- Power supply voltage: 230V; 50Hz
- Counting range: 0 – 999
- Timer range: 0.01 – 99h99min
- Counting speed: 30/500 cps
- Zeroing: outside impulse
- Battery for programme storing: up to 10 years
- Power consumption: <3VA
- Mechanical wear resistance: 107 cycles
- Operating temperature: -5 ÷ +65°C
- Humidity: 35 – 85%RH
- Commutating capacity: relay outlet with active load: up to 3A
- Weight: 120g

MOUNTING:

- on the front panel
- opening with dimensions: 45x45



TOTAL DIGITAL COUNTER CE15J

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The device is to be mounted on DIN-rail. It is used as an impulse counter with no outside power supply. For that purpose there is a Li battery built in the device which provides data storing and operation of the device for 5 years. It has eight digital lighting display providing excellent visibility at different lighting. It is used for impulse sequence counting with accumulation.

TECHNICAL DATA:

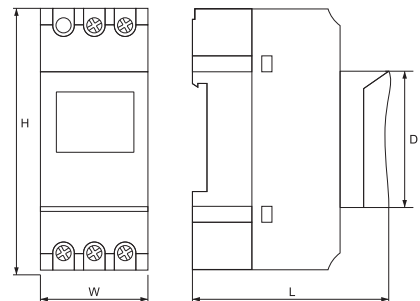
- Display: LCD
- Power supply voltage: built in battery
- Inlet signal: 100-230V AC/DC
- Counting accuracy: <0.002%
- Data storing battery: up to 5 years
- Operating temperature: -5 ÷ +65°C
- Humidity: 35 – 85%RH
- Weight: 120g

Dimensions (mm)

H	W	D	L
86	36	45	64

MOUNTING:

- DIN-rail





TOTAL DIGITAL COUNTER CE15L

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

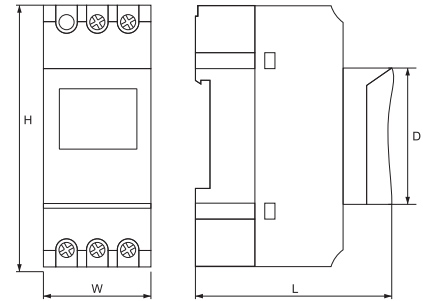
The device is to be mounted on DIN-rail. It is used as a time impulse counter with no outside power supply. For that purpose there is a Li battery built in the device which provides data storing and operation of the device for 5 years. It has eight digital lighting display providing excellent visibility at different lighting. It is used for time impulse sequence counting with accumulation. It displays the operated time.

TECHNICAL DATA:

- Display: LCD
- Power supply voltage: built in battery
- Inlet signal: 100-230V AC/DC
- Counting accuracy: <0.002%
- Battery for data storing: up to 5 years
- Operating temperature: $-5 \div +65^{\circ}\text{C}$
- Humidity: 35 – 85%RH
- Weight: 120g

MOUNTING:

- DIN-rail



Dimensions (mm)

H	W	D	L
86	36	45	64

Documents corresponding to the product: EN 61010-1

Type	Packing/Box (pcs)	Product category	Catalogue number
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CE15L 1 / 100 B **50115**



PHASE SEQUENCE INDICATOR EK - RSTB

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

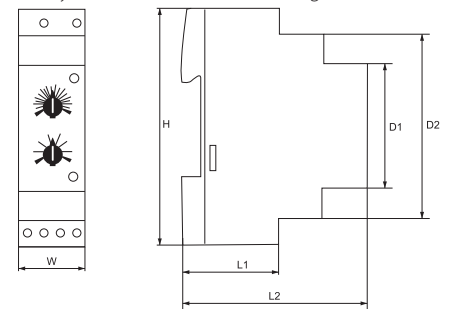
The device is to be mounted on DIN-rail. It is used for control and indication of the presence, sequence and quality of the phases. The device indicates the following fault: lack of one or several phases; change in the sequence of the phases; lowering of the power supplying voltage: under 10%; increasing of the power supplying voltage: over 10%; phase asymmetry of the power supplying voltage: $\pm 10\%$. In the presence of one of the conditions above a relay starts operating in the device which breaks the controlling circuit. The time between fault indication and outlet relay switching on can be adjusted in order to prevent unwilling stops at very short breaks. When the voltage is back to normal limits, the device receives energy (indication lights) according to the hysteresis values. At phase sequence fault the device operates immediately.

TECHNICAL DATA:

- Power supply voltage: 400V; 50Hz
- Possibility for operation range adjustment: 0.1 – 10 seconds
- Possibility for working range adjustment: from 300 to 480 V
- Electrical wear resistance: 1 000 000 cycles
- Mechanical wear resistance: 10 000 000 cycles
- Indication: green LED – indication for a change in the condition; red LED – failure
- Operating temperature: $-5 \div +65^{\circ}\text{C}$
- Humidity: 35 – 85%RH
- Weight: 120g
-

MOUNTING:

- DIN-rail



Dimensions (mm)

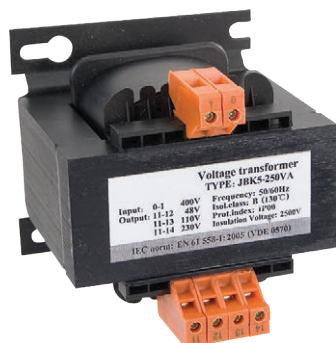
H	W	D1	D2	L1	L2
85	24	45	60	34	66

Documents corresponding to the product: EN 61010-1

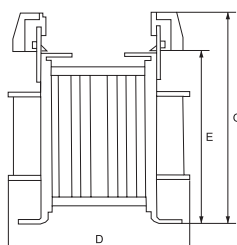
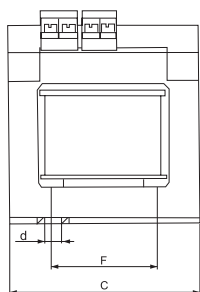
Type	Packing/Box (pcs)	Product category	Catalogue number
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EK - RSTB 1 / 200 B **50103**





Documents corresponding to the product: Standard EN 60051-1



UNTIL SUPPLY
LAST

EVT5 - CONTROL VOLTAGE TRANSFORMER

FUNCTIONS:

Reduction of main voltage within standard range

- Galvanic separation of the power supply circuit from the operation circuit

TECHNICAL FEATURES:

- Input voltage: 400 or 230 V
- Frequency : 50/60Hz
- Short circuit resistance: unstable
- Temperature class: B (130°C)
- Construction: open (for installation in other products)
- Magnetic circuit: cold rolled electric furnace steel
- Coils: pure electrotechnical copper
- IP code: IP20

CONNECTION:

- flexible or hard conductors of relevant section to terminals

MOUNTING:

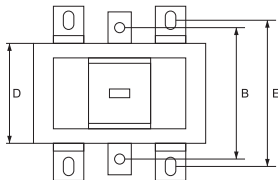
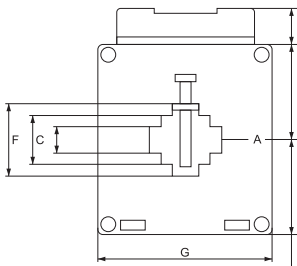
- Mounting in distribution boards or products
- fastening: by means of screws/bolts to the surface
- position: vertical
- ambient temperature: $-20 \div +65^{\circ}\text{C}$

Type	Initial voltage (V)	Secondary voltage (V)	Power VA	Dimensions						Packing / Box (pcs.)	Product category	Catalogue number
				C	D	E	F	G	d			
EVT5 - 250VA	230	48-36	250	130	100	120	53	130	20	16	F	45242N
EVT5 - 250VA	400	24-12	250	130	100	120	53	130	20	12	F	45444
EVT5 - 500VA	400	48-24-12	500	150	113	133	53	140	20	4	F	45445
EVT5 - 500VA	230	110-48-24	500	150	125	133	53	140	20	4	F	45215
EVT5 - 500VA	400	110-48-24	500	150	125	133	53	140	20	6	F	45415
EVT5 - 1000VA	400	48-24-12	1000	170	125	150	65	155	20	2	F	45441
EVT5 - 1600VA	400	48-24-12	1600	190	125	150	65	170	20	2	F	454416





Documents corresponding to the product: Standard EN 61010-1; EN 60044-1; EN 60044-6



CURRENT MEASUREMENT TRANSFORMERS MES - XX/X5 TYPE

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The measurement transformers find application at current measuring, current regulation, systems for current characteristics watching, systems for reactive energy compensation, signaling, etc. They are with x/5 gear ratio as X is the inlet range of the transformer.

TECHNICAL DATA:

- Maximum operating voltage: 720V; 50Hz
- Admissible deviation of the operating current: 1.2 x In
- Inlet current: 50 – 1200A
- Outlet current: 5A
- Impulse voltage wear resistance: 4000V; 50Hz (1min)
- Operating temperature: -5 ÷ +65°C

- Humidity: 35 – 85%RH
- Precision class: 0.5

MOUNTING:

- Current transformers can be DIN rail mounted;
- vertically or horizontally to the power supplying rails according to the opening of the transformer
- Current transformers can be mounted on flat surfaces by use of fixing clamps.

Type	Overall dimensions (mm)						
	A	B	C	D	E	F	G
MES - 75/30	88	52	52	41	77	31	31
MES - 75/40	88	52	52	41	77	41	41
MES - 86/60	117	57	57	184	77	61	61

Type	Range	Precision class	Capacity VA	Weight kg	Packing/Box (pcs)	Product category	Catalogue number
MES - 75/30	50/5	0.5	1	0.60	1 / 40	B	45050A
MES - 75/30	75/5	0.5	1.5	0.60	1 / 40	B	45075A
MES - 75/30	100/5	0.5	1.5	0.60	1 / 40	B	45103A
MES - 75/30	150/5	0.5	2.5	0.60	1 / 40	B	45153A



Type	Range	Precision class	Capacity VA	Weight kg	Packing/Box (pcs)	Product category	Catalogue number
MES - 75/40	200/5	0.5	3.75	0.60	1 / 40	B	45204A
MES - 75/40	250/5	0.5	3.75	0.60	1 / 40	B	45254A
MES - 75/40	300/5	0.5	5	0.60	1 / 40	B	45304A
MES - 75/40	400/5	0.5	5	0.60	1 / 40	B	45404A
MES - 75/40	500/5	0.5	5	0.60	1 / 40	B	45504A
MES - 75/40	600/5	0.5	5	0.60	1 / 40	B	45604A



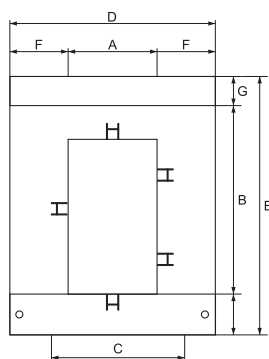
Type	Range	Precision class	Capacity VA	Weight kg	Packing/Box (pcs)	Product category	Catalogue number
MES - 86/60	400/5	0.5	3.75	0.60	1 / 40	B	45406A
MES - 86/60	500/5	0.5	5	0.60	1 / 40	B	45506A
MES - 86/60	600/5	0.5	10	0.60	1 / 40	B	45606A
MES - 86/60	800/5	0.5	10	0.60	1 / 40	B	45806A
MES - 86/60	1000/5	0.5	10	0.60	1 / 32	B	45906A
MES - 86/60	1200/5	0.5	10	0.60	1 / 32	B	45916A



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Documents corresponding to the product: Standard EN 60044-1



CURRENT TRANSFORMERS, TYPE CP

3+2 standard + extended **5** YEAR TOTAL WARRANTY

Current measuring transformers of duct type. Specially designed to be installed in measuring circuits without removing cables in current measuring circuit. CP Transformers save installation time and decrease installation costs

TECHNICAL SPECIFICATION:

- small size table:
- secondary coil rated current 5A
- rated voltage 720V
- frequency 50Hz
- rated load: up to 30VA
- safety coefficient: $f_s \leq 5$
- accuracy class :0.5; 1
- secondary coil connection: cable shoe terminal

Type	Overall dimensions (mm)						
	A	B	C	D	E	F	G
CP 23	20	30	51	89	111	34	47
CP 58	50	80	78	114	145	32	32
CP 88	80	80	108	144	145	32	32

Type	Range	Precision class	Capacity VA	Weight kg	Packing/Box (pcs)	Product category	Catalogue number
CP 23	200/5	1	1.5	0,74	1 / 45	B	452320
CP 23	250/5	1	2.5	0,74	1 / 45	B	452325
CP 23	300/5	0,5	2.5	0,74	1 / 45	B	452330



Type	Range	Precision class	Capacity VA	Weight kg	Packing/Box (pcs)	Product category	Catalogue number
CP 58	250/5	0,5	1,5	0,87	1 / 36	B	455825
CP 58	300/5	0,5	2,5	0,87	1 / 36	B	455830
CP 58	400/5	0,5	2,5	0,87	1 / 36	B	455840
CP 58	500/5	0,5	5	0,87	1 / 36	B	455850
CP 58	600/5	0,5	5	0,87	1 / 36	B	455860



Type	Range	Precision class	Capacity VA	Weight kg	Packing/Box (pcs)	Product category	Catalogue number
CP 88	400/5	0,5		1	1 / 20	B	458840
CP 88	500/5	0,5	2,5	1	1 / 20	B	458850
CP 88	600/5	0,5	5	1	1 / 20	B	458860
CP 88	750/5	0,5	2,5	1	1 / 20	B	458875
CP 88	800/5	0,5	3.75	1	1 / 20	B	458880
CP 88	1000/5	0,5	5	1	1 / 20	B	458890



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Documents corresponding to the product: EN 60947-5-1; EN 61810

INDUSTRIAL RELAYS AND BASES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Devices intended for construction of automation and signalling boards. They are mainly used for command transfer towards the executive mechanisms. Currents of comparatively heavy values enabling the direct control of industrial executive mechanisms are commuted in comparatively small sizes. The contact surfaces are made from silver-coated electrolytic copper. The entire contact system is closed within a lid of colourless fire-proof plastic with a test-button installed to it. The base provides a safe electric connection of the conductors of the electric installation and the relays and is used to install the relay to the DIN busbar.

TECHNICAL CHARACTERISTICS:

- Supply voltage: from 12 to 230V AC, 50 Hz and from 12 to 110V DC
- Acceptable deviation of the supply voltage: 85 -110% U_n
- Rated current of the sockets: 10A AC
- Electrical endurance: 1 000 000 cycles
- Isolation resistance: 500 m Ω /min (500V)
- Impulse tension resistance: 2000V, 50Hz
- Dielectric strength: 1000V AC/1 min
- Turn-out time: 25ms
- Working temperature: -5 ÷ + 65°C
- Humidity: 35 - 85% RH

METHOD OF INSTALLATION:

- on a DIN rail by means of a socket

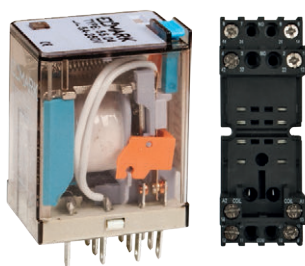


Relay type	Voltage of the coil (V)	Socket type	Resistance of the coil (Ω)	Number of contacts	Packing/Box (pcs)	Product category	Catalogue number
ELM - 14FC	12 VDC	ELM-RT624-B	260	NO+NC	100 / 1000	B	57141
ELM - 14FC	24 VDC	ELM-RT624-B	1080	NO+NC	100 / 1000	B	57142
ELM - 14FC	48 VDC	ELM-RT624-B	4260	NO+NC	100 / 1000	B	57143



Relay type	Voltage of the coil (V)	Socket type	Resistance of the coil (Ω)	Number of contacts	Packing/Box (pcs)	Product category	Catalogue number
ELM - 60.2	12 VDC	ELM - 90.22	96	2NO+2NC	20 / 300	B	57601
ELM - 60.2	24 VDC	ELM - 90.22	384	2NO+2NC	20 / 300	B	57602
ELM - 60.2	48 VDC	ELM - 90.22	1540	2NO+2NC	20 / 300	B	57603
ELM - 60.2	230 VAC	ELM - 90.22	7400	2NO+2NC	20 / 300	B	57605
ELM-60.2	24VAC	ELM-90.22		2NO+2NC	20 / 300	B	57606
ELM - 60.13	12 VDC	ELM - 90.23	96	3NO+3NC	20 / 300	B	57611
ELM - 60.13	24 VDC	ELM - 90.23	384	3NO+3NC	20 / 300	B	57612
ELM - 60.13	48 VDC	ELM - 90.23	1540	3NO+3NC	20 / 300	B	57613
ELM - 60.13	110 VAC	ELM - 90.23	1700	3NO+3NC	20 / 300	B	57614
ELM - 60.13	230 VAC	ELM - 90.23	7400	3NO+3NC	20 / 300	B	57615
ELM-60.13	24VAC	ELM90.23		3NO-3NC	20/300	B	57616





Relay type	Voltage of the coil (V)	Socket type	Resistance of the coil (Ω)	Number of contacts	Packing/Box (pcs)	Product category	Catalogue number
ELM - 55.02	12 VDC	ELM - RT702-B	42	2NO+2NC	50 / 500	B	57521
ELM - 55.02	24 VDC	ELM - RT702-B	168	2NO+2NC	50 / 500	B	57522
ELM - 55.02	48 VDC	ELM - RT702-B	675	2NO+2NC	50 / 500	B	57523
ELM - 55.02	230 VAC	ELM - RT702-B	14000	2NO+2NC	50 / 500	B	57525
ELM55.02	24VAC	ELM - RT702-B		2NO+2NC	50 / 500	B	57526
ELM - 55.04	12 VDC	ELM-RT704-B	42	4NO+4NC	50 / 500	B	57541
ELM - 55.04	24 VDC	ELM-RT704-B	168	4NO+4NC	50 / 500	B	57542
ELM - 55.04	48 VDC	ELM-RT704-B	675	4NO+4NC	50 / 500	B	57543
ELM - 55.04	110 VAC	ELM-RT704-B	3500	4NO+4NC	50 / 500	B	57544
ELM - 55.04	230 VAC	ELM-RT704-B	14000	4NO+4NC	50 / 500	B	57545
ELM-55.04	24VAC	ELM-RT704-B		4NO+4NC	50 / 500	B	57546



57901 57902, 57912

Socket type	Dimensions (mm)	Number of terminals (pcs.)	Packing/Box (pcs)	Product category	Catalogue number
ELM - RT624-B	76 x 15	5	20 / 600	B	57901
ELM - RT702-B	76 x 27	11	10 / 240	B	57902
ELM - RT704-B	76 x 27	14	10 / 240	B	57912
ELM - 90.22	68 x 38	8	10 / 400	B	57904
ELM - 90.23	68 x 38	11	10 / 400	B	57905



57904, 57905

INDUSTRIAL SOLID STATE RELAYS (SSR)

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Documents corresponding to the product: EN 60947-5-1;
EN 61810

Industrial SSR are intended for mounting in power and control cabinets as an output switch devices with reliable ON/OFF performance. The SSR are based on the CMOS technology. The non-contact electronic switch is optically separated from the input signal by a photoelectric coupler. This allows use of switch currents of up to 50A despite of the devices small overall size. Another important feature of the relay is that output load can be regulated depending on the input signal value. The relay is mainly used to transmit control signals to actuating mechanisms since it can work at comparatively high currents making it possible to directly control actuators. SSR have transparent plastic covers to additionally improve their safety level. The SSR use is connected with considerable heat emissions, so measures must be taken to dispense the excessive thermal energy in the atmosphere. This is achieved through application of specially designed radiators. The correct definition of radiator parameters is of critical importance. It is made by calculating the heat generation capacity with the formula: Heat generation = active load current x 3.0 W/A. The heat removal surface is estimated with the help of the following graphic:

TECHNICAL SPECIFICATIONS:

- Load/output voltage: 30/400V 50 Hz or the solid state voltage regulators
- Rated output current: from 10A to 60A
- Insulating voltage: 1000 MΩ /min (500V)
- Impulse voltage stability: 2000V, 50Hz
- Dielectric Strength: < 2500VAC / 1 min
- Leakage current: <2mA
- Turn-on time: <10ms
- Operating temperature: -5°C + 65°C
- Relative Humidity: 35 - 85%RH



Type	Relay Type	Control Voltage (V)	Output Voltage (V)	Number of phases	Output Current (A)	Packing/Box (pcs)	Product category	Catalogue number
ZG3NC - 2 - 10B	SSR	3-32VDC	230VAC	1	10	10 / 100	B	57710
ZG3NC - 2 - 20B	SSR	3-32VDC	230VAC	1	20	10 / 100	B	57720
ZG3NC - 2 - 25B	SSR	3-32VDC	230VAC	1	25	10 / 100	B	57725
ZG3NC - 2 - 40B	SSR	3-32VDC	230VAC	1	40	10 / 100	B	57740
ZG3NC - 2 - 60B	SSR	3-32VDC	230VAC	1	60	10 / 100	B	57760
ZG3NC - 3 - 10B	SSR	3-32VDC	400VAC	2	10	10 / 100	B	57713
ZG3NC - 3 - 20B	SSR	3-32VDC	400VAC	2	20	10 / 100	B	57723
ZG3NC - 3 - 25B	SSR	3-32VDC	400VAC	2	25	10 / 100	B	57735
ZG3NC - 3 - 40B	SSR	3-32VDC	400VAC	2	40	10 / 100	B	57743
ZG3NC - 3 - 60B	SSR	3-32VDC	400VAC	2	60	10 / 100	B	57763



UNTIL SUPPLY
LAST

Type	Relay Type	Control Voltage (V)	Output Voltage (V)	Number of phases	Output Current (A)	Packing/Box (pcs)	Product category	Catalogue number
ZG1NC - 2 - 10D	SS voltage regulator	1-10VDC	0-230VAC	1	10	10 / 100	F	57810
ZG1NC - 3 - 10D	SS voltage regulator	1-10VDC	0-400VAC	2	10	10 / 100	F	57813



Type	Relay Type	Control Voltage (V)	Output Voltage (V)	Number of phases	Output Current (A)	Packing/Box (pcs)	Product category	Catalogue number
ZG33 - 3 - 10B	SSR	3-32VDC	400VAC	3	10	1 / 30	B	57831
ZG33 - 3 - 20B	SSR	3-32VDC	400VAC	3	20	1 / 30	B	57832
ZG33 - 3 - 25B	SSR	3-32VDC	400VAC	3	25	1 / 30	B	57833
ZG 33 - 3 - 40B	SSR	3-32VDC	400VAC	3	40	1 / 30	B	57834



Note: The relay output must be supplied with a varistor to ensure its over-voltage protection, whenever RRS is used to control inductive loads.

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



DIGITAL VOLTMETER/AMPEREMETER EKDP 15 A/V

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Documents corresponding to the product: Standard EN 61010-1

Type	Packing/ Box (pcs)	Product category	Catalogue number
EKDP-15AA	1 / 100	B	50117A
EKDP-15DA	1 / 100	B	50117D
EKDP-15AV	1 / 100	B	50116A
EKDP-15DV	1 / 100	B	50116D



Dimensions (mm)

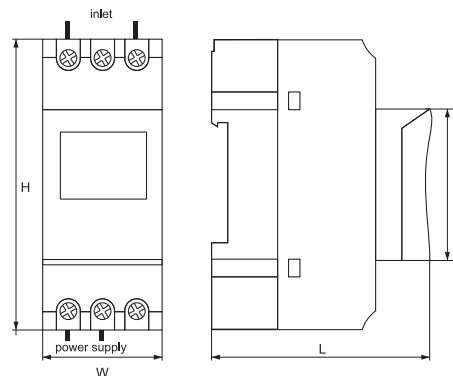
H	W	L	D
88	36	64	45

TECHNICAL DATA:

- Power supply voltage: 100 - 240V; 50Hz
- Inlet signal:
 - operating as voltmeter: 2 – 700V (the range is adjusted from inside)
 - operating as amperemeter: 5 – 2000A (the range is adjusted from inside)

NOTE: At current range over 5A a current measurement transformer should be used

- Consumption: <4VA
- Impulse voltage wear resistance: 4000V; 50Hz (1min)
- Operating temperature: -5 ÷ +65°C
- Humidity: 35 – 85%RH
- Precision: 0.5% from the whole scale
- Display: LCD
- Weight: 150gr



MOUNTING:

- DIN-rail

DIGITAL VOLTMETER/AMPEREMETER AND FREQUENCY METER EKDP7

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY



Documents corresponding to the product: Standard EN 61010-1

Type	Packing/ Box (pcs)	Product category	Catalogue number
EKDP7-AV	1 / 84	B	50106
EKDP7-AA	1 / 84	B	50107
EKDP7-DV	1 / 84	B	50108
EKDP7-DA	1 / 84	B	50109
EKDP7-HZ	1 / 84	B	50110



Dimensions (mm)

H	W	H1	D	L
72	72	68	6	42

Digital device adjusted for mounting on the front panel of electrical boards and offered in the following types:

- amperemeter:
EKDP7 – AA – amperemeter for alternating current
EKDP7 – DA – amperemeter for direct current
- voltmeter:
EKDP7 – AV – voltmeter for alternating current
EKDP7 – DV – voltmeter for direct current
- frequency meter
EKDP7 – Hz – frequency meter

It is supplied with LCD display where the measurement quantity is displayed with numbers with 3 1/2 size. It has high accuracy of analogue-digital transfer, measurement precision and electromagnetic interference stability. There is possibility for adjustment of the measurement range through built in micro switches. Adjusted to measure direct current and alternating current quantities.

TECHNICAL DATA:

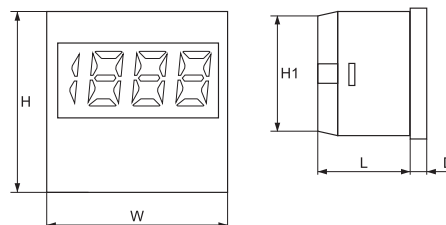
- Power supply voltage: 100 - 240V; 50Hz
- Inlet signal:
 - operating as voltmeter: 2 – 700V (the range is adjusted from inside)
 - operating as amperemeter: 5 – 2000A (the range is adjusted from inside)

NOTE: For high current range a current measurement transformer should be used for alternating current device and a measurement shunt for direct current.

- Consumption: <5A
- Impulse voltage wear resistance: 4000V; 50Hz (1min)
- Operating temperature: -5 ÷ +65°C
- Humidity: 35 – 85%RH
- Precision: 0.5% from the whole scale
- Display: LCD
- Weight: 130gr

MOUNTING:

- on the front panel



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



DIGITAL ROUND VOLTMETER/ AMPEREMETER AND FREQUENCY METER EL-ED16R

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

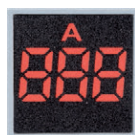
Type	Range	Diameter (mm)	Packing / Box (pcs)	Product category	Catalogue number
Voltmeter	AC 12-500V	22	10/500	B	401553
Amperemeter	AC 0-100A	22	10/500	B	401554
Frequency meter	AC 35-99 HZ	22	10/500	B	401555



DIGITAL SQUARE VOLTMETER/ AMPEREMETER AND FREQUENCY METER EL-ED16S

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Range	Diameter (mm)	Packing / Box (pcs)	Product category	Catalogue number
Voltmeter	AC 12-500V	22	10/500	B	401556
Amperemeter	AC 0-100A	22	10/500	B	401557
Frequency meter	AC 35-99 HZ	22	10/500	B	401558

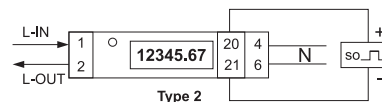
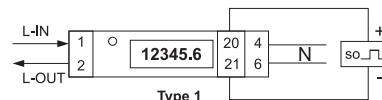
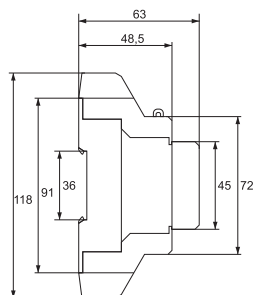


Documents corresponding to the product: Standard IEC 62052-11; IEC 62053-21; IEC 62056-21

DIN RAIL MOUNTED KWH METERS

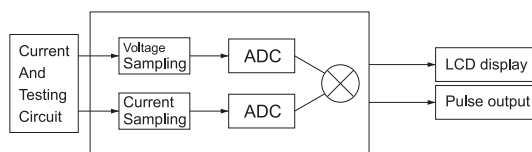
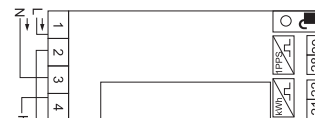
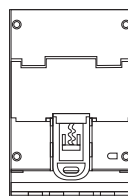
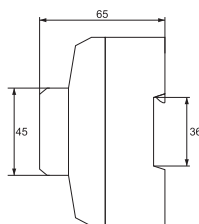
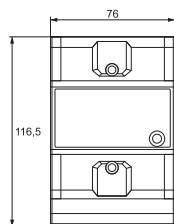
3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Electronic single and three phase kWh meters intended for DIN rail mounting and active energy measurement. Meters are suitable for home and commercial applications. They perform direct measurement of the real consumption of electric power and the results are shown on the LCD display. The system doesn't need any additional adjustment or calibration. The range includes single and multi-tariff models.



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
DDS - 1Y - 45	5A (45A)	1	1000	230	63 / 18 / 118	1 / 120	F	50214

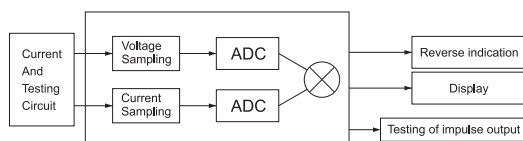
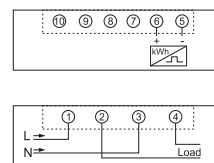
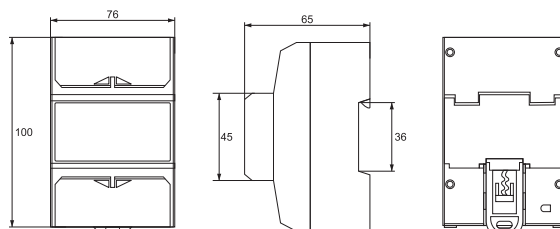
UNTIL SUPPLY
LAST



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
DD4F-S01-1Y-60	5A (60A)	4	1600	230	116.5 / 76 / 65	1 / 48	F	50220

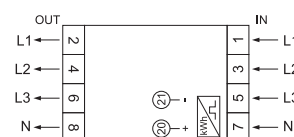
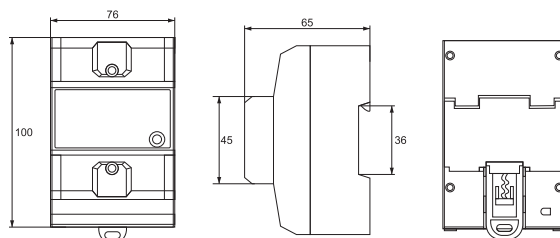
UNTIL SUPPLY
LAST





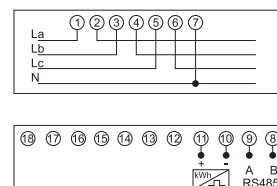
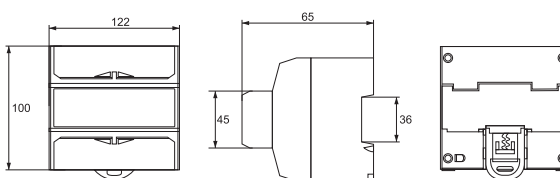
Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
DDS - 1Y - 100	10A (100A)	1	1600	230	65 / 76 / 100	1 / 45	F	50260

UNTIL SUPPLY
LAST



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
DDS - 3Y 80	20A (80A)	1	800	3x230/400	65 / 76 / 100	1 / 45	F	50380

UNTIL SUPPLY
LAST



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
DTGS-S01-3Y100	10A (100A)	4	800	3X230/400	122 / 100 / 65	1 / 30	F	50400

UNTIL SUPPLY
LAST



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
EL-45SA	5A(40A)	1	2000	230	116 / 18 / 59	1/10	B	50213



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
EL-100SA-U	10A(60A)	1	1600	230	100 / 76 / 65	1/60	B	50216



Type	Measuring range	Number of Tariffs	Meter constant (imp/kWh)	Voltage (V)	Overall dimensions (mm) height / width / depth	Packing/Box (pcs)	Product category	Catalogue number
EL-024	3x20A(100A)	1	400	3x220/380	100 / 76 / 65	1/60	B	50217





Documents corresponding to the product:

Standard EN 60051-1



ANALOGUE (POINTER) PANEL METERS SD72 TYPE FOR BUILD-IN

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Analogue devices adjusted for mounting on the front panel of electrical boards. Designed for frequency measurement, capacity, alternating or direct voltage and current of the power supply grid, with overall dimensions 72x72mm. They are manufactured on the basis of bridge measurement schemes. There is possibility for display change for the higher scopes of measuring.

Type	Type of the measurement system	Precision class	Range	Note	Packing/Box (pcs)	Product category	Catalogue number
amperemeter AC	MEMSI	1.5	0-100A	current transfer 100/5	1 / 100	B	654010
amperemeter AC	MEMSI	1.5	0-200A	current transfer 200/5	1 / 100	B	654020
amperemeter AC	MEMSI	1.5	0-400A	current transfer 400/5	1 / 50	B	654040
amperemeter AC	MEMSI	1.5	0-600A	current transfer 600/5	1 / 50	B	654060
amperemeter AC	MEMSI	1.5	0-1000A	current transfer 1000/5	1 / 50	B	654100
amperemeter AC	MEMSI	1.5	0-1500A	current transfer 1500/5	1 / 50	B	654150
voltmeter AC*	MEMSI	1.5	0-500V	-	1 / 50	B	50125
frequency meter**	ME	0.5	45-65Hz	-	1 / 50	B	50126
cosφ meter	MEMSI	1.5	3P 400V	-	1 / 50	B	50127
amperemeter DC	MEMC	1.5	0-5A	-	1 / 50	B	50128
amperemeter DC	MEMC	1.5	0-50A	outer resistor 60mV	1 / 50	B	50129
voltmeter DC	MEMC	1.5	0-50V	-	1 / 50	B	50130
voltmeter DC	MEMC	1.5	0-100V	-	1 / 20	B	50131
wattmeter	MEMSI	1.5	0-3000W 1P240V	-	1 / 25	B	50132
wattmeter	MEMSI	1.5	0-3000W 3P 3 line	-	1 / 25	B	50133
wattmeter	MEMSI	1.5	0-3000W 3P 4 line	-	1 / 25	B	50134



Note: MEMSI - magnetic-electrical movable steel instrument; MEMC – magnetic-electrical movable coil

* Possibility for supplying with voltage transformer X/100V for range expanding

** Possibility for voltage 110V, 230V , 400V

ALL-PURPOSE LIMIT SWITCH – SERIES CSA-XXX

3+0
 standard
 +extended
3 YEAR TOTAL
 WARRANTY

The all-purpose limit switches are devices used in automatic systems as a control element. They are used for setting of gearing limits. They are mounted on transport lines, conveyors and other linear progressive motion machines. They feature a vibration-resistant metal shell.

PRODUCT CONFORMITY DOCUMENTATION:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Rated current: 10A active; 4A inductive
- Insulating resistance: 100mΩ
- Electrical endurance (number of cycles): 500 000 with active load

- Mechanical endurance (number of cycles): 1 000 000
- Gearing speed: 5mm/s to 0.5 m/s
- Rated voltage: 230V
- Rated current: up to 10A
- IP code: IP66
- Cable input: cable gland PG11
- Section of power supply conductor: up to 2mm²
- Fastening strength of terminals: 6-8kgf/cm

Type of contact system	Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Packing/ Box (pcs)	Product category	Catalogue number
NO (4) (3) NO NC (1) (2) NC									
	CSA - 001	metal cylinder	800	400	2.0mm	5.8mm	10 / 90	B	46A001
	CSA - 003	cylinder with metal roll	800	400	2.0mm	5.8mm	10 / 90	B	46A003
	CSA - 012	horizontal lever with metal roll	800	400	2.0mm	5.8mm	10 / 90	B	46A012
	CSA - 031	adjustable lever with metal roll	400	100	22.5°	95°	10 / 80	B	46A031
	CSA - 021	lever with metal roll	400	100	22.5°	95°	10 / 80	B	46A021
	CSA - 081	spring lever	150	50	22.5°	50mm	10 / 80	B	46A081



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

ALL-PURPOSE LIMIT SWITCH – SERIES TZ-6XXX

3+0
 standard
 +extended
3 YEAR TOTAL
 WARRANTY

The all-purpose limit switches are installed on transport lines, conveyors and other linear progressive motion machines. The miniature limit switch is mounted in an aluminum shell, resistant to vibrations, lubricants and water.

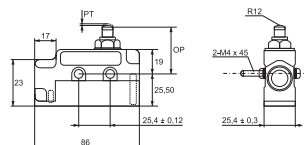
PRODUCT CONFORMITY DOCUMENTATION:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Rated current: 15A active; 5A inductive
- Insulating resistance: 100mΩ
- Contact resistance: 15mΩ
- Electrical endurance (number of cycles): 500 000 with active load
- Mechanical endurance (number of cycles): 10 000 000
- Gearing speed: 0.1mm/s to 0.5 m/s
- Rated voltage: 230V
- IP code: IP65
- Cable input: cable gland PG11
- Section of power supply conductor: up to 1.5mm²

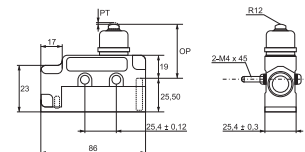
Type of contact system



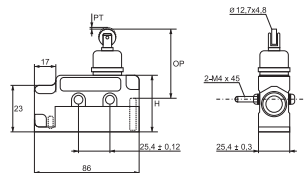
Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Packing/ Box (pcs)	Product category	Catalogue number
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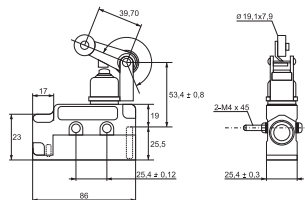
TZ-6001	metal cylinder	350	115	0.5mm	5.5mm	1 / 50	B	466001
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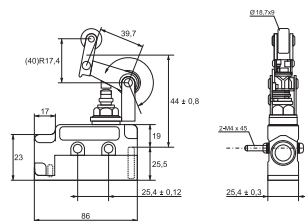
TZ-6101	oil-resistant metal cylinder	800	240	2mm	5mm	1 / 50	B	466101
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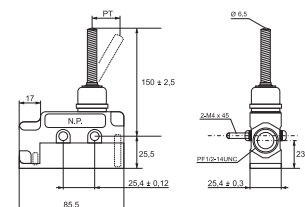
TZ-6102	oil-resistant cylinder with metal roll	500	100	1mm	3.5mm	1 / 50	B	466102
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TZ-6104	oil-resistant horizontal lever with metal roll	640	230	5mm	6mm	1 / 50	B	466104
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TZ-6143	oil-resistant vertical lever with metal roll	640	230	5mm	6mm	1 / 50	B	466143
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TZ-6106	spring lever	150	-	20°	-	1 / 50	B	466106
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In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

UNIVERSAL LIMIT SWITCH – SERIES CM-1XXX

3+0
 standard
 +extended
3 YEAR TOTAL
 WARRANTY

Limit switches of the CM series are used mainly as replacement of the limit switches of the TZ series or for setting the movement limits of some types of equipment. The switches are supplied with screw cable terminals. They can work at resistance loads as high as 15A, and are of single circuit type. Limit switches have high accuracy and can operate at wide variety of speeds.

ITEMS ARE COMPLIANT WITH THE FOLLOWING STANDARDS:

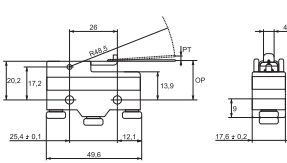
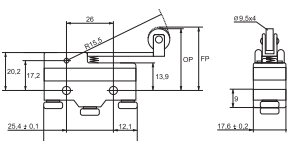
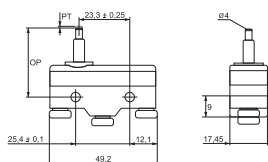
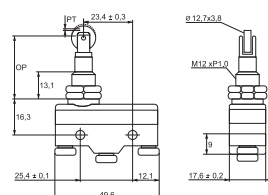
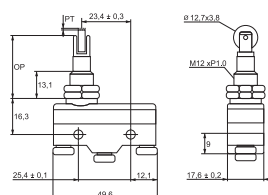
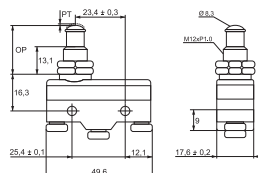
- EN 60947-1; EN 60947-5-1
- Dielectric Strength: 1000V AC
 - Rated current: 15A active; 5A inductive
 - Insulation Resistance: 100mΩ min. (at 500VDC)
 - Contact Resistance: 5mΩ
 - Electrical Life (No. of cycles): 500 000 with non-inductive load

- Mechanical Life (No. of cycles): 5 000 000
- Operating frequency: 20 electrical operations/minute
- Operating speed: 0.1mm/s to 1.0m/s
- Rated voltage: 230V
- IP code: IP40
- Fastening strength of terminals: 6-8kgf/cm

Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Packing/ Box (pcs)	Product category	Catalogue number
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CM -1307	Metal cylinder	350	114	0.4mm	5.5mm	1 / 480 B		468105
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CM -1309	Cylinder and transverse metal roll	350	114	0.4mm	5.5mm	1 / 480 B		468106
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CM -1308	Cylinder longitudinal metal roll	350	114	0.4mm	5.5mm	1 / 480 B		468109
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CM -1305	Metal cylinder	350	114	0.4mm	1.6mm	1 / 480 B		468110
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CM -1703	Extended metal roll	160	22	7.1mm	1.02mm	1 / 480 B		468113
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CM -1705	Spring lever	10	3	20mm	5.6mm	1 / 480 B		468117
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In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

ALL-PURPOSE LIMIT SWITCH – SERIES TZ-8XXX

3+0
standard
+extended

3

**YEAR TOTAL
WARRANTY**

The all-purpose limit switches are devices used for setting gearing limits. They are mounted on transport lines, conveyors and other linear progressive motion machines. They have small dimensions and a vibration-resistant metal shell with plastic lid, resistant to oil and water.

PRODUCT CONFORMITY DOCUMENTATION:

- PRODUCT CONFORMITY DOCUMENTATION:**
- Standard: EN 60947-1; EN 60947-5-1
 - Dielectric strength: 1000V AC
 - Rated current: 5A active; 3A inductive
 - Insulating resistance: 100MΩ
 - Contact Resistance: 25mΩ
 - Electrical endurance (number of cycles): 500 000 with active load
 - Mechanical endurance (number of cycles): 5 000 000
 - Gearing speed: 5mm/s to 0.5 m/s
 - Rated voltage: 230V
 - IP code: IP65
 - Cable input: cable gland PG11
 - Section of power supply conductor: up to 2mm
 - Fastening strength of terminals: 6-8kgf/cm

Type of contact system	Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Packing/Box (pcs)	Product category	Catalogue number
NO (4) (3) NO NC (1) (2) NC									
	TZ -8104	lever with metal roll	750	100	20°	50°	10 / 100	B	468104
	TZ -8108	adjustable lever with metal roll	750	100	20°	50°	10 / 100	B	468108
	TZ -8112	cylinder with metal roll	900	150	1.5mm	4.0mm	10 / 100	B	468112
	TZ -8111	metal cylinder	900	150	1.5mm	4.0mm	10 / 100	B	468111
	TZ -8107	metal rod	750	100	20°	50°	10 / 100	B	468107
	TZ -8167	spring lever	150	-	30mm	-	10 / 100	B	468167



ALL-PURPOSE LIMIT SWITCH – SERIES CWL-XXX

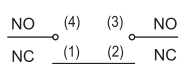
3+0
 standard
 +extended
3 YEAR TOTAL
 WARRANTY

The all-purpose limit switches are devices used for setting gearing limits. They are mounted on transport lines, conveyors and other linear progressive motion machines. They have aluminium shell of high mechanic strength and resistance to oil, water and pressure.

PRODUCT CONFORMITY DOCUMENTATION:

- Standard: EN 60947-1; EN 60947-5-1
- Dielectric strength: 1000V AC
- Rated current: 10A active; 3A inductive
- Insulating resistance: 100mΩ
- Contact resistance: 15mΩ
- Electrical endurance (number of cycles): 500 000 with active load
- Mechanical endurance (number of cycles): 10 000 000
- Gearing speed: 1mm/s to 2 m/s
- Rated voltage: 230V
- IP code: IP66
- Cable input: cable gland
- Metal shell
- Vibration-resistant

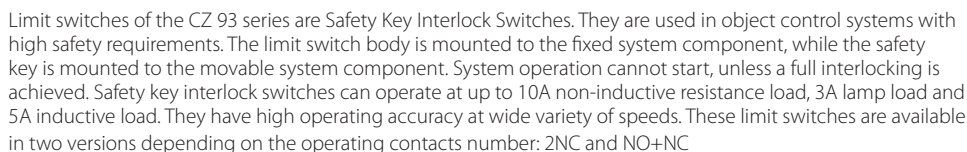
Type of contact system



Type	Type of the head	Power of starting (g)	Power of release (g)	Switching position	General movement	Packing/ Box (pcs)	Product category	Catalogue number
CWLD	metal cylinder	2720	910	2.0mm	6.4mm	1 / 50	B	46LD
CWLD2	cylinder with metal roll	2720	910	2.0mm	5.6mm	1 / 50	B	46LD2
CWLCA2-2	lever with metal roll	1360	227	20°	50°	1 / 50	B	46LCA2-2
CWLCA12-2-Q	adjustable lever with metal roll	2720	910	20°	50°	1 / 50	B	46LCA12-2-Q
CWCA32-41	fork	1200	-	55°	90±10°	1 / 50	B	46LCA32-41
CWLNJ	oil-resistant spring lever	150	-	28mm	90±10°	1 / 50	B	46LNJ
	metal rod	142	28	20°	50°	1 / 50	B	46LCL



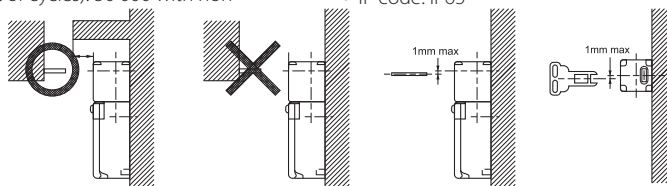
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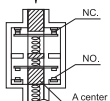
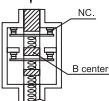
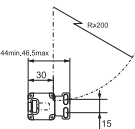
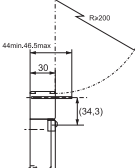
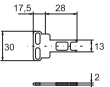
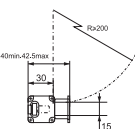
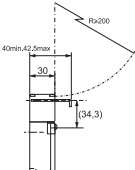
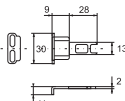


EN 60947-1; EN 60947-5-1

- Dielectric Strength: 2500V AC
- Rated current: 10A active; 3A inductive
- Insulation Resistance: 100mΩ min. (at 500VDC)
- Contact Resistance: 25mΩ
- Electrical Life (No. of cycles): 50 000 with non-

- inductive load
- Mechanical Life (No. of cycles): 2 000 000
- Operating frequency: 30 electrical operations/minute
- Operating speed: 0.1mm/s to 0.5m/s
- Rated voltage: 230V
- IP code: IP65



	Type	Key type	Power of starting (g)	Power of release (g)	Switching position	General movement	Packing/ Box (pcs)	Product category	Catalogue number
 	CZ-93BPG01	CZ93-K1	147N	29.4N	6 mm	28mm	10 / 100	B	46CZ08
 	CZ-93CPG01	CZ93-K1	147N	29.4N	6 mm	28mm	10 / 100	B	46CZ09
	CZ-93BPG02	CZ93-K2	147N	29.4N	6 mm	28mm	10 / 100	B	46CZ10
 	CZ-93CPG02	CZ93-K2	147N	29.4N	6 mm	28mm	10 / 100	B	46CZ11
	CZ-93BPG03	CZ93-K3	147N	29.4N	6 mm	28mm	10 / 100	B	46CZ12
	CZ-93CPG03	CZ93-K3	147N	29.4N	6 mm	28mm	10 / 100	B	46CZ13



Type	Key Actuating	Packing / Box (pcs)	Product category	Catalogue number
CZ 93 - K 1	Horizontal	1 / 100	B	46CZ931
CZ 93 - K 2	Vertical	1 / 100	B	46CZ932
CZ 93 - K 3	Adjustable	1 / 100	B	46CZ933



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

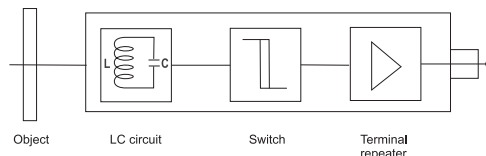
ALL-PURPOSE PROXIMITY SWITCH – SERIES LM XX

3+0
 standard
 +extended
3 YEAR TOTAL
 WARRANTY

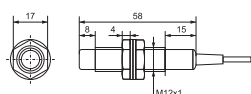
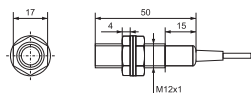
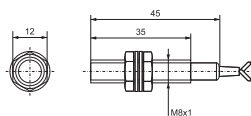

EL-LM8

Proximity induction sensors are all-purpose switches used in machine systems and equipment for no contact surveillance of metal elements motion. They can also be used in other machine systems applications as no contact control sensors for level of liquids, control sensors for the speed and position of rotating chains, etc. They are developed on the base of PNP and NPN transition. They have small dimensions and feature a metal cylindrical shell resistant to vibrations and a plastic lid which is oil and water resistant.

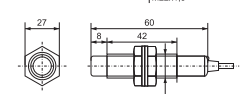
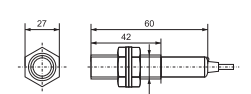
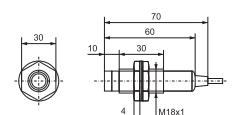
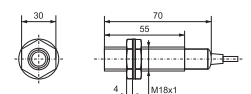
- Insulating resistance: $\geq 50 \text{ M } \Omega$
- Gearing distance: from 2 mm to 7 mm
- Precision of repetition: 0.01
- Ambient temperature: -25°C to $+65^{\circ}\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 67



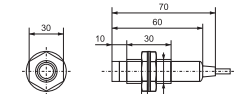
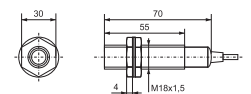
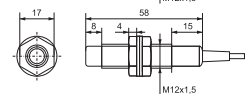
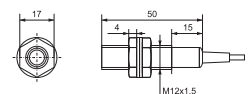
EL-LM12



EL-LM18



EL-LM22



Type	Start distance (mm)	Power supply voltage	Type of transition	Type of contact	Output load	Packing / Box (pcs)	Product category number	Catalogue number
EL-LM8-3002NA	2	15~30 VDC	NPN	NO	130 mA	2 / 200 B	46LM 8-32NA	
EL-LM8-3002NB	2	15~30 VDC	NPN	NC	130 mA	2 / 200 B	46LM 8-32NB	
EL-LM8-3002PA	2	15~30 VDC	PNP	NO	130 mA	2 / 200 B	46LM 8-32PA	
EL-LM8-3002PB	2	15~30 VDC	PNP	NC	130 mA	2 / 200 B	46LM 8-32PB	
EL-LM8-2002A	2	90~230VAC	SCR	NO	150 mA	2 / 200 B	46LM 8-22A	
EL-LM12-3004NA	4	15~30 VDC	NPN	NO	200 mA	2 / 200 B	46LM 12-34NA	
EL-LM12-3004NB	4	15~30 VDC	NPN	NC	200 mA	2 / 200 B	46LM 12-34NB	
EL-LM12-3004PA	4	15~30 VDC	PNP	NO	200 mA	2 / 200 B	46LM 12-34PA	
EL-LM12-3004PB	4	15~30 VDC	PNP	NC	200 mA	2 / 200 B	46LM 12-34PB	
EL-LM12-2004A	4	90~230VAC	SCR	NO	300 mA	2 / 200 B	46LM 12-24A	
EL-LM18-3008NA	8	15~30 VDC	NPN	NO	200 mA	1 / 100 B	46LM 18-38NA	
EL-LM18-3008NB	8	15~30 VDC	NPN	NC	200 mA	1 / 100 B	46LM 18-38NB	
EL-LM18-3008PA	8	15~30 VDC	PNP	NO	200 mA	1 / 100 B	46LM 18-38PA	
EL-LM18-3008PB	8	15~30 VDC	PNP	NC	200 mA	1 / 100 B	46LM 18-38PB	
EL-LM18-2008A	8	90~230VAC	SCR	NO	300 mA	1 / 100 B	46LM 18-28A	
EL-LM22-3010NA	10	15~30 VDC	NPN	NO	200 mA	1 / 100 B	46LM 22-30NA	
EL-LM22-3010NB	10	15~30 VDC	NPN	NC	200 mA	1 / 100 B	46LM 22-30NB	
EL-LM22-3010PA	10	15~30 VDC	PNP	NO	200 mA	1 / 100 B	46LM 22-30PA	
EL-LM22-3010PB	10	15~30 VDC	PNP	NC	200 mA	1 / 100 B	46LM 22-30PB	
EL-LM22-2010A	10	90~230VAC	SCR	NO	300 mA	1 / 100 B	46LM 22-20A	
EL-LM12-4002A	2	230VAC	inductive	NO	100 mA	2 / 200 B	46LM 12-44A	
EL-LM12-4004A	4	230VAC	inductive	NO	300 mA	2 / 200 B	46LM 12-46A	
EL-LM18-4006A	5	230VAC	inductive	NO	100 mA	1 / 100 B	46LM 18-44A	
EL-LM18-4008A	8	230VAC	inductive	NO	300 mA	1 / 100 B	46LM 18-48A	



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CAPACITIVE SENSORS – SERIES CM XX

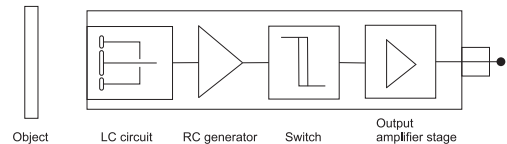
3+0
standard
+extended
3 YEAR TOTAL
WARRANTY



EL-CM12

Capacitive sensors are used in machine systems and equipment for no-contact motion surveillance. They consist of two coaxial electrodes, a condenser and RC generator. This type of sensors reacts to both metal and non-metal objects, as the gearing distance for non-metal objects depends on their dielectric constants. They allow gearing distance adjustment for non-magnetic conductive materials. They are developed on the base of PNP and NPN transition. They have small dimensions and feature a metal cylindrical shell resistant to vibrations and a plastic lid which is oil and water resistant.

- Insulating resistance: $\geq 50 \text{ M}\Omega$
- Gearing distance: from 2 mm to 15 mm
- Precision of repetition: 0.01
- Ambient temperature: -25°C to $+65^\circ\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 54



EL-CM18






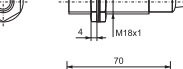















EL-CM24



EL-SM12



EL-XM24

	Type	Start distance voltage (mm)	Power supply voltage	Type of transition	Type of Output contact load	Packing / Box (pcs)	Product category	Catalogue number
	EL-CM12-3004NA 0~4	15~30 VDC	NPN	NO	200 mA 1/100 B			46CM 12-32NA
	EL-CM12-3004NB 0~4	15~30 VDC	NPN	NC	200 mA 1/100 B			46CM 12-32NB
	EL-CM12-3004PA 0~4	15~30 VDC	PNP	NO	200 mA 1/100 B			46CM 12-32PA
	EL-CM12-3004PB 0~4	15~30 VDC	PNP	NC	200 mA 1/100 B			46CM 12-32PB
	EL-CM18-3008NA 0~8	15~30 VDC	NPN	NO	200 mA 1/100 B			46CM 18-38NA
	EL-CM18-3008NB 0~8	15~30 VDC	NPN	NC	200 mA 1/100 B			46CM 18-38NB
	EL-CM18-3008PA 0~8	15~30 VDC	PNP	NO	200 mA 1/100 B			46CM 18-38PA
	EL-CM18-3008PB 0~8	15~30 VDC	PNP	NC	200 mA 1/100 B			46CM 18-38PB
	EL-CM18-2008A 0~8	90~230VAC	SCR	NO	300 mA 1/100 B			46CM 18-28A
	EL-CM24-3012NA 8	15~30 VDC	NPN	NO	200 mA 1/100 B			46CM 24-12NA
	EL-CM24-3012NB 8	15~30 VDC	NPN	NC	200 mA 1/100 B			46CM 24-12NB
	EL-CM24-3012PA 8	15~30 VDC	PNP	NO	200 mA 1/100 B			46CM 24-12PA
	EL-CM24-3012PB 8	15~30 VDC	PNP	NC	200 mA 1/100 B			46CM 24-12PB
	EL-CM24-2012A 8	90~230VAC	SCR	NO	300 mA 1/100 B			46CM 24-12A
	EL-SM12-3110NA 10	15~30 VDC	NPN	NO	200 mA 2/200 B			46SM 12-31NA
	EL-SM12-3110NB 10	15~30 VDC	NPN	NC	200 mA 2/200 B			46SM 12-31NB
	EL-SM18-3110PA 10	15~30 VDC	PNP	NO	200 mA 1/100 B			46SM 18-31PA
	EL-SM18-3110PB 10	15~30 VDC	PNP	NC	200 mA 1/100 B			46SM 18-31PB
	EL-XM18-305PMI 5	15~30 VDC	inductive	NO	100 mA 1/100 B			46XM 18-35A
	EL-XM18-305PMU 5	15~30 VDC	inductive	NC	100 mA 1/100 B			46XM 18-35B

Note: Sensor of Hall

EL-XM24-308PMI 8 15~30 VDC inductive NO 300 mA 1/100 B **46XM 24-38A**

EL-XM24-308PMU 8 15~30 VDC inductive NC 300 mA 1/100 B **46XM 24-38B**

Note: MI - current type; MU - voltage type



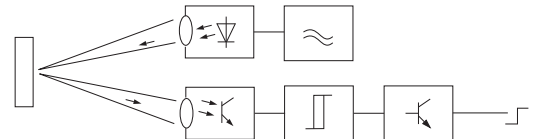
In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

PHOTOELECTRICAL SENSOR

Photoelectrical sensors of the Gxx series are all-purpose switches used in machine systems and equipment for no contact surveillance of motion of elements. They are based on the photoelectric principle of operation – inside the sensor there is a photo signal emitter and receiver of the returned signal. There are three types of sensors: diffuse sensors, reflector sensors and emitter-receiver sensors. These types of sensors differ in the way of returning the signal. They allow for gearing distance adjustment. They are developed on the base of PNP and NPN transition. They have small dimensions and feature a metal cylindrical shell resistant to vibrations and a plastic lid which is oil and water resistant.

TECHNICAL FEATURES:

- Power supply voltage: 15~30 VDC
- Insulating resistance: $\geq 50 \text{ M}\Omega$
- Gearing distance: from 2 mm to 7 mm
- Precision of repetition: 0.01
- Ambient temperature: -25°C to $+65^{\circ}\text{C}$
- Gearing speed: 5mm/s
- Rated voltage: 6~36VDC; 90~230VAC
- IP code: IP 67



Type	Start distance	Type of transition	Type of contact	Type of sensor	Packing / Box (pcs)	Product category	Catalogue number
EL-G12-3A07NA	70 mm	NPN	$\varnothing 12; l=50$	Diffuse	1 / 100	B	46G12A071
EL-G12-3A07PA	70 mm	PNP	$\varnothing 12; l=50$	Diffuse	1 / 100	B	46G12A072
EL-G12-3C3NA	3 m	NPN	$\varnothing 12; l=50$	Truth beam	1 / 100	B	46G123C11
EL-G12-3C3PA	3 m	PNP	$\varnothing 12; l=50$	Truth beam	1 / 100	B	46G123C12
EL-G18-3A10NA	100 mm	NPN	$\varnothing 18; l=70$	Diffuse	1 / 100	B	46G18A101
EL-G18-3A10PA	100 mm	PNP	$\varnothing 18; l=70$	Diffuse	1 / 100	B	46G18A102
EL-G18-3B2NA	2 m	NPN	$\varnothing 18; l=70$	Reflector	1 / 100	B	46G183B11
EL-G18-3B2PA	2 m	PNP	$\varnothing 18; l=70$	Reflector	1 / 100	B	46G183B12
EL-G18-3C5NA	5 m	NPN	$\varnothing 18; l=70$	Truth beam	1 / 100	B	46G185C11
EL-G18-3C5PA	5 m	PNP	$\varnothing 18; l=70$	Truth beam	1 / 100	B	46G185C12
EL-G30-3A70NA	500 mm	NPN	$\varnothing 22; l=70$	Diffuse	1 / 100	B	46G30A101
EL-G30-3A70PA	500 mm	PNP	$\varnothing 22; l=70$	Diffuse	1 / 100	B	46G30A102
EL-G30-3B3NA	3 m	NPN	$\varnothing 22; l=70$	Reflector	1 / 100	B	46G303B11
EL-G30-3B3PA	3 m	PNP	$\varnothing 22; l=70$	Reflector	1 / 100	B	46G303B12
EL-G30-3C101NA	10 m	NPN	$\varnothing 22; l=70$	Truth beam	1 / 52	B	46G305C11
EL-G30-3C101PA	10 m	PNP	$\varnothing 22; l=70$	Truth beam	1 / 52	B	46G305C12
EL-G35-3A50NA	500 mm	NPN	NO	Diffuse	1 / 100	B	46G35A101
EL-G35-3A50PA	500 mm	PNP	NO	Diffuse	1 / 100	B	46G35A102
EL-G35-3B3NA	3 m	NPN	NO	Reflector	1 / 100	B	46G353B11
EL-G35-3B3PA	3 m	PNP	NO	Reflector	1 / 100	B	46G353B12
EL-G35-3C5NA	5 m	NPN	NO	Truth beam	1 / 50	B	46G355C11
EL-G35-3C5PA	5 m	PNP	NO	Truth beam	1 / 50	B	46G355C12
EL-G50-3A30NA	500 mm	NPN	NO	Diffuse	1 / 100	B	46G50A101
EL-G50-3A30PA	500 mm	PNP	NO	Diffuse	1 / 100	B	46G50A102
EL-G50-3B4NA	4 m	NPN	NO	Reflector	1 / 100	B	46G503B11
EL-G50-3B4PA	4 m	PNP	NO	Reflector	1 / 100	B	46G503B12
EL-G50-3C5NA	5 m	NPN	NO	Truth beam	1 / 50	B	46G505C11
EL-G50-3C5PA	5 m	PNP	NO	Truth beam	1 / 50	B	46G505C12
EL-BZJ-211	10 mm	Reflector	NO	Colour detector	1 / 50	B	46BZJ211
EL-BZJ-311	9mm	Reflector	NO	Colour detector	1 / 50	B	46BZJ311
EL-BZJ-411	9mm	Reflector	NO	Colour detector	1 / 50	B	46BZJ411

EL-G12

EL-G18

EL-G30

EL-G35

EL-G50

EL-BZJ

POWER SUPPLIES

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

The DRP-xx-xx series of power supplies are voltage reduction and rectification units ideally suited to provide stable power supply of systems and equipment for contact-free movement monitoring elements (such as inductive, capacity and photo sensors, logic elements and systems, etc.). They have small overall dimensions and can be installed on a DIN rail. The power units have metal or plastic cases resistant to vibrations and plastic oil- and waterproof covers. They are able to provide stable output voltage at comparatively fluctuating input voltage. Devices have built-in overload and short circuit protection, allowing short time overload of up to 130%. Power supplies are available with various output voltages (5, 12, 15 and 24 V DC) and different output power rates.

TECHNICAL SPECIFICATIONS:

- Input voltage: 80 ~ 230V AC
- Over-voltage: 115 ~ 135% of the rated output voltage
- Overload: 120 ~ 120% of the rated output power
- Terminals: Input – 2 screw terminals; Output: 4 screw terminals;
- IP code: IP44
- Power indicator
- Installation: DIN rail
- Cooling: Free air cooling convection

Type	Output Voltage (V)	Output Load (A)	Tolerance	Power (W)	Dimensions W/H/L (mm)	Packing / Box (pcs)	Product category	Catalogue number
DR - 45 - 5	5	5	±2%	25	78 / 93 / 56	1 / 50	C	46DR455
DR - 45 - 12	12	3.5	±1%	42	78 / 93 / 56	1 / 50	C	46DR4512
DR - 45 - 15	15	2.8	±1%	42	78 / 93 / 56	1 / 45	C	46DR4515
DR - 45 - 24	24	2	±1%	48	78 / 93 / 56	1 / 16	C	46DR4524

Type	Output Voltage (V)	Output Load (A)	Tolerance	Power (W)	Dimensions W/H/L (mm)	Packing / Box (pcs)	Packing / Box (pcs)	Catalogue number
DR - 75 - 12	12	6.3	±2%	75	55.5 / 125.3 / 100	1 / 18	C	46DR7512
DR - 75 - 24	24	3.2	±1%	75	55.5 / 125.3 / 100	1 / 18	C	46DR7524
DRP - 240 - 24	24	10	±1%	240	125.5 / 125.3 / 100	1 / 12	C	46DR2424



FLOAT SWITCHES

3+0
 standard
 +extended **3** YEAR TOTAL
 WARRANTY


Float switches of the type QW-xx-xx are sealed units for direct pump control. They are intended for continuous liquid level maintenance in pools, tanks or ponds exercised through direct control of the pumping in or out process in the respective reservoir. They are pre-wired and depending on the chosen configuration can control either the pumping in, or pumping out of the reservoir. They allow direct control of single phase pumps with mounted power of 1 kW. Float switches are waterproof.

The automatic level control units of the DHC1Y-xx series are intended for mounting on pumping control panels. They do not use any additional sensors, but conductive probes to contact the liquid. The unit sends low (harmless) voltage signals to the probes and once a contact between a probe and liquid is established, the unit changes its contactors' state. Units are available in three variants with different number of control contacts suitable for different applications. Each contact can transfer current of up to 5A, which is enough to ensure control over the powerful pumps' contactors or to directly control pumps with mounted power of 1 kW. The automatic level control units can be installed on a DIN rail.

Type	Number of probes (No. of levels)	Output Load (A)	Accuracy	Operating Voltage (V)	Note	Packing / Box (pcs)	Product category	Catalogue number
DHC1Y - S	1	5	±1%	230	-	100	B	46DW001
DHC1Y - SD	3	5	±1%	230	-	100	B	46DW002
DHC1Y - T	1	5	±1%	230	2 pumps control	100	B	46DW003

Type	Number of probes (No. of levels)	Output Load (A)	Accuracy	Operating Voltage (V)	Note	Packing / Box (pcs)	Product category	Catalogue number
QW - M 15 - 3	2	6	±1%	230	-	1 / 30	B	46DW004
QW - 70AB	2	4	±1%	230	-	1 / 20	B	46DW005



QW - 70AB



QW - M 15 - 3

Documents corresponding to the product: Standard: EN 60947-1; EN 60947-3-1

ROTARY SWITCHES LW26 SERIES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY



The rotary switches LW26 series are produced for switching on/off electrical circuits with commutated current from 20 to 160A. They are designed on the bases of the rotor-eccentric switching on which is realized through turning of the handle to 60 or 90 degrees. The normal operation is used for commutation of two, three or four conductor systems. There are special rotary switches that switch on under given connection schemes and are used to control motors, electric welding machines and other consumers.

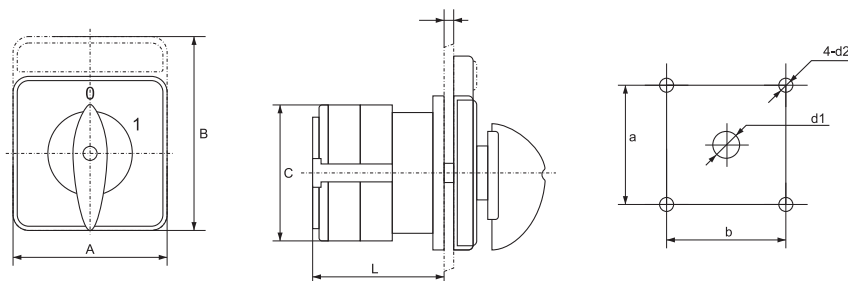
TECHNICAL DATA:

- Power supply voltage: 230/400V; 50Hz
- Insulation voltage: 690V
- Impulse voltage wear resistance: 6000V
- Mechanical wear resistance: 3x10⁵ commutation cycles
- Operating temperature: -10 ÷ +65°C
- Humidity: 35 – 85% RH
- Commuting capacity: up to 160A according to the tables
- Plastic: UV rays wear resistance
- IP code:

- IP42 for the ordinary breakers mounted in a panel
- IP65 for the breakers offered in a box
- Cable connection: screw joining
- Tightening moment of the bolt: 1.33N
- Maximum section of the power supply conductors: according to the dimensions table
- Weight: according to the number of the contacts

MOUNTING:

- directly to the control panel
- thickness of the surface to which it is mounted: max 5mm



Type	Front panel	Joining conductor (mm ²)	Overall dimensions (mm)				Mounting dimensions (mm)			
			A	B	C	L	a	b	d1	d2
LW26-20	M1 panel	1x2.5	48	48	43	22 + 9.6n	36	36	Ø8.5	Ø4.5
	M1 panel with inscription field		48	60	43	22 + 9.6n	36	36	Ø8.5	Ø4.5
LW26-25	M1 panel	1x4.0	48	48	45.2	23+12.8n	36	36	Ø8.5	Ø4.5
LW26-32	M2 panel	1x6.0	64	64	58	29.2 + 12.8n	48	48	Ø10	Ø4.5
LW26-63	M2 panel	1x16	64	64	66	29.2 + 21.5n	48	48	Ø10	Ø4.5
LW26-125	M3 panel	1x35	88	88	84	35 + 26.5n	68	68	Ø13	Ø6
LW26-160	M3 panel	1x50	88	88	88	35 + 32.5n	68	68	Ø13	Ø6

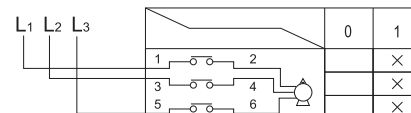
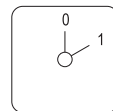
* n - number of modules

Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 10Q	Q10 three-poles switching on; motor starting and stopping; voltage turning on/off to the consumers	10	2	1 / 100	B	492101
LW26 - 16Q		16	2	1 / 100	B	492161
LW26 - 20Q		20	2	1 / 100	B	492201
LW26 - 25Q		25	2	1 / 100	B	492251
LW26 - 32Q		32	2	1 / 72	B	492321
LW26 - 63Q		63	2	1 / 30	B	492631
LW26 - 125Q		125	2	1 / 24	B	492951
LW26 - 160Q		160	2	1 / 27	B	492961

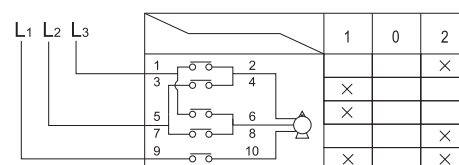
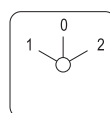




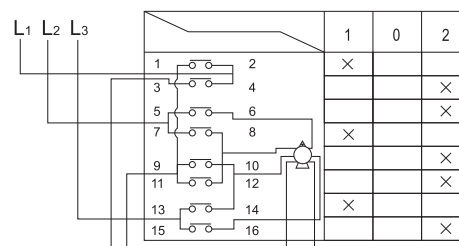
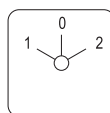
Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26GS - 20/04	Q11 three-poles switching over; motor starting and stopping; voltage turning on/off to the consumers; possibility for access control	20	2	1 / 100	B	492207
LW26GS - 25/04		25	2	1 / 100	B	492257
LW26GS - 32/04		32	2	1 / 72	B	492327
LW26GS - 63/04		63	2	1 / 30	B	492637



Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 20N	N11 3-position – 2 start positions and 1 stop; for motor reversing	20	3	1 / 100	B	492202
LW26 - 25N		25	3	1 / 100	B	492252
LW26 - 32N		32	3	1 / 64	B	492322
LW26 - 63N		63	3	1 / 48	B	492632
LW26 - 125N		125	3	1 / 24	B	492952
LW26 - 160N		160	3	1 / 18	B	492962



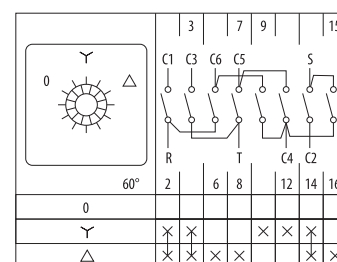
Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 25S	S19 3-position – 2 start positions and 1 stop; for two speed motor control; switching over between charging*	25	4	1 / 100	B	492253
LW26 - 63S		63	4	1 / 30	B	492633
LW26 - 125S		125	4	1 / 24	B	492953
LW26 - 160S		160	4	1 / 18	B	492963



Note: It is necessary that additional bridges be placed at switching over between charging

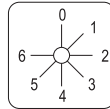


Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 25 SD	S21	25	4	1 / 100	B	492025
LW26 - 63 SD	3-position switching on star/delta	63	4	1 / 30	B	492063





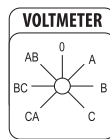
Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 32H 5881/3	H5881/3 – 85	32	3	1 / 64	B	492324
LW26 - 63H 5881/3	for welding transformer windings switching over	63	3	1 / 48	B	492634



	0	1	2	3	4	5	6
1		×					
2			×				
3				×			
4					×		
5						×	
6							×
7							
8							
9							
10							
11							
12							



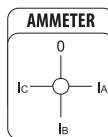
Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 20 YH5/3	YH5/3 - 66 for voltage switching over	20	3	1 / 72	B	492205



	CA	BC	AB	0	A	B	C
1		×					×
2			×				
3				×			
4					×		
5						×	
6							×
7							
8							
9							
10							
11							
12							



Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 20 LH3/3	LH3/3 - 58 for amperemeter switching on to current transformers	20	3	1 / 100	B	492206



	0	I _a	I _b	I _c	
1	×	×	×	×	×
2		×	×	×	×
3		×	×	×	×
4		×	×	×	×
5		×	×	×	×
6		×	×	×	×
7		×	×	×	×
8		×	×	×	×
9		×	×	×	×
10		×	×	×	×
11		×	×	×	×
12		×	×	×	×

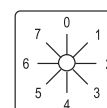


Type	Scheme	IP code:	Packing / Box (pcs)	Product category	Catalogue number
LW26 - 20-25-Q	Box for LW26-20/25	IP 42	1 / 68	B	492037
LW26 - 32-Q	Box for LW26-32	IP 42	1 / 30	B	492038
LW26 - 20-25-DIN	Adaptor for DIN-rail for LW26-20/25		15 / 1500	B	492039





Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 4.I7168/7	4.I7168/7	20	7	1 / 100	B	492028

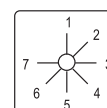


4.I7168/7

	0	1	2	3	4	5	6	7
1								X
3				X				
5				X				
7								X
9			X					
11								X
13					X			
15			X					
17								X
19				X				
21			X					
23						X		
25			X	X	X			X
27								X



Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW26 4.H6518/5	4.H6518/5	25	5	1 / 100	B	492029



4.H6518/5

	1	2	3	4	5	6	7
1				X	X		
3							
5					X	X	
7			X	X			
9							X
11							X
13							X
15			X	X			
17							X
19			X	X			

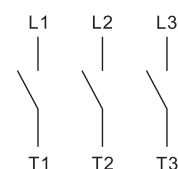


Type	Scheme	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW30-20	LW30-20	20	3	1 / 32	B	492030
LW30-32	LW30-32	32	3	1 / 32	B	492031
LW30-40	LW30-40	40	3	1 / 32	B	492033
LW30-63	LW30-63	63	3	1 / 32	B	492034



* Possibility for access control

LW30-20-100A
ON/OFF switch 3 poles

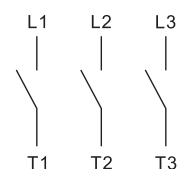


Type	Scheme	IP code	In (A)	Levels	Packing / Box (pcs)	Product category	Catalogue number
LW30-32	LW30-32	IP54	32	3	1 / 30	B	492032



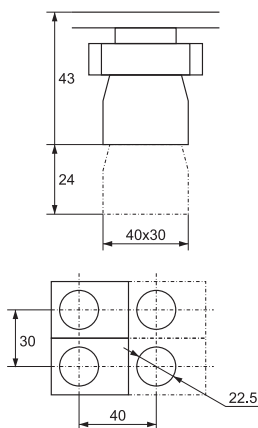
* Possibility for access control

LW30-20-100A
ON/OFF switch 3 poles



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product: Standard: EN 60947-1; EN 60947-5-1



Overall dimensions
Diagram for drill the openings



BUTTONS AND LED INDICATORS

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

These are devices used in control and indication systems, command boards and panels in industrial automation systems. They are manufactured to commute controlling circuits and to control the switching on or off executive mechanisms such as relays, contactors, etc. The signal lamps and indicators find broad application in all industrial fields. The devices endure short time current overload up to 10A, and normally they can commute thermal current up to 6A in their contact system. The connection to the contact terminals is through screw terminals to which operational conductors with section up to 2.5mm² can be joined.

DOCUMENTATION CORRESPONDING TO THE PRODUCT:

- Standard: EN 60947-1; EN 60947-5-1

TECHNICAL DATA:

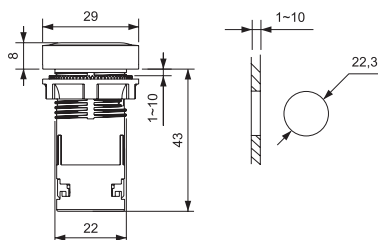
- Insulation voltage: 660V; 50/60Hz
- Impulse voltage wear resistance: 6000V;
- Rated current: 6A (230V AC); 0.3A (230V DC)
- Short circuit protection: safety device 10A gG outside in the circuit
- Mechanical wear resistance: 1x10⁶ commutation cycles
- Power of mechanical compression:

- at closing: 20N
- at opening: 8N
- Operating temperature: -20 - +65°C
- Humidity: 35 - 85%RH
- Tightening moment of the joining conductors: 0.15Nm
- Section of the conductor: 1x0.5; 1x0.75; 1x1; 1x1.5; 1x2.5mm²

MOUNTING:

- to a flat metal or plastic surface with thickness: max 4mm
- opening with size: Ø 22.5mm

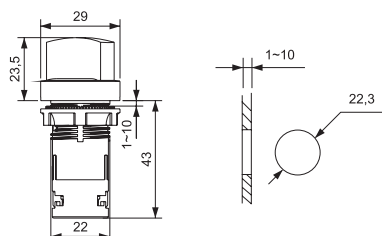
Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
EL-EA25	Button round with spring reverse	NO+NC	6	black	10/500	B	401025
EL-EA31		NO	6	green	10/500	B	401030
EL-EA42		NC	6	red	10/500	B	401040



Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
EL-EA25	Button round with spring reverse and silicon lid- IP44	NO+NC	6	black	10/500	B	401026
EL-EA31		NO	6	green	10/500	B	401033
EL-EA42		NC	6	red	10/500	B	401041



Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
EL-ED25	Switch with arrest	NO+NC	6	black	10/500	B	401425

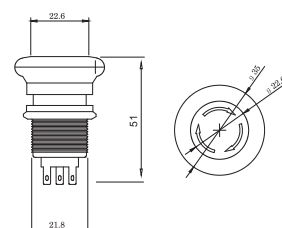


In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



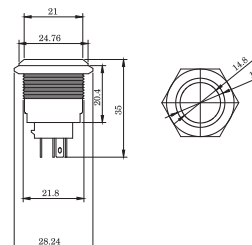
Type	Description	Type of contacts	Rated current (A) at 230V	Colour	Diameter (mm)	Note	Packing / Box (pcs)	Product category	Catalogue number
EL-2211T	Button with head "mushroom" type	1NO+1NC	5	red	22	release with spinning	20/800	B	401546

Material: Stainless steel | Chromium plated brass | IP65



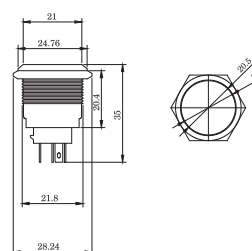
Type	Description	Type of contacts	Rated current (A) at 230V	Colour	Diameter (mm)	Packing / Box (pcs)	Product category	Catalogue number
EL-2211DZR	Button round with LED indicator-latching	1NO+1NC	5	red	22	20/800	B	401547
EL-2211DZG	Button round with LED indicator-latching	1NO+1NC	5	green	22	20/800	B	401548

Material: Stainless steel | Chromium plated brass | IP65



Type	Description	Type of contacts	Rated current (A) at 230V	Diameter (mm)	Packing / Box (pcs)	Product category	Catalogue number
EL-2211F	Button round momentary	1NO+1NC	5	22	20/800	B	401549

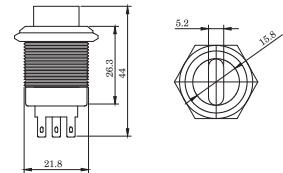
Material: Stainless steel | Chromium plated brass | IP65





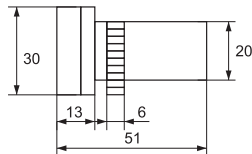
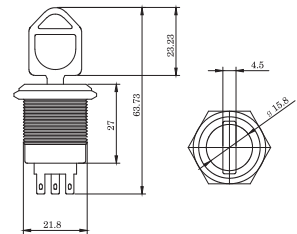
Type	Description	Type of contacts	Rated current (A) at 230V	Colour	Diameter (mm)	Note	Packing / Box (pcs)	Product category	Catalogue number
EL-22X2	Two position Switch with arrest	1NO+1NC	5	red	22	release with spinning	20/800	B	401550

Material: Stainless steel | Chromium plated brass | IP65



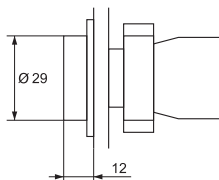
Type	Description	Type of contacts	Rated current (A) at 230V	Colour	Diameter (mm)	Packing / Box (pcs)	Product category	Catalogue number
EL-22Y2	Two position Key Switch with arrest	1NO+1NC	5	red	22	20/800	B	401551
EL-22Y3	Three position Key Switch with arrest	2NO+2NC	5	green	22	20/800	B	401552

Material: Stainless steel | Chromium plated brass | IP65

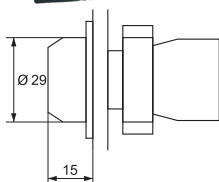


Type	Description	Voltage (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
AD56-22-W-230	LED indicators	230V AC	white	10 / 500	B	401123
AD56-22-W-110		110V AC	white	10 / 500	B	401111
AD56-22-W-24		24V AC/DC	white	10 / 500	B	401124
AD56-22-A-110		110V AC	amber	10 / 500	B	401211
AD56-22-A-24		24V AC/DC	amber	10 / 500	B	401224
AD56-22-A-230		230V AC	amber	10 / 500	B	401223
AD56-22-PG-230		230V AC	green	10 / 500	B	401323
AD56-22-PG-110		110V AC	green	10 / 500	B	401311
AD56-22-PG-24		24V AC/DC	green	10 / 500	B	401324
AD56-22-B-230		230V AC	blue	10 / 500	B	401523
AD56-22-B-110		110V AC	blue	10 / 500	B	401511
AD56-22-B-24		24V AC/DC	blue	10 / 500	B	401524
AD56-22-Y-230		230V AC	yellow	10 / 500	B	401723
AD56-22-Y-110		110V AC	yellow	10 / 500	B	401711
AD56-22-Y-24		24V AC/DC	yellow	10 / 500	B	401724
AD56-22-R-230		230V AC	red	10 / 500	B	401423
AD56-22-R-110		110V AC	red	10 / 500	B	401411
AD56-22-R-24		24V AC/DC	red	10 / 500	B	401424





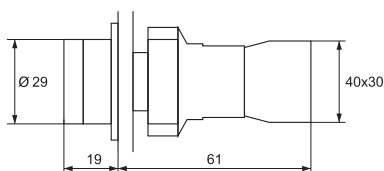
Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BA 21	Button round with spring reverse	NO	6	black	20 / 300	B	401021
EL 2- BA 31		NO	6	green	20 / 300	B	401031
EL 2- BA 51		NO	6	yellow	20 / 300	B	401051
EL 2- BA 61		NO	6	blue	20 / 300	B	401061
EL 2- BA 42		NC	6	red	20 / 300	B	401042



Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Note	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BP 31	Button round with spring reverse	NO	6	green	IP=65 Provided from silicon lid	20 / 300	B	401032
EL 2- BP 42	Button round with spring reverse	NC	6	red	IP=65 Provided from silicon lid	20 / 300	B	401043

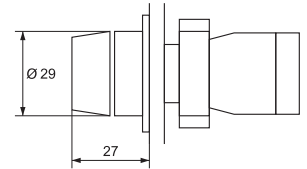


Type	Description	Voltage (V)	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BW3471	Button round with spring reverse and LED indicator	24V	6	red	20 / 200	B	401474
EL 2- BW3371		24V	6	green	20 / 200	B	401374
EL 2- BW3571		24V	6	yellow	20 / 200	B	401574
EL 2- BW3671		24V	6	blue	20 / 200	B	401674
EL 2- BW3471		110V	6	red	20 / 200	B	401473
EL 2- BW3371		110V	6	green	20 / 200	B	401373
EL 2- BW3571		110V	6	yellow	20 / 200	B	401573
EL 2- BW3671		110V	6	blue	20 / 200	B	401673
EL 2- BW3471		230V	6	red	20 / 200	B	401471
EL 2- BW3371		230V	6	green	20 / 200	B	401371
EL 2- BW3571		230V	6	yellow	20 / 200	B	401571
EL 2- BW3671		230V	6	blue	20 / 200	B	401671

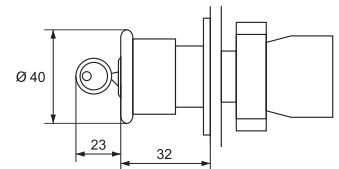




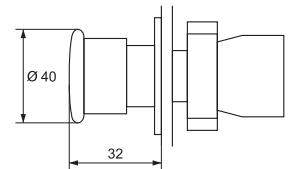
Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Note	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BD 21	Switch with arrest	1NO	6	black	two-position	20 / 200	B	401421
EL 2- BD 33		2NO	6	black	three-position	20 / 200	B	401433



Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Note	Packing / Box (pcs)	Product category	Catalogue number
EL2-BS 142	Button with head "mushroom" type and with key	NC	6	red	release with spinning	15/150	B	401142



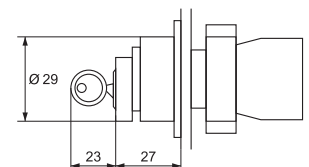
Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Note	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BC 42	Button with head "mushroom" type	1NC	6	red	spring reverse	15 / 150	B	401642



Type	Description	Type of contacts	Rated current (A) at 400V	Colour	Note	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BS 545	Button with head "mushroom" type	1NC + 1NO	6	red	release with spinning	15 / 150	B	401545

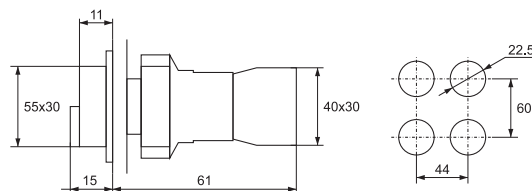


Type	Description	Type of contacts	Rated current (A) at 400V	Note	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BG 21	Change-over switch with switch	1NO	6	two-position with switch	20 / 200	B	401121





Type	Description	Type of contacts	Rated current (A) (V) at 400V	Voltage	Note	Packing / Box (pcs)	Product category	Catalogue number
EL 2- BW8475	Button double	1NO+1NC 6	24 AC	24 AC	Green and red button + LED indicator	20 / 200	B	401844
EL 2- BW8475	Button double	1NO+1NC 6	230 AC	230 AC	Green and red button+LED indicator	20/200	B	401845



Type	Description	Type of contacts	Colour	Packing / Box (pcs)	Product category	Catalogue number
EL02 - BE101	1	1 NO	green	100 / 1000	B	401001
EL02 - BE102	2	1 NC	red	100 / 1000	B	401002



Type	Description	Voltage (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
XB2-BV75	Signal lamp	230V AC	yellow	20 / 200	F	401975
XB2-BV76	Signal lamp	230V AC	blue	20 / 200	F	401976
XB2-BV77	Signal lamp	230V AC	colourless	20 / 200	F	401977



UNTIL SUPPLY
LAST



UNTIL SUPPLY
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Type	Description	Voltage (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
XB7-EV45	Button	230V AC	yellow	20 / 200	F	401004



UNTIL SUPPLY
LAST

Type	Description	Voltage (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
XB - BW - 3561	Button + LED indicator	230V AC	yellow	20 / 200	F	401561





Type	Description	Voltage (V)	Packing / Box (pcs)	Product category	Catalogue number
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EL-1035 Glim indicator lamp 220 VAC 1 C M030015
 Shape and color of the indicator - oval, red | Dimensions - 10 mm x 30 mm | Base diameter: 10mm |
 Case colour: red | Conductor length: 20mm



BUTTONS

2+0
standard
+extended

2

YEAR TOTAL
WARRANTY

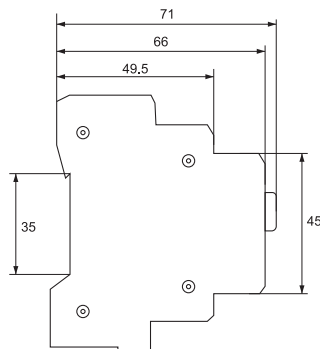
Type	Description	Voltage (V)	Rated current (A)	LED colour	Packing / Box (pcs)	Product category	Catalogue number
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ASW-13 Toggle Switch ON-OFF SPST 12 VDC 20 red 1 C M519114
 Function: ON/OFF | Leads: 3 | Body dimensions: 30.5 x 13.5 x 22mm | Mounting hole diameter - 12 mm |
 Toggle height - 27 mm | Operating temperature -from - 25 °C to + 85 °C



Type	Description	Voltage (V)	Rated current (A)	Colour	Packing / Box (pcs)	Product category	Catalogue number
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V 144/B Switch ON-OFF 250 VAC 5 white 1 C M300001
 Function: ON/OFF | Leads: 3 | Body dimensions: 26.2 x 12 x 14.5 mm | Mounting hole - 29 x 11 mm |
 Operating temperature - up to 105°C



DIN-RAIL BUTTONS AND LED INDICATORS

3+2
standard
+extended

5

YEAR TOTAL
WARRANTY

These are devices used in control and indication systems adjusted for mounting in command boards and panels directly on DIN-rail. They are manufactured to commute controlling circuits and to control the switching on or off executive mechanisms such as relays, contactors, etc. The signal lamps and indicators find broad application in all industrial fields. The devices endure short time current overload up to 20A, and normally they can commute current up to 10A with their contact system. The connection to the contact terminals is through screw terminals to which operational conductors with section up to 2.5mm² can be joined. There are also designed buttons combined with lamps.

TECHNICAL DATA:

- Insulation voltage: 660V; 50/60Hz
- Impulse voltage wear resistance: 6000V;
- Rated current: up to 10A (230V AC)
- Short circuit protection: safety device 10A gG outside in the circuit
- Rated consumed current (for indicators and buttons combined with indicators): <20mA
- wear resistance (indicators): >2000h
- Mechanical wear resistance (buttons): 1x106 commutation cycles
- Power of mechanical compression:

- at closing: 20N
- at opening: 8N
- Operating temperature: -20 - +65°C
- Humidity: 35 – 85%RH
- Tightening moment of the joining conductors: 0.15Nm
- Section of the conductor: 1x0.5; 1x0.75; 1x1; 1x1.5; 1x2.5mm²
- Plastic: UV rays wear resistance

MOUNTING:

- to a DIN-rail
- Altitude: up to 2000m

Documents corresponding to the product: Standard EN 60947-1
 EN 60 947-5-1 t



Type	Description	Voltage (V)	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
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ELD-RG-DIN	lamp	230V	<20	red/green	12 / 240	B	401559
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Type	Description	Voltage (V)	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
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ELD-RGB-DIN	lamp	230V	<20	red/green/blue	12 / 240	B	401560
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Type	Description	Voltage (V)	Rated current (A) at 400V	Colour	Packing / Box (pcs)	Product category	Catalogue number
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ELD - G - DIN	lamp	230V	<20	green	12 / 240	B	401500
ELD - R - DIN	lamp	230V	<20	red	12 / 240	B	401501
ELD - Y - DIN	lamp	230V	<20	yellow	12 / 240	B	401502
ELD - B - DIN	lamp	230V	<20	blue	12 / 240	B	401503
ELD - W - DIN	lamp	230V	<20	white	12 / 240	B	401504



Type	Description	Rated current (A) at 400V	Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
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ELB - BL - DIN	button	<10	1NO+ 2 NC	black	12 / 240	F	401506
ELB - G - DIN	button	<10	1NO+ 2 NC	green	12 / 240	F	401508
ELB - Y - DIN	button	<10	2NO+ 1 NC	yellow	12 / 240	F	401509
ELB - Y - DIN	button	<10	1NO+ 2 NC	yellow	12 / 240	F	401510



UNTIL SUPPLY
LAST



Type	Description	Voltage (V)	Rated current (A) at 400V	Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
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ELBD - G - DIN	button + lamp	230V	<20	1NO+ 2 NC	green	12 / 240	F	401515
ELBD - R - DIN	button + lamp	230V	<20	1NO+ 2 NC	red	12 / 240	F	401517
ELBD - Y - DIN	button + lamp	230V	<20	1NO+ 2 NC	yellow	12 / 240	F	401519



UNTIL SUPPLY
LAST

BUTTONS AND SWITCHES WITH BOX

3+2
 standard
 +extended **5** YEAR TOTAL
 WARRANTY


Type	Description	IP code:	Overall dimensions (mm)			Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
			L	H	W					

EL1-B134	switching on 0-1	IP44	68	68	50	1 NO	black	1 / 100	B	401134
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Type	Description	IP code:	Overall dimensions (mm)			Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
			L	H	W					

EL1-B102	1 button with spring return	IP44	68	68	50	1 NO	green	1 / 100	B	401102
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EL1-BP102	1 button with spring return	IP65	68	68	50	1 NO	green	1 / 100	B	401132
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Type	Description	IP code:	Overall dimensions (mm)			Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
			L	H	W					

EL1-B213	2 buttons with spring return	IP44	104	68	50	1 NC 1 NO	1 - red 1 - green	1 / 100	B	401213
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EL1-BP213	2 buttons with spring return	IP65	104	68	50	1 NC 1 NO	1 - red 1 - green	1 / 100	B	401233
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Type	Description	IP code:	Overall dimensions (mm)			Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
			L	H	W					

EL1-B339	3 buttons with spring return	IP44	134	68	50	1 NO 1 NC 1 NO	1 - green 1 - red 1 - green	1 / 50	B	401339
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EL1-BP339	3 buttons with spring return	IP65	134	68	50	1 NO 1 NC 1 NO	1 - green 1 - red 1 - green	1 / 50	B	401349
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Type	Description	IP code:	Overall dimensions (mm)			Type of the contact	Colour	Packing / Box (pcs)	Product category	Catalogue number
			L	H	W					

EL1-B174	Emergency button with head "mushroom" type Ø40. Release through turning	IP44	68	68	50	1 NC	red	1 / 100	B	401174
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In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

DEVICES FOR TELPHER CONTROL MBP TYPE



They represent different combinations of START and STOP buttons mounted in plastic boxes in different sizes. They are connected to the operating circuits of cranes or telfers and serve as a remote control of their movement. They are connected directly to the operating cable of the telfer and send commands directly to the executive mechanisms. They are designed to provide protection from dust and moisture IP65.

TECHNICAL DATA:

- Supplying voltage: 230V; 50/60Hz
- Electrical wear resistance: 1×10^5 cycles
- Operating temperature: -10 +65°C
- Humidity: 35 – 85% RH

- Number of contacts: according to the number of the buttons

- Commuting capacity: up to 6A










- Plastic: UV rays wear resistance

- IP code: IP65

- Weight: according to the number of the contacts

MOUNTING:

- directly to the control cable of the telfer (crane)

	Type	Number of buttons	Contact block and scheme Emergency	For the directions	Packing / Box (pcs)	Product category	Catalogue number
	MBP-A281	2	-	NO+NC	1/20	B	46281
	MBP-A291 two speed	2	-	NO+NC	1/20	B	46291
	MBP-A2813	2+1	emergency button	NO+NC	1/20	B	46283
	MBP-A2813K	2+1	emergency button with switch	NO+NC	1/20	B	46283K
	MBP-A2913 two speed	2+1	emergency button	NO+NC	1/20	B	46294
	MBP-A2913K two speed	2+1	emergency button with switch	NO+NC	1/20	B	46294K
	MBP-A481	4	-	NO+NC	1/20	B	46481
	MBP-A491 two speed	4	-	NO+NC	1/20	B	46491
	MBP-A4813	4+1	emergency button	NO+NC	1/20	B	46483
	MBP-A4813K	4+1	emergency button with switch	NO+NC	1/20	B	46483K
	MBP-A4913 two speed	4+1	emergency button	NO+NC	1/20	B	46493
	MBP-A4913K two speed	4+1	emergency button with switch	NO+NC	1/20	B	46493K
	MBP-A681	6	-	NO+NC	1/20	B	46681
	MBP-A691 two speed	6	-	NO+NC	1/20	B	46691
	MBP-A6813	6+1	emergency button	NO+NC	1/20	B	46683
	MBP-A6813K	6+1	emergency button with switch	NO+NC	1/20	B	46683K
	MBP-A6913 two speed	6+1	emergency button	NO+NC	1/20	B	46693
	MBP-A6913K two speed	6+1	emergency button with switch	NO+NC	1/20	B	46693K
	MBP-A881	8	-	NO+NC	1/20	B	46881
	MBP-A891 two speed	8	-	NO+NC	1/20	B	46891
	MBP-A8813	8+1	emergency button	NO+NC	1/20	B	46883
	MBP-A8813K	8+1	emergency button with switch	NO+NC	1/20	B	46883K
	MBP-A8913 two speed	8+1	emergency button	NO+NC	1/20	B	46893
	MBP-8913K two speed	8+1	emergency button with switch	NO+NC	1/20	B	46893K

**MBP-Axxxx**

— stop button type

— button type – one-speed (x81) or two-speed (x91)

— number of buttons

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

WARNING LIGHTS AND TOWERS

3+0
 standard
 +extended
3 YEAR TOTAL
 WARRANTY

The revolving warning lights and towers are devices intended for use as status indicators in the human-machine control systems. They are suitable for installation on control cabinets and panels or directly on machines. They are manufactured in different colour combinations to attract attention of operators working in a given production sector. Warning lights and towers are widely used in almost any industrial branch. They can be mounted on movable components or such, creating potential danger and can warn all workers for a critical situation with their blinking light and siren. These devices are electrically connected through cables, protruding out of the lamp casing.

TECHNICAL SPECIFICATION:

- Rated voltage: 12 VAC/230VAC; 50/60 Hz;
- Isolation voltage: 660V; 50/60 Hz;
- Impulse voltage stability: 6000V
- Rated power: see the tables below
- Short circuit protection: 1A gG external fuse
- Operating Temperature: - 20°C + 65°C

- Humidity: 35 – 85% RH
- Plastic cover: UV resistant polycarbonate not considered as being harmful to human health

INSTALLATION:

- Warning lights are fixed to the respective machine body with the studs protruding from the light plastic casing.



Type	Description	Voltage (VAC)	Rated Power (W)	Colour	Packing / Box (pcs)	Product category	Catalogue number
LTE1101 - R	Warning light	12	10	Red	1 / 30	B	401525R
LTE1101 - G	Warning light	12	10	Green	1 / 30	B	401525G
LTE1101 - Y	Warning light	12	10	Yellow	1 / 30	B	401525Y
LTE1101J - R	Warning light + siren	12	11	Red	1 / 30	B	401526R
LTE1101J - G	Warning light + siren	12	11	Green	1 / 30	B	401526G
LTE1101J - Y	Warning light + siren	12	11	Yellow	1 / 30	B	401526Y
LTE1101 - R	Warning light	230	8	Red	1 / 30	B	402525R
LTE1101 - G	Warning light	230	8	Green	1 / 30	B	402525G
LTE1101 - Y	Warning light	230	8	Yellow	1 / 30	B	402525Y
LTE1101J - R	Warning light + siren	230	9	Red	1 / 30	B	402526R
LTE1101J - G	Warning light + siren	230	9	Green	1 / 30	B	402526G
LTE1101J - Y	Warning light + siren	230	9	Yellow	1 / 30	B	402526Y
LTE1161 - R	Warning light	12	35	Red	1 / 8	B	401527R
LTE1161 - G	Warning light	12	35	Green	1 / 8	B	401527G
LTE1161 - Y	Warning light	12	35	Yellow	1 / 8	B	401527Y
LTE1161 - R	Warning light	230	28	Red	1 / 8	B	402527R
LTE1161 - G	Warning light	230	28	Green	1 / 8	B	402527G
LTE1161 - Y	Warning light	230	28	Yellow	1 / 8	B	402527Y
LTA205 - 1	Tower / flashing	12	4	1 - Red	1 / 20	B	401528
LTA205 - 2	Tower / flashing	12	8	2 - Red/Green	1 / 20	B	401529
LTA205 - 3	Tower / flashing	12	12	3 - Red/Yellow/Green	1 / 20	B	401530
LTA205 - 3J	Tower / flashing + siren	12	12	3 - Red/Yellow/Green	1 / 20	B	401531
LTA205 - 5	Tower / flashing	12	18	5 - Red/Yellow/Green/Blue/Transparent	1 / 20	B	401532
LTA205 - 1	Tower / flashing	230	6	1 - Red	1 / 20	B	402528
LTA205 - 2	Tower / flashing	230	8	2 - Red/Green	1 / 20	B	402529
LTA205 - 3	Tower / flashing	230	10	3 - Red/Yellow/Green	1 / 20	B	402530
LTA205 - 3J	Tower / flashing + siren	230	11	3 - Red/Yellow/Green	1 / 20	B	402531
LTA205 - 5	Tower / flashing	230	14	5 - Red/Yellow/Green/Blue/Transparent	1 / 20	B	402532



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	Description	Voltage (V)	Rated Power (W)	Sound level (dB)	Packing / Box (pcs)	Product category	Catalogue number
MS-290A	metal siren	230	60	100	1 / 24	B	401533
MS-290B	plastic siren	230	60	100	1 / 24	B	401541



Type	Description	Voltage (V)	Rated Power (W)	Sound level (dB)	Packing / Box (pcs)	Product category	Catalogue number
MS-390	siren	230	160	120	1 / 10	B	401534



Type	Description	Voltage (V)	Rated Power (W)	Sound level (dB)	Packing / Box (pcs)	Product category	Catalogue number
CB-4	alarm bell	12	-	85	1 / 50	B	401535
CB-4	alarm bell	24	-	85	1 / 50	B	401536
CB-4	alarm bell	110	-	85	1 / 50	B	401537
CB-4	alarm bell	230	-	85	1 / 50	B	401538

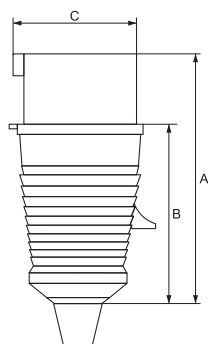


Type	Description	Voltage (V)	Rated Power (W)	Sound level (dB)	Packing / Box (pcs)	Product category	Catalogue number
FA-01	fire alarm	230	-	120	1 / 100	B	401540



Documents corresponding to the product:

Standard EN 60309-1; EN 60309-2



INDUSTRIAL PLUGS AND SOCKETS HT/HTN TYPE

5+0 standard +extended 5 YEAR TOTAL WARRANTY

Made of special high quality plastic with alloys against aging at sun light exposing and for increasing the mechanical strength. They are designed in accordance with standard EN 60309 and provide reliable connection and high protection level against electrical current. They provide IP protection not less than IP 44/67. They are designed for surface or flush mounting, movable or fixed type.

TECHNICAL DATA:

- Rated voltage: 500V
- Rated short circuit current: according to the mounted protection in the boards
- Impulse voltage wear resistance: 8kV
- Mechanical wear resistance: 3000 cycles
- IP code: IP 44/67
- Plastic: UV rays wear resistance
- Ambient temperature: -5 to +65°C
- Altitude: up to 2000m
- Plugs and sockets: 6h



Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HT-013	16	1P+N+E	230	121 / 84 / 53	44	2 / 10 / 100	C	37013
HT-023	32	1P+N+E	230	138 / 92 / 63	44	2 / 10 / 60	C	37023



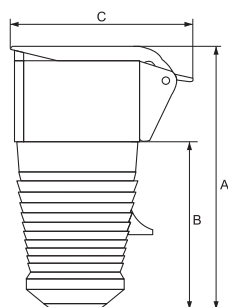
Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HT-014	16	3P+E	400	121 / 84 / 51	44	2 / 10 / 100	C	37014
HT-024	32	3P+E	400	138 / 92 / 63	44	2 / 10 / 60	C	37024
HT-034	63	3P+E	400	230 / 109 / 36	44	2 / 10	C	37034
HT-044	125	3P+E	400	295 / 124 / 50	44	2 / 10	C	37044



Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HT-015	16	3P+N+E	400	129 / 92 / 62	44	2 / 10 / 60	C	37015
HT-025	32	3P+N+E	400	149 / 97 / 70	44	2 / 10 / 60	C	37025
HT-035	63	3P+N+E	400	230 / 109 / 36	44	2 / 10	C	37035
HT-045	125	3P+N+E	400	295 / 124 / 50	44	2 / 10	C	37045



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



MOVABLE INDUSTRIAL SOCKETS HT TYPE IP44

5+0
 standard
 +extended
5 YEAR TOTAL
 WARRANTY


Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-213	16	1P+N+E	230	130 / 96	44	2 / 10 / 100	C	37213
HT-223	32	1P+N+E	230	149 / 90	44	2 / 10 / 60	C	37223



Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-214	16	3P+E	400	131 / 96	44	2 / 10 / 100	C	37214
HT-224	32	3P+E	400	149 / 90	44	2 / 10 / 60	C	37224
HT-234	63	3P+E	400	230/109	44	2 / 10	C	37234
HT-244	125	3P+E	400	290/124	44	2 / 10	C	37244



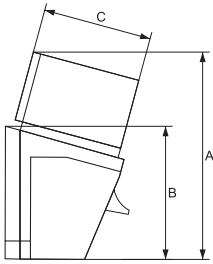
Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-215	16	3P+N+E	400	139 / 90	44	2 / 10 / 60	C	37215
HT-225	32	3P+N+E	400	154 / 100	44	2 / 10 / 60	C	37225
HT-235	63	3P+N+E	400	230/100	44	2 / 10	C	37235
HT-245	125	3P+N+E	400	290/124	44	2 / 10	C	37245



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

FIXED INDUSTRIAL PLUGS HT TYPE IP44

5+0
standard
+extended
5 YEAR TOTAL
WARRANTY



Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-513	16	1P+N+E	230	121/79	44	2 / 10 / 60	C	37513
HT-523	32	1P+N+E	230	131/83	44	2 / 10 / 60	C	37523



Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT 514	16	3P+E	400	121/76	44	2 / 10 / 60	C	37514
HT 524	32	3P+E	400	131/83	44	2 / 10 / 60	C	37524

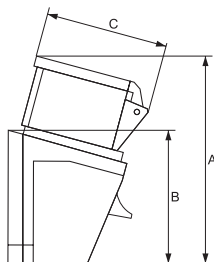


Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT 515	16	3P+N+E	400	123/79	44	2 / 10 / 60	C	37515
HT 525	32	3P+N+E	400	132/84	44	2 / 10 / 60	C	37525



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

FIXED INDUSTRIAL SOCKETS HT TYPE IP44

5+0
 standard
 +extended
5 YEAR TOTAL
 WARRANTY


Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-113	16	1P+N+E	230	126 / 86	44	2 / 10 / 60	C	37113
HT-123	32	1P+N+E	230	141 / 97	44	2 / 10 / 60	C	37123



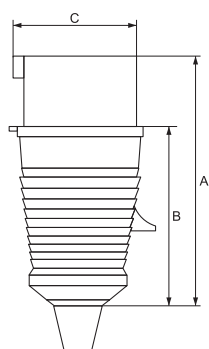
Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-114	16	3P+E	400	132 / 91	44	2 / 10 / 60	C	37114
HT-124	32	3P+E	400	141 / 96	44	2 / 10 / 60	C	37124
HT-134	63	3P+E	400	193 / 122	44	2 / 10	C	37134
HT-144	125	3P+E	400	220 / 140	44	2 / 10	C	37144



Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HT-115	16	3P+N+E	400	129 / 96	44	2 / 10 / 60	C	37115
HT-125	32	3P+N+E	400	141 / 98	44	2 / 10 / 60	C	37125
HT-135	63	3P+N+E	400	193 / 122	44	2 / 10	C	37135
HT-145	125	3P+N+E	400	220 / 140	44	2 / 10	C	37145



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



MOVABLE INDUSTRIAS PLUGS HTN TYPE IP67

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY



Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HTN 0131	16	1P+N+E	230	120/71/12	67	1 / 60	C	37131
HTN 0231	32	1P+N+E	230	150/93/17	67	1 / 40	C	37231



Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HTN 0141	16	3P+E	400	125/79/12	67	2 / 60	C	37141
HTN 0241	32	3P+E	400	150/93/17	67	2 / 40	C	37241
HTN 0341	63	3P+E	400	230/109/36	67	10	C	37341
HTN 0441	125	3P+E	400	230/109/36	67	10	C	37441

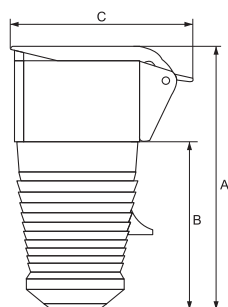


Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HTN 0151	16	3P+N+E	400	133/87/12	67	2 / 60	C	37151
HTN 0251	32	3P+N+E	400	155/99.5/17	67	2 / 40	C	37251
HTN 0351	63	3P+N+E	400	230/109/36	67	10	C	37351
HTN 0451	125	3P+N+E	400	295/124/50	67	10	C	37451



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

MOVABLE INDUSTRIAL SOCKET HTN TYPE IP67

5+0
 standard
 +extended
5 YEAR TOTAL
 WARRANTY


Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HTN 2131	16	1P+N+E	230	131/90	67	2 / 60	C	37831
HTN 2231	32	1P+N+E	230	149/90	67	2 / 40	C	37931



Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HTN 2141	16	3P+E	400	131/76	67	2 / 60	C	37841
HTN 2241	32	3P+E	400	149/90	67	2 / 40	C	37941
HTN 2341	63	3P+E	400	271/115	67	10	C	37942
HTN 2441	125	3P+E	400	295/137	67	6	C	37943



Model	In (A)	Poles	Un (V)	Dimensions (mm) A/C	IP code:	Packing/Box	Product category	Catalogue number
HTN 2151	16	3P+N+E	400	139/90	67	2 / 60	C	37851
HTN 2251	32	3P+N+E	400	154/100	67	2 / 40	C	37951
HTN 2351	63	3P+N+E	400	240/112	67	10	C	37952
HTN 2451	125	3P+N+E	400	300/126	67	6	C	37953

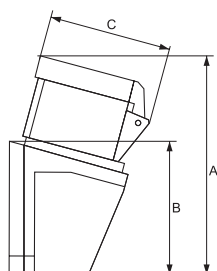


In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

FIXED INDUSTRIAL SOCKET HTN TYPE IP67

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY



Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HTN 1131	16	1P+N+E	230	101/150/93.5	67	2 / 40	C	37731
HTN 1231	32	1P+N+E	230	114/162/93.5	67	2 / 40	C	37631



Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HTN 1141	16	3P+E	400	104/150/93.5	67	2 / 40	C	37741
HTN 1241	32	3P+E	400	116/162/93.5	67	2 / 40	C	37641
HTN 1341	63	3P+E	400	171/170/230	67	1 / 10	C	37842
HTN 1441	125	3P+E	400	171/170/230	67	1 / 6	C	37844





Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HTN 1151	16	3P+N+E	400	107/150/93.5	67	2 / 40	C	37751
HTN 1251	32	3P+N+E	400	116/162/93.5	67	2 / 40	C	37651
HTN 1351	63	3P+N+E	400	171/170/230	67	10	C	37852
HTN 1451	125	3P+N+E	400	171/170/230	67	6	C	37854





In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.


INDUSTRIAL SOCKETS FOR FLUSH MOUNTING HT
TYPE IP445+0
standard
+extended
5 YEAR TOTAL
WARRANTY

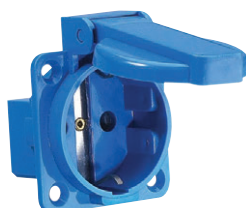
Model	In (A)		Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HT-413	16		1P+N+E	230	70/60/67	44	2 / 10 / 60	C	37413
HT-423	32		1P+N+E	230	80/95/79	44	2 / 10 / 60	C	37423




Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number	
HT-414	16		3P+E	400	75/86/75	44	2 / 10 / 60	C	37414
HT-424	32		3P+E	400	80/95/79	44	2 / 10 / 60	C	37424



Model	In (A)		Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HT-415	16		3P+N+E	400	75/85/70	44	2 / 10 / 60	C	37415
HT-425	32		3P+N+E	400	98/98/83	44	2 / 10 / 60	C	37425




Model	In (A)	Poles	Un (V)	Dimensions (mm) A / B / C	IP code:	Packing/Box	Product category	Catalogue number
HT-105SR	16	 German type	230	50/63/42	44	500	C	37105



German type socket for DIN rail mounting
It provides plug presence in electric boards and easy cabling.
* Supply voltage: 230V
* Computing option: up to 16A

* Operation temperature: from -10 up to +65°C
* Humidity: up to 85%RH
Mounting method:
* DIN rail

Type	Poles	Packing / Box (pcs)	Product category	Catalogue number
German type socket for DIN rail	 German type	5 / 100	C	37004



Documents corresponding to the product:

Standard IEC60670; CEI 23-48; CEI 23-49; EN 50102



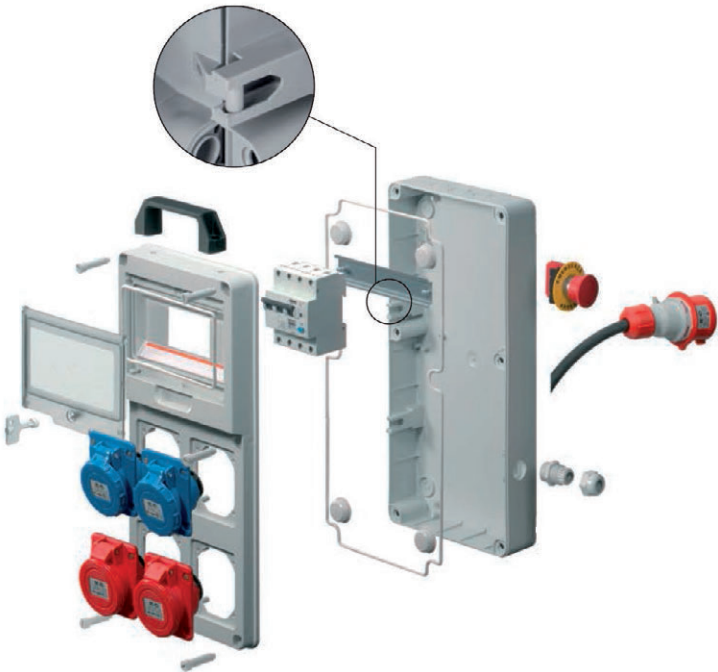
INDUSTRIAL BOARD SYSTEM EC690 SERIES

5+0
standard
+extended
5 YEAR TOTAL
WARRANTY

Distribution boards 690 series can be safely used for temporary installation such as construction sites, markets, fairs, etc. They are entirely made up of UV-resistant halogen free technopolymer on ABS- base. They are suitable for outdoor use, thanks to the high impact resistance. The distribution boards are fit to use in different options- movable with handle or fixed on the wall. The distribution boards are suitable with sockets with mounting flange with screw hole center distance 60x60mm.

TECHNICAL DATA:

- Material: shock resistant, halogen free technopolymer on ABS base with resistance to UV rays.
- Colour: grey RAL 7035
- IP code: IP65
- Resistance to mechanical shock: IK08-IK10(shocks up to 6-20j)
- Resistance to abnormal heat: up to 650°C(Glow Wire Test, Reference Standard IEC 695-2-1
- Installation temperature range: min-15°C, max+60°C
- DIN rail material: galvanized steel
- Pre-cuts for conduit or cable inlet of different sizes.
- Standards: IEC60670; CEI 23-48; CEI 23-49; EN 50102
- RoHS 2002/95/CE



**EMPTY DISTRIBUTION BOARD EC690 SERIES
2 VERTICAL SOCKETS**

5+0
standard
+extended
5 YEAR TOTAL
WARRANTY

Type	Number of modules	IP code	W	H	D	Packing pcs/ box	Product category	Catalogue number
EC69021	4	65	105	337	95	1/15	C	53EC69021



For sockets with 60x60mm hole center distance

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.





EMPTY DISTRIBUTION BOARD EC690 SERIES 3 VERTICAL SOCKETS

5+0
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Number of modules	IP code	W	H	D	Packing pcs/ box	Product category	Catalogue number
EC69022	4	65	105	430	95	1/13	C	53EC69022



For sockets with 60x60mm hole center distance



EMPTY DISTRIBUTION BOARD EC690 SERIES 4 SOCKETS

5+0
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Number of modules	IP code	W	H	D	Packing pcs/ box	Product category	Catalogue number
EC69023	8	65	200	430	95	1/10	C	53EC69023



For sockets with 60x60mm hole center distance



EMPTY DISTRIBUTION BOARD EC690 SERIES 6 SOCKETS

5+0
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Number of modules	IP code	W	H	D	Packing pcs/ box	Product category	Catalogue number
EC69025	12	65	320	510	135	1	C	53EC69025



For sockets with 60x60mm hole center distance



Dimensions W x H x D: 105 x 337 x 95mm

ASSEMBLED DISTRIBUTION BOARD 690 SERIES 2 VERTICAL SOCKETS, 4 MODULES

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

Empty board type				IP code	Product category	Catalogue number
German type	1P+N+E	3P+N	3P+N+E			
EC69021	1x16A+1x32A			44	C	53EC690212A1
EC69021	1x16A		1x16A	44	C	53EC690212A2
EC69021	1x16A	1x16A		44	C	53EC690212A3
EC69021	2x16A			44	C	53EC690212A4
EC69021	1x16A+1x32A			67	C	53EC690212B1
EC69021	1x16A		1x16A	67	C	53EC690212B2
EC69021	1x16A	1x16A		67	C	53EC690212B3



ASSEMBLED DISTRIBUTION BOARD 690 SERIES 3 VERTICAL SOCKETS, 4 MODULES

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

Empty board type				IP code	Product category	Catalogue number
German type	1P+N+E	3P+N	3P+N+E			
EC69022	1x16A+1x32A		1x16A	44	C	53EC690223A1
EC69022	1x32A		1x16A+1x32A	44	C	53EC690223A2
EC69022	1x16A+1x32A	1x16A		44	C	53EC690223A3
EC69022	1x32A	1x16A+1x32A		44	C	53EC690223A4
EC69022	2x16A	1x16A		44	C	53EC690223A5
EC69022	1x16A+1x32A		1x16A	67	C	53EC690223B1
EC69022	1x32A		1x16A+1x32A	67	C	53EC690223B2
EC69022	1x16A+1x32A	1x16A		67	C	53EC690223B3
EC69022	1x32A	1x16A+1x32A		67	C	53EC690223B4



Dimensions W x H x D: 105 x 430 x 95mm

ASSEMBLED DISTRIBUTION BOARD 690 SERIES 4 SOCKETS, 8 MODULES

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

Empty board type				IP code	Product category	Catalogue number
German type	1P+N+E	3P+N	3P+N+E			
EC69023	1x16A+1x32A		1x16A+1x32A	44	C	53EC690234A1
EC69023	2x32A		2x16A	44	C	53EC690234A2
EC69023	1x16A+1x32A	1x16A+1x32A		44	C	53EC690234A3
EC69023	2x32A	2x16A		44	C	53EC690234A4
EC69023	2x16A	1x16A+1x32A		44	C	53EC690234A5
EC69023	2x16A	1x16A+1x32A		44	C	53EC690234A6
EC69023	1x16A+1x32A		1x16A+1x32A	67	C	53EC690234B1
EC69023	2x32A		2x16A	67	C	53EC690234B2
EC69023	1x16A+1x32A	1x16A+1x32A		67	C	53EC690234B3
EC69023	2x32A	2x16A		67	C	53EC690234B4



Dimensions W x H x D: 200 x 430 x 95mm

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Dimensions W x H x D: 320 x 510 x 135mm

ASSEMBLED DISTRIBUTION BOARD 690 SERIES 6 SOCKETS, 12 MODULES

5+0
standard
+extended

5 YEAR TOTAL
WARRANTY

Empty board type



German type



1P+N+E



3P+N



3P+N+E

IP code

Product
category

Catalogue number

EC69025		2x16A+1x32A		2x16A+1x32A	44	C	53EC690256A1
EC69025		1x16A+2x32A		1x16A+2x32A	44	C	53EC690256A2
EC69025		2x16A+1x32A	2x16A+1x32A		44	C	53EC690256A3
EC69025		1x16A+2x32A	1x16A+2x32A		44	C	53EC690256A4
EC69025	3x16A	2x16A+1x32A			44	C	53EC690256A5
EC69025	2x16A	1x16A	2x16A+1x32A		44	C	53EC690256A6
EC69025		2x16A+1x32A		2x16A+1x32A	67	C	53EC690256B1
EC69025		1x16A+2x32A		1x16A+2x32A	67	C	53EC690256B2
EC69025		2x16A+1x32A	2x16A+1x32A		67	C	53EC690256B3
EC69025		1x16A+2x32A	1x16A+2x32A		67	C	53EC690256B4



SPARE FLANGE WITH SCREWS AND GASKETS

Type	W	H	D	Packing pcs/box	Product category	Catalogue number
EC690F1	85	74		1/10	C	53EC690F1



The flange mounted is used for closing of the factory made openings, in case there is no switch for it at the moment, and assures the necessary IP of the board. Another function is assuring the possibility for mounting of great number of additional appliances within assembling the board when making a suitable opening in the flange.



Spare flange with
mounted limit switch



Limit switch
Page 127



Spare flange with
mounted stop button



Stop button
Page 133

HANDLE WITH SCREWS

Type	W	H	D	Packing pcs/box	Product category	Catalogue number
EC690MA	134	42	25.6	1/10	C	53EC690MA

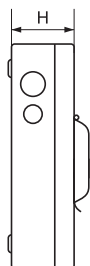
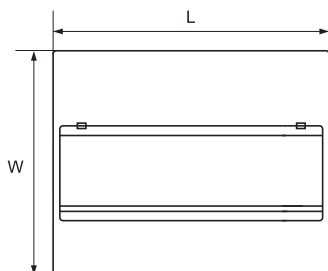


It assures a convenience when carrying the board.

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METAL CONSUMER UNITS - SIGMA SERIES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY



TECHNICAL DATA:

- Material: High quality electro-galvanized steel sheet
- Modules: 8; 12; 16; 22
- Steel thickness: 1,0mm (8; 12 modules); 1,2mm (16; 22 modules)
- Row: single
- Rated voltage In (A): 100A
- Protected with epoxy polyester coating
- Colour of body: White RAL9003
- Colour of door: White RAL9003
- IP code: IP40
- Fire resistance: 960°C/30s
- Humidity: Max.95%
- Storage temperature: -40+75°C
- Specification: CE, ROHS, BS, EN, EIC60439-3



Modern design and aesthetic look



Different variants of assembling



DIN, zero and ground terminals included



Defense of the electrical parts
from direct contact

**Metal consumer unit enclosures, Sigma series**

Type	Nº of ways	Construction Material	Nº of ROWS	Dimensions (mm)			Product category	Catalogue number
				L (mm)	W (mm)	H (mm)		
Sigma	8	Steel	1	303	257	110	C	61088
Sigma	12	Steel	1	375	257	110	C	61128
Sigma	16	Steel	1	447	257	110	C	61168
Sigma	22	Steel	1	555	257	110	C	61228

**Metal consumer units with 100A main switch, Sigma series**

Type	Nº of ways when empty	Construction Material	Nº of ways	Main Switch	Power Voltage Supply	Dimensions (mm)			Product category	Catalogue number
						L (mm)	W (mm)	H (mm)		
Sigma	8	Steel	6	100A	240V	303	257	110	C	61088SI
Sigma	12	Steel	10	100A	240V	375	257	110	C	61128SI
Sigma	16	Steel	14	100A	240V	447	257	110	C	61168SI
Sigma	22	Steel	20	100A	240V	555	257	110	C	61228SI

**Metal domestic consumer unit with 100A main switch and RCD's, Sigma series**

Type	Nº of ways when empty	Construction Material	Nº of ways	Nº of RCD's Supplied	Main Switch	Dimensions (mm)			Product category	Catalogue number
						L (mm)	W (mm)	H (mm)		
Sigma	12	Steel	6	2x63A 30mA	1x100A	375	257	110	C	61128SR
Sigma	16	Steel	10	2x63A 30mA	1x100A	447	257	110	C	61168SR
Sigma	22	Steel	16	2x63A 30mA	1x100A	555	257	110	C	61228SR





Product Contents: 1x Enclosure, 1x 63A 30mA RCD, 6x MCB's 6kA Curve B (3x 6A, 1x 16A and 2x 20A), busbar and cables

Sigma 6-way metal consumer unit

Type	Nº of ways when empty	Construction Material	Nº of ways	Nº of MCB's Supplied	Nº of RCD's Supplied	Amp Rating	Amp Rating			Product category	Catalogue number
							L (mm)	H (mm)	W (mm)		
Sigma	8	Steel	6	6	1	63A	244	230	90	C	610885



Product Contents: 1x Enclosure, 1x 100A Main Switch, 2x 63A 30mA RCD's, 6x MCB's 6kA Curve B (3x 6A, 1x 16A, 2x 32A, 1x 40), busbar and cables

Sigma 6-way dual RCD's metal consumer unit

Type	Nº of ways when empty	Construction Material	Nº of ways	Nº of MCB's Supplied	Nº of RCD's Supplied	Main Switch	Amp Rating	Amp Rating			Product category	Catalogue number
								L (mm)	H (mm)	W (mm)		
Sigma	12	Steel	6	6	2	1	63A	316	230	90	C	611285



Product Contents: 1x Enclosure, 1x 100A Main Switch, 2x 63A 30mA RCD's, 10x MCB's 6kA Curve B (3x 6A, 2x 16A, 4x 32A, 1x 40), busbar and cables

Sigma 10-way dual RCD's metal consumer unit

Type	Nº of ways when empty	Construction Material	Nº of ways	Nº of MCB's Supplied	Nº of RCD's Supplied	Main Switch	Amp Rating	Amp Rating			Product category	Catalogue number
								L (mm)	H (mm)	W (mm)		
Sigma	16	Steel	10	10	2	1	63A	388	230	90	C	611685



Product Contents: 1x Enclosure, 1x 100A Main Switch, 2x 63A 30mA RCD's, 12x MCB's 6kA Curve B (3x 6A, 1x 10A, 2x 16A, 4x 32A, 1x 40, 1x 50A), busbar and cables

Sigma 16-way dual RCD's metal consumer unit

Type	Nº of ways when empty	Construction Material	Nº of ways	Nº of MCB's Supplied	Nº of RCD's Supplied	Main Switch	Amp Rating	Amp Rating			Product category	Catalogue number
								L (mm)	H (mm)	W (mm)		
Sigma	22	Steel	16	12	2	1	63A	496	230	90	C	612285



**DOCUMENTS CORRESPONDING
TO THE PRODUCT:**

Standard IEC60439-3

**METAL DISTRIBUTION BOXES FOR SURFACE
MOUNTING- DELTA SERIES****3+2**
standard
+extended
5 YEAR TOTAL
WARRANTY

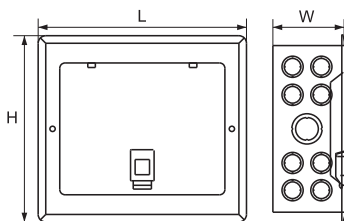
The metal distribution boxes have wide range of application for mounting in buildings under construction or new communal objects, offices, shops, house facilities. Inside the box, could be mounted circuit elements for protection in the electrical installation. They are made of high quality electro-galvanized steel sheet and provide proper prevention from fire. They are shock-proof as well. The box is also equipped with zero and ground terminals.

TECHNICAL DATA:

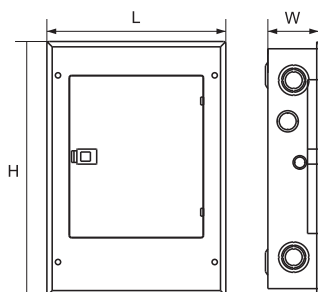
- Material: High quality electro-galvanized steel sheet
- Maximum insulation voltage: 690V; 50Hz
- Single phase: 4; 8; 12; 16 modules
- Triple phase: 4; 6; 8; 10; 12 modules
- Steel thickness: 1,0mm
- MCB mounting design: Din-rail
- Main switch rated current: MCB125A
- Mounting type: Surface
- Colour of body: grey
- IP code: IP40
- Fire resistance: 960°C/30s
- Humidity: Max.95%
- Storage temperature: -40+75°C
- Specification: CE, ROHS, BS, EN,IEC60439-3

**Single phase metal distribution boxes, Delta series**

Type	Construction Material	Nº of poles	Module capacity	Dimensions (mm)			Packing / Box	Product category	Catalogue number
				L	H	W			
Delta 1/4	Metal	1	4	226	226	95	1/10	C	600104N
Delta 1/8	Metal	1	8	298	226	95	1/10	C	600108N
Delta 1/12	Metal	1	12	370	226	95	1/10	C	600112N
Delta 1/16	Metal	1	16	442	226	95	1/10	C	600116N

**Three phase metal distribution boxes, Delta series**

Type	Construction Material	Nº of poles	Module capacity	Dimensions (mm)			Packing / Box	Product category	Catalogue number
				L	H	W			
Delta 3/4	Metal	3	4	506	350	105	1/10	C	600304N
Delta 3/6	Metal	3	6	560	350	105	1/10	C	600306N
Delta 3/8	Metal	3	8	614	350	105	1/10	C	600308N
Delta 3/10	Metal	3	10	668	350	105	1/10	C	600310N
Delta 3/12	Metal	3	12	722	350	105	1/10	C	600312N



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

DOCUMENTS CORRESPONDING TO THE PRODUCT:

Standard IEC60439-3



METAL CONSUMER UNITS - ZETA SERIES

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

The metal distribution boxes have wide range of application for mounting in buildings under construction or new communal objects, offices, shops, house facilities. Inside the box, could be mounted circuit elements for protection in the electrical installation. They are made of high quality electro-galvanized steel sheet and provide proper prevention from fire. They are shock-proof as well. The box is also equipped with zero and ground terminals.

TECHNICAL DATA:

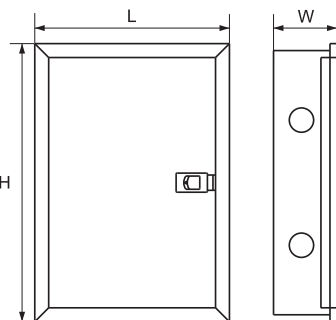
- Material: High quality electro-galvanized steel sheet
- Modules: 30; 36; 45; 60; 72
- Steel thickness: 1,2mm
- Rated voltage In (A): 100A
- Mounting type: Surface
- Colour of body: White RAL7035
- Colour of door: White RAL7035
- IP code: IP40
- Fire resistance: 960°C/30s
- Humidity: Max.95%
- Storage temperature: -40+75°C
- Specification: CE, ROHS, IEC60439-3



Zero and ground terminals included

Metal consumer unit enclosures, Zeta series

Type	Construction Material	Nº of ROWS	Nº of ways	Dimensions (mm)			Product category	Catalogue number
				L (mm)	H (mm)	W (mm)		
Zeta 30	Metal	2	30	428	428	110	C	55030
Zeta 36	Metal	2	36	482	428	110	C	55036
Zeta 45	Metal	3	45	428	578	110	C	55045
Zeta 60	Metal	4	60	428	728	110	C	55060
Zeta 72	Metal	4	72	482	728	110	C	55072



Documents corresponding to the product:

Standard EN 62208;
EN 60439-1; EN 60 439-3

METAL DISTRIBUTION BOARDS JXF SERIES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Supplied with a special lock, metal plate for fixing of electrical devices, lid for the input-output conductors, grounded dowel pin, gaskets, etc. Option to change the opening direction. Made of single steel sheet, treated with decorative powder coating.

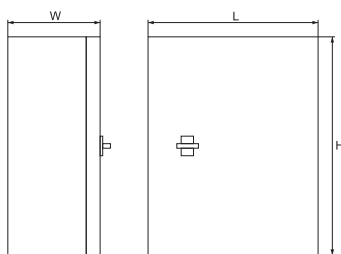
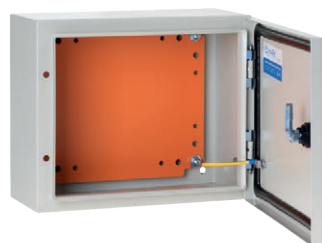
TECHNICAL DATA:

- Rated voltage: up to 1000V
- Maximum current: up to 1250A
- Material: steel
- RAL 7032

- Coating: powder style painting
- IP code: IP 65

MOUNTING:

- vertically on flat surface



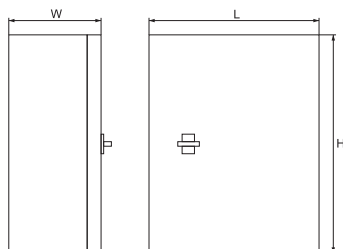
Type	Thickness of metal sheet mm)	Metal box dimensions (mm)			Nominal working current In (A)	Packing / Box	Product category	Catalogue number
		H (height)	L (width)	W (depth)				
JXF 25/25/15	1.0	250	250	150	80	1	C	53025
JXF 25/30/15	1.0	250	300	150	100	1	C	53026
JXF 30/25/15	1.0	300	250	150	100	1	C	53030
JXF 30/40/20	1.0	300	400	200	160	1	C	53031
JXF 40/30/20	1.0	400	300	200	160	1	C	53040
JXF 40/50/20	1.2	400	500	200	250	1	C	53041
JXF 40/40/20	1.2	400	400	200	250	1	C	53044
JXF 50/40/20	1.2	500	400	200	250	1	C	53050
JXF 40/60/20	1.2	400	600	200	250	1	C	53051
JXF 60/40/20	1.2	600	400	200	250	1	C	53060
JXF 60/60/20	1.2	600	600	200	250	1	C	53066
JXF 70/50/20	1.2	700	500	200	350	1	C	53070
JXF 80/60/25	1.5	800	600	250	400	1	C	53080
JXF 100/80/30	1.5	1000	800	300	630	1	C	53100
JXF 120/80/30	1.5	1200	800	300	630	1	C	53120
JXF 140/80/30	1.5	1400	800	300	800	1	C	53140
JXF 180/80/30	1.5	1800	800	300	1000	1	C	53188
JXF 180/100/30*	1.5	1800	1000	300	1250	1	C	53180



Note: *Metal boxes with double door

Documents corresponding to the product:

Standard EN 62 208;
EN 60439-1; EN 60 439-3



STAINLESS STEEL METAL BOARDS SXF SERIES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Supplied with a special lock, metal plate for fixing of electrical devices, lid for the input-output conductors, grounded dowel pin, gaskets, etc. Option to change the opening direction. Made of single stainless steel sheet. The mounting plate is treated with anti-corrosion and decorative powder coating. They are used in case of special requirements regarding the exposure of corrosion.

TECHNICAL DATA:

- Rated voltage: up to 1000V
- Maximum current: up to 800A
- Material: stainless steel

- IP code: IP 65

MOUNTING:

- vertically on flat surface

Type	Thickness of metal sheet (mm)	Metal box dimensions (mm)			Packing / Box	Product category	Catalogue number
		H (height)	L (width)	W (depth)			
SXF 25/25/15	1.0	250	250	150	1	C	54025
SXF 30/25/15	1.0	300	250	150	1	C	54030
SXF 40/30/20	1.0	400	300	200	1	C	54040
SXF 50/40/20	1.2	500	400	200	1	C	54050
SXF 60/40/20	1.2	600	400	200	1	C	54060
SXF 70/50/20	1.2	700	500	200	1	C	54070
SXF 80/60/25	1.5	800	600	250	1	C	54080
SXF 100/80/30	1.5	1000	800	300	1	C	54100
SXF 120/80/30	1.5	1200	800	300	1	C	54120



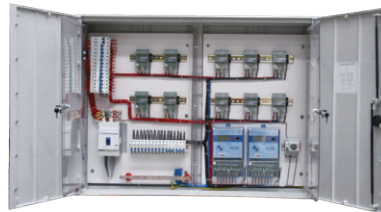
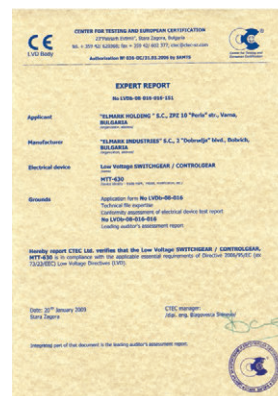
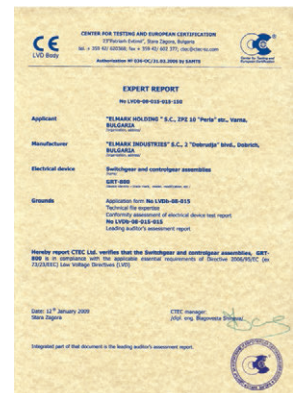
Documents corresponding to the product:

Standard EN 60439-1;
EN 60 439-3

ELECTRIC SWITCHBOARDS WITH TYPE-APPROVAL CERTIFICATES

The company has produced and successfully passed the type-approval procedures for the following metal and plastic electric control boxes and boards with ELMARK automation:

- Tower Mounted Switchgear
- Low Voltage Meter Box
- Low Voltage Main Switchboard
- Distribution Switchboard
- Power Compensation System

**Low Voltage Meter Box Type TEPO****Low Voltage Main Switchboard Type GRT****Tower Mounted Switchgear Type MTT****Power Compensation System Type CCU****Distribution Switchboard Type KRSH**

Documents corresponding to the product:

Standard EN 60670-24

PLASTIC DISTRIBUTION BOXES FOR SURFACE AND FLUSH MOUNTING ATTIS SERIES, IP40

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY



Zero and ground terminals included



The distribution boxes are designed for mounting in newly built buildings or buildings in reconstruction. They are a module box with mounted protective devices of the given flats electrical current circuit circles. They are supplied with transparent door for each row opening upwards to 90°. They are made of white self-extinguishing plastic, resistant to heat and high temperature with IP code: IP 40. The mounted device in the box is protected from direct contact to the current leading parts. They are offered with DIN-rail for device mounting and terminal strips for the neutral and earthing conductor joining. Mounted

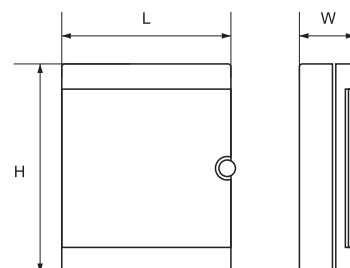
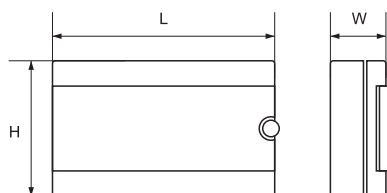
directly on the walls with screws.

TECHNICAL DATA:

- Maximum insulation voltage: 690V; 50Hz
- Door colour: Transparent
- Mounting type: Surface; Flush
- Modules (N°): 6; 9; 12; 16; 24; 36
- IP code: IP40
- Row: Single row for 6, 9, 12 and 16 modules
- Double rows for 16; 24 and 36 modules
- Material: ABS for body and PC for door
- Fire resistance: 360°C/30s

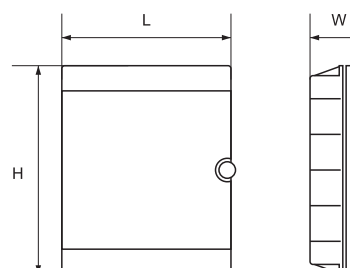
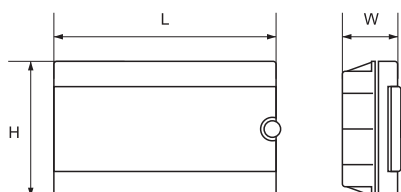
Plastic distribution boxes for surface mounting- ATTIS series, IP40

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
Attis 6	1	6	185	140	90	1/30	C	60025
Attis 9	1	9	220	164	90	1/20	C	60095
Attis 12	1	12	305	205	90	1/16	C	60125
Attis 16	1	16	355	220	90	1/16	C	60165
Attis 16	2	16	231	285	90	1/16	C	60175
Attis 24	2	24	313	345	96	1/8	C	60245
Attis 36	3	36	315	440	96	1/5	C	60365



Plastic distribution boxes for flush mounting- ATTIS series, IP40

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
Attis 6	1	6	185	140	90	1/30	C	60026
Attis 9	1	9	220	164	90	1/20	C	60096
Attis 12	1	12	305	205	90	1/16	C	60126
Attis 16	1	16	355	220	90	1/16	C	60166
Attis 16	2	16	231	285	90	1/16	C	60176
Attis 24	2	24	313	345	96	1/8	C	60246
Attis 36	3	36	315	440	96	1/5	C	60366



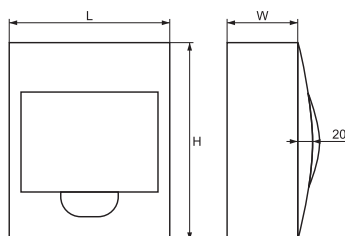
In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.

Documents corresponding to the product:

Standard EN 60670-24

PLASTIC DISTRIBUTION BOXES FOR SURFACE MOUNTING MINI SERIES, IP40**3+0**
standard
+extended **3** YEAR TOTAL
WARRANTY**Plastic distribution boxes for surface mounting, MINI series**

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
Mini 1	1	1	40	150	65	1/120	C	60106
Mini 2	1	2	55	150	65	1/84	C	60107
Mini 4	1	4	95	150	65	1/48	C	60108

**PLASTIC DISTRIBUTION BOXES FOR SURFACE AND FLUSH MOUNTING PDB1 SERIES, IP40****3+2**
standard
+extended **5** YEAR TOTAL
WARRANTY**Boxes for surface mounting**

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
PDB1-4	1	4	110	205	75	1 / 20	C	60040
PDB1-6	1	6	150	205	75	1 / 20	C	60060
PDB1-8	1	8	190	205	75	1 / 20	C	60080

**Boxes for flush mounting**

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
PDB1-4	1	4	110	205	75	1 / 20	C	60041
PDB1-6	1	6	150	205	75	1 / 20	C	60061
PDB1-8	1	8	190	205	75	1 / 20	C	60081

**Plastic distribution boxes for surface and flush mounting IP40 ***

Type	Number of rows	Module capacity (number of devices)	Mounting type	Dimensions (mm)			Packing / Box	Product category	Catalogue number
				L	H	W			
PDB1-4*	1	4	Flush	136	222	60	1/20	F	80041
PDB1-6*	1	6	Flush	170	222	60	1/20	F	80061
PDB1-36*	3	36	Flush	300	484	66	1/5	F	80361
PDB1-36*	3	36	Surface	271	462	66	1/5	F	80360

*3 year standard+0 year extended warranty

UNTIL SUPPLY
LAST

In case of insufficient quantity in stock for BOXES MINI SERIES, the delivery time after order confirmation will be 45 days, and for PDB1 will be 90 days.

Documents corresponding to the product:

Standard EN 62 208;
EN 60439-1; EN 60 439-3



PLASTIC DISTRIBUTION BOXES FOR SURFACE MOUNTING IP40 - BLUE SERIES

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

The distribution boxes are designed for mounting in newly built buildings or buildings in reconstruction. They are a module box with mounted protective devices of the given flats electrical current circuit circles. They are supplied with transparent door for each row opening upwards to 90°. They are made of white self-extinguishing plastic, resistant to heat and high temperature with IP code: IP 40. The mounted device in the box is protected from direct contact to the current leading parts. They are offered with DIN-rail for device mounting and terminal strips for the neutral and earthing conductor joining. Mounted directly on the walls with screws.

TECHNICAL DATA:

- Door colour: Transparent blue
- Mounting type: Surface; Flush
- Modules (N°): 12; 18; 24; 28; 36
- IP code: IP40
- Row: Single row for 12 and 18 modules
- Double rows for 24; 28 and 36 modules
- Material: ABS for body and PC for door
- Fire resistance: 650°C/30s
- Ambient temperature(°C): -5 +65°C, max. 95% humidity
- Colour: White RAL 9003
- Storage temperature(°C): -40 +75°C

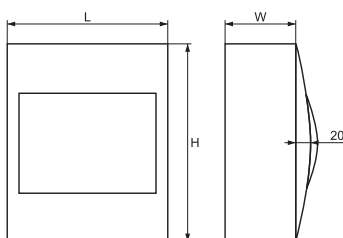
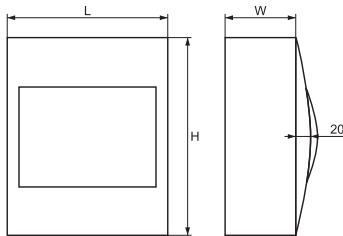
Boxes for surface mounting, BLUE series

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
Blue 12	1	12	300	204	102	1/10	C	60122
Blue 18	1	18	410	204	102	1/10	C	60182
Blue 24	2	24	300	294	109	1/5	C	60242
Blue 28	2	28	310	354	109	1/5	C	60282
Blue 36	2	36	410	294	109	1/5	C	60362



Boxes for flush mounting, BLUE series

Type	Number of rows	Module capacity (number of devices)	Dimensions (mm)			Packing / Box	Product category	Catalogue number
			L	H	W			
Blue 12	1	12	317	220	102	1/10	C	60123
Blue 18	1	18	426	220	102	1/10	C	60183
Blue 24	2	24	317	310	109	1/5	C	60243
Blue 28	2	28	294	338	109	1/5	C	60283
Blue 36	2	36	426	310	109	1/5	C	60363



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Documents corresponding to the product:Standard EN 62 208;
EN 60439-1; EN 60 439-3**MOISTURE-PROOF DISTRIBUTION BOXES
FOR SURFACE MOUNTING - BETA SERIES IP55
AND GAMMA SERIES IP65****3+2**
standard
+extended **5** YEAR TOTAL
WARRANTY

The distribution boxes are designed for mounting in newly built buildings or buildings in reconstruction. They are a module box with mounted protective devices of the given flats electrical installation current circles. They are supplied with transparent door for each row opening upwards to 90°. They are made of white non-self-extinguishing plastic, resistant to heat and high temperature. The special design of the lids and gaskets provides IP code: IP55; IP65. The mounted device in the box is protected from indirect contact to the current leading parts. They are offered with DIN-rail for device mounting and terminal strips for the neutral and earthing conductor joining. For direct wall mounting with screws.

TECHNICAL DATA:

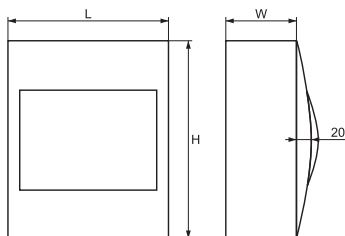
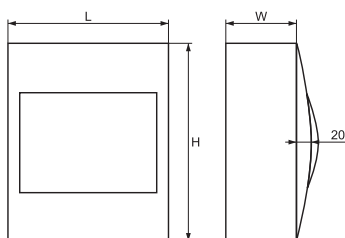
- Maximum insulation voltage: 690V; 50Hz
- Flame retardance: UL94 V-O
- IP code: IP55; IP65
- Door colour: Transparent
- Mounting type: Surface

Moisture-proof distribution boxes for surface mounting - Beta series, IP 55

Type	Number of rows	Module capacity (number of devices)	IP	Dimensions (mm)			Packing / Box	Product category	Catalogue number
				L	H	W			
Beta 4	1	4	55	127	214	93	1 / 20	C	60100
Beta 6	1	6	55	162	214	93	1 / 20	C	60101
Beta 8	1	8	55	216	214	93	1 / 20	C	60102
Beta 12	1	12	55	270	214	93	1 / 12	C	60103
Beta 18	1	18	55	378	233	93	1 / 8	C	60104
Beta 24	2	24	55	340	288	93	1 / 8	C	60105

**Moisture-proof distribution boxes for surface mounting - Gamma series, IP 65**

Type	Number of rows	Module capacity (number of devices)	IP	Dimensions (mm)			Packing / Box	Product category	Catalogue number
				H	L	W			
Gamma 4	1	4	65	210	140	100	1/30	C	60004
Gamma 8	1	8	65	210	215	100	1/20	C	60008
Gamma 12	1	12	65	260	300	140	1/10	C	60012
Gamma 18	1	18	65	285	410	140	1/5	C	60018
Gamma 24	2	24	65	300	415	140	1/5	C	60024



Documents corresponding to the product:

Standard EN 60439 -1
EN 60439 -5



PLASTIC DISTRIBUTION BOARDS ABS- PP SERIES, IP65

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Plastic distribution boards of various sizes. Intended for extension or distribution of cable lines. They can also be used as meter boxes. They are resistant to chemical agents, thermal and UV rays.

TECHNICAL SPECIFICATIONS:

- Resistance: chemical agents, weak acids, alkali, oils, salts, etc.
- Rated Voltage: up to 690V
- Maximum Current: up to 800A
- Thermal Deformation: over 240°C
- Operating Temperature: -35°C + 65°C
- Material: ABS
- IP code: IP65

- Colour: RAL7035 grey
- Recyclable
- adjustable mounting plate position

MOUNTING:

- Vertically on flat surface

ABS halogen free distribution boards PP series - gray door

Board Type	Material Type	H (mm)	L (mm)	W (mm)	Packing / Box	Product category	Catalogue number
PP 3001	ABS	300	200	130	1	C	5312030130
PP 3002	ABS	350	250	150	1	C	5312535150
PP 3004	ABS	400	300	170	1	C	5313040170
PP 3005	ABS	400	300	220	1	C	5313040220
PP 3006	ABS	500	350	190	1	C	5313550190
PP 3007	ABS	500	400	240	1	C	5314050240
PP 3008	ABS	600	400	200	1	C	5314060190



Note: Open door angle 180°

ABS halogen free distribution boards PP series- transparent door

Board Type	Material Type	H (mm)	L (mm)	W (mm)	Packing / Box	Product category	Catalogue number
PP 3011	ABS	300	200	130	1	C	5342030130
PP 3012	ABS	350	250	150	1	C	5342535150
PP 3014	ABS	400	300	170	1	C	5343040170
PP 3015	ABS	400	300	220	1	C	5343040220
PP 3016	ABS	500	350	190	1	C	5343550190
PP 3017	ABS	500	400	240	1	C	5344050240
PP 3018	ABS	600	400	200	1	C	5344060190
PP 3020	ABS	700	500	250	1	C	5345070250



ABS halogen free distribution module boards PP series- transparent door

Board Type	Material Type	H (mm)	L (mm)	W (mm)	Packing / Box	Product category	Catalogue number
PP 3112-18modules	ABS	350	250	150	1	C	5322535150
PP 3114-24modules	ABS	400	300	170	1	C	5323040170
PP 3116-45modules	ABS	500	350	190	1	C	5323550190
PP 3118-60modules	ABS	600	400	200	1	C	5324060190



Note: Transperent door

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.

SURFACE MOUNTING POLYESTER BOARDS EC SERIES IP65

UNTIL SUPPLY
LAST

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

TECHNICAL SPECIFICATIONS:

- Colour: grey RAL 7035.
- IP65 protection degree.
- Material: made of halogen free reinforced fiberglass polyester, self-extinguishing V0 degree according to UL94.
- Double insulation, shock resistance: IK10, 20j, according to EN 62262.
- Application temperature: minimum -25°, maximum +65°.

- Resistance to abnormal heat (GWT)- board with blank door up to 960°C - board with transparent window up to 650°C.
- Application voltage 1000V, suitable for photovoltaic plants.
- Right or left reversible door with stainless steel pins – it can be opened more than 180°.
- Plain and smooth headboards for easy opening and conduit inlet.



Halogen free polyester boards EC series- transparent door

Type	Material	H (mm)	L (mm)	W (mm)	Packing /Box	Product category	Catalogue number
PBTD 5001	Polyester	305	270	170	1	F	5362730170
PBTD 5002	Polyester	430	325	185	1	F	5363243185
PBTD 5004	Polyester	655	435	215	1	F	5364365215



Polyester hinger counterdoor EC

Type	Material	Used for type boards	Packing /Box	Product category	Catalogue number
CD 5002	Polyester	PBTD/PBBD 5002	1	F	53502CD
CD 5004	Polyester	PBTD/PBBD 5004	1	F	53504CD
CD 5005	Polyester	PBTD/PBBD 5005	1	F	53505CD



Blank cover module EC

Type	Height of single/ double cover (mm)	Used for type boards	Packing / Box	Product category	Catalogue number single cover	Catalogue number double cover
Blank cover module	125/250	PBTD/PBBD 5002	1	F	53502S	
	150/300	PBTD/PBBD 5003/5004	1	F	53503S	53503D
	150/300	PBTD/PBBD 5005	1	F		53505D
	150/300	PBTD/PBBD 5006	1	F		53506D



Spare brass and brackets for fixing- galvanized EC

Type	Used for type boards	Packing /Box	Product category	Catalogue number
Spare brass insert kit	All type	1 kit (10 pcs)	F	53512



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.

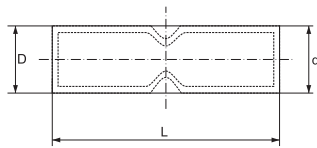


CONNECTION TUBES - GTY TYPE

Copper pipes with galvanic tin coating, used for joining of copper rigid or multicore conductors with different sections. The assembling is made by mechanical pressing with crimping tool.

TECHNICAL DATA:

- Material: copper alloy
- Coating: tin
- Application: general



Type	Length L (mm)	Outer diameter D (mm)	Inner diameter d (mm)	Cable (mm ²)	Packing / Box (pcs)	Product category	Catalogue number
GTY-4	20	5	3	4	1000 / 16000	C	59213
GTY-6	25	5.3	3.7	6	500 / 1500 / 12000	C	59201
GTY-10	30	6.3	4.5	10	500 / 1500 / 12000	C	59202
GTY-16	35	7.5	5.7	16	100 / 200 / 4800	C	59203
GTY-25	40	9	7.2	25	100 / 500 / 2000	C	59204
GTY-35	45	10.8	8.5	35	100 / 200 / 1600	C	59205
GTY-50	50	12.5	9.8	50	20 / 200 / 1600	C	59206
GTY-70	55	14.5	11.5	70	10 / 100 / 800	C	59207
GTY-95	60	17	13.7	95	10 / 80 / 640	C	59208
GTY-120	65	19	15	120	10 / 60 / 480	C	59209
GTY-150	70	21	16.7	150	10 / 50 / 400	C	59210
GTY-185	75	23	18.5	185	10 / 40 / 320	C	59211
GTY-240	80	26	21	240	10 / 30 / 240	C	59212

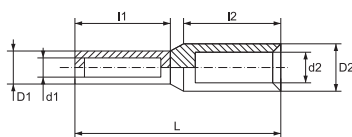


BIMETALLIC CONNECTION TUBE - GTL TYPE

Pipes made of two metals – copper and aluminum without galvanic coating. They are designed for joining copper and aluminum conductors – rigid or multicore conductors with different section. The connection is accomplished through crimping pliers, through mechanical pressing of the butt terminals and the conductor. They are used for protection against electrochemical corrosion got at two metals contact with different chemical properties and conductivity at electrical current feed. They are manufactured under modern technology and have high quality and long exploitation period.

TECHNICAL DATA:

- Material: copper aluminum alloy
- Coating: none
- Application: general for joining of two types of conductors



Type	d1	D1	d2	D2	l1	l2	L	Packing / Box (pcs)	Product category	Catalogue number
GTL - 16	5	9	6	10	30	30	75	20 / 200 / 1200	C	59214
GTL - 25	6	10	7	12	30	33	82	20 / 400 / 1500	C	59215
GTL - 35	7	11	8.5	14	30	40	90	20 / 300 / 1000	C	59216
GTL - 50	8.5	13	9.8	16	32	42	95	20 / 800	C	59217
GTL - 70	9.5	15	11.5	18	38	50	105	10 / 600	C	59218
GTL - 95	11.5	17	13.5	21	40	50	110	10 / 500	C	59219
GTL - 120	13.5	19	15	23	42	55	112	10 / 400	C	59220
GTL - 150	15	21	17	25	44	55	118	10 / 350	C	59221
GTL - 185	17	23	18.5	27	46	60	125	10 / 300	C	59222
GTL - 240	19	26	21	30	54	60	130	10 / 200	C	59223



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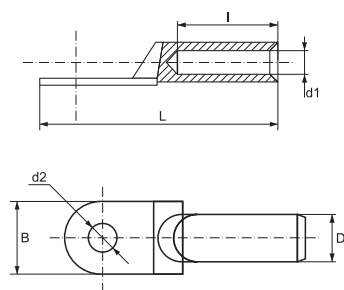
CABLE TERMINALS NON-ISOLATED - JM TYPE



They are used for joining copper conductors - multicore conductors with different section to electrical devices or connections to combine all cores of the conductor, to provide safe connection at tightening in terminals and safe connection at the base of the terminal. Thus the connection stability against vibrations is increased and the possibility for short circuit is decreased. They are made of copper alloy with galvanic tin coating. The connection is realized through crimping pliers, through mechanic pressing of the terminal and conductor. Two types are offered with standard length SC and extended base JM. They are manufactured under modern technology and have high quality and long exploitation period.

TECHNICAL DATA:

- Material: copper alloy
- Coating: tin
- Application: general for joining conductors to electrical devices.



Type	d1 (mm)	D (mm)	d2 (mm)	L (mm)	Packing / Box (pcs)	Product category	Catalogue number
JM - 2.5/6	2.2	4.5	6	24	1000 / 3000 / 24000	C	59240
JM - 4/6	3.0	4.8	6	24	1000 / 2000 / 16000	C	59241
JM - 6/6	3.8	5.5	6	24	500 / 2000 / 16000	C	59035
JM - 6/8	3.8	5.5	8	24	500 / 2000 / 16000	C	59059
JM - 10/6	4.8	6.8	6	25.5	100 / 1500 / 12000	C	59036
JM - 10/8	4.8	6.8	8	25.5	500 / 1500 / 12000	C	59037
JM - 16/6	5.5	7.5	6	30.5	400 / 800 / 6400	C	59038
JM - 16/8	5.5	7.5	8	30.5	400 / 800 / 6400	C	59039
JM - 16/10	5.5	7.5	10	30.5	400 / 800 / 6400	C	59040
JM - 25/8	7	9	8	34	100 / 500 / 4000	C	59041
JM - 25/10	7	9	10	34	250 / 500 / 4000	C	59042
JM - 35/8	8.2	10.5	8	38	200 / 400 / 3200	C	59043
JM - 35/10	8.2	10.5	10	38	200 / 400 / 3200	C	59044
JM - 35/12	8.2	10.5	12	38	200 / 400 / 3200	C	59045
JM - 50/8	9.8	12.5	8	45	100 / 200 / 1600	C	59046
JM - 50/10	9.8	12.5	10	45	100 / 100 / 1600	C	59047
JM - 50/12	9.8	12.5	12	45	100 / 200 / 1600	C	59048
JM - 70/10	11.5	14.5	10	50	80 / 100 / 1280	C	59049
JM - 70/12	11.5	14.5	12	50	80 / 100 / 1280	C	59050
JM - 95/10	13.8	17.5	10	55.5	50 / 200 / 800	C	59051
JM - 95/12	13.8	17.5	12	55.5	50 / 200 / 800	C	59052
JM - 120/10	15.5	19.5	10	63	30 / 60 / 480	C	59053
JM - 120/12	15.5	19.5	12	63	30 / 60 / 480	C	59054
JM - 150/12	16.5	21	12	71	10 / 50 / 400	C	59055
JM - 185/12	18.8	23.5	12	78	10 / 40 / 320	C	59056
JM - 185/16	18.8	23.5	16	78	10 / 40 / 320	C	59057
JM - 240/16	21.3	26.5	16	92	10 / 30 / 240	C	59058



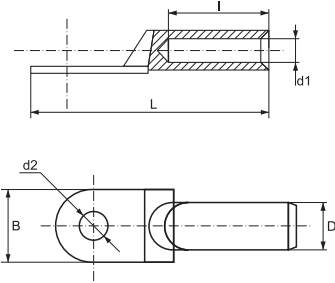
BIMETALIC NON-ISOLATED CABLE TERMINALS FOR CRIMPING DTL



They are used for joining aluminum conductors - multicore conductors with different section to electrical devices or connections to combine all cores of the conductor, to provide safe connection at tightening in terminals and safe connection at the base of the terminal. Thus the connection stability against vibrations is increased and the possibility for short circuit is decreased. They are made of copper and aluminum alloys as in the aluminum billet is made under special technology the copper terminal formed like an ear. The connection is realized through crimping pliers, through mechanic pressing of the terminal and conductor.

TECHNICAL DATA: Material: copper aluminum; Application: general for joining conductors to electrical devices.

Type	d1 (mm)	D (mm)	d2 (mm)	L (mm)	l (mm)	B (mm)	Packing / Box (pcs)	Product category	Catalogue number
DTL - 1 - 16	6	11	8	70	30	16	20 / 200 / 1440	C	59224
DTL - 1 - 25	7	12	8	75	34	18	20 / 180 / 1080	C	59225
DTL - 1 - 35	8.5	14	10	85	38	20.5	20 / 100 / 600	C	59226
DTL - 1 - 50	9.8	16	10	90	40	23	20 / 70 / 420	C	59227
DTL - 1 - 70	11.5	18	12	102	48	26	10 / 60 / 360	C	59228
DTL - 1 - 95	13.5	21	12	112	50	28	10 / 40 / 180	C	59229
DTL - 1 - 120	15	23	14	120	53	30	10 / 30 / 120	C	59230
DTL - 1 - 150	16.5	25	14	126	56	34	5 / 25 / 120	C	59231
DTL - 1 - 185	18.5	27	16	133	58	37	5 / 20 / 120	C	59232
DTL - 1 - 240	21	30	16	140	60	40	4 / 12 / 72	C	59233



COPPER CABLE WIRE FORK TERMINAL CONNECTOR



Type	Length (mm)	Colour	Conductor (mm ²)	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
SVS1.25-4	21.2	Red	0.5-1.0	100	10 / 240	C	59080
SVS1.25-5	21.2	Red	0.5-1.0	100	15 / 180	C	59081
SVS1.25-6	21.2	Red	0.5-1.0	100	15 / 180	C	59082
SVS 2-4	21.0	Blue	1.5-2.5	100	15 / 180	C	59083
SVS 2-5	22.5	Blue	1.5-2.5	100	15 / 180	C	59084
SVS 2-6	27,6	Blue	1.5-2.5	100	10 / 120	C	59085
SVS 5,5-4	24.5	Yellow	4.0-6.0	100	5 / 60	C	59086
SVS 5,5-5	27,9	Yellow	4.0-6.0	100	5 / 60	C	59087
SVS 5,5-6	27,9	Yellow	4.0-6.0	100	5 / 60	C	59088



ISOLATED CABLE TERMINALS - CHS TYPE



Type	Length (mm)	Conductor (mm ²)	Packing / Box (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
CHS3	18.1	0.25-1.5	100	250	C	59115
CHS4	20.1	1.5-2.5	100	200	C	59116
CHS5	25.5	4.0-6.0	100	200	C	59117
CHS6	27.3	8.0	100	100	C	59118



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



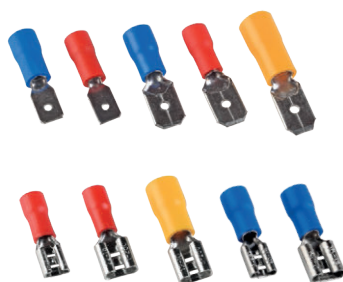
ISOLATED CABLE JOINTS

Metal pipes with outside PVC insulation. They are used for joining/extending multicore conductors with section up to 6mm². It increases the connection stability against vibrations and decreases the possibility for short circuit. The connection is realized through crimping pliers, through mechanic pressing of the terminal and conductor. The different insulation colour corresponds to different conductor sections.

TECHNICAL DATA:

- Material: copper alloy
- Coating: polyvinylchloride
- Application: general for joining of copper conductors

Type	Length (mm)	Colour	Conductor (mm ²)	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
PVT 1.25	16	red	0.5-1.0	100	15 / 300	C	59015
BV 1.25	25	red	0.5-1.0	100	10 / 120	C	59001
PVT 2	16	blue	1.5-2.5	100	15 / 300	C	59034
BV 2	25	blue	1.5-2.5	100	10 / 60	C	59002
PVT 5.5	20	yellow	4.0-6.0	100	5 / 60	C	59014
BV 5.5	25	yellow	4.0-6.0	100	5 / 60	C	59003



ISOLATED CABLE TERMINALS - MDD/FDD TYPES

They represent a cable terminal made of brass alloy with galvanic tin coating and insulated with polyvinylchloride. They are used as non-insulated terminals, as the insulated part protects the cores from bending and breaking in the joining point and at the same time it protects the staff from direct contact to the current - carrying parts. They are used for conductors with section up to 6 mm. The connection is realized through crimping pliers, through mechanic pressing of the terminal and cable. The different insulation colour corresponds to different conductor sections. They are manufactured under modern technology and have high quality and long exploitation period.

All insulated cable terminals are being offered in 100 pcs. packing

TECHNICAL DATA:

- Material: copper alloy
- Coating: polyvinylchloride
- Application: general for joining copper conductors
- Ambient temperature: -10 to +75°C

Type	Shape	Colour	Conductor (mm ²)	Shoe width	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
MDD 1.25 - 187	male	red	0.5-1.0	187	100	10 / 240	C	59012
MDD 1.25 - 250	male	red	0.5-1.0	250	100	10 / 240	C	59009
MDD 2 - 187	male	blue	1.5-2.5	187	100	10 / 240	C	59013
MDD 2 - 250	male	blue	1.5-2.5	250	100	10 / 180	C	59011
MDD 5.5 - 250	male	yellow	4.0-6.0	250	100	10 / 120	C	59010
FDD 1.25 - 187	female	red	0.5-1.0	187	100	20 / 240	C	59008
FDD 1.25 - 187	female	red	0.5-1.0	250	100	15 / 180	C	59006
FDD 2 - 187	female	blue	1.5-2.5	187	100	20 / 240	C	59007
FDD 2 - 250	female	blue	1.5-2.5	250	100	10 / 180	C	59004
FDD 5.5 - 250	female	yellow	4.0-6.0	250	100	10 / 120	C	59005





ISOLATED CABLE TERMINALS - E TYPE

Type	Colour	Terminal length (mm)	Conductor (mm ²)	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
E0508	white	8	0.5	100	50 / 600	C	59023
E7508	blue	8	0.75	100	50 / 600	C	59024
E1008	red	8	1.0	100	50 / 600	C	59025
E1510	black	10	1.5	100	30 / 360	C	59026
E2512	grey	12	2.5	100	30 / 300	C	59027
E4012	orange	12	4.0	100	20 / 240	C	59028
E6018	green	18	6.0	100	5 / 120	C	59029
E10-18	dark green	18	10	100	8 / 96	C	59030
E16-18	milky yellow	18	16	100	6 / 60	C	59031
E25-16	black	16	25	100	5 / 36	C	59032
E35-25	grey-yellow	25	35	100	2 / 24	C	59033



TWIN ISOLATED CABLE TERMINALS- TE TYPE

Type	Colour	Terminal length (mm)	Conductor (mm ²)	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
TE0508	white	8	2x0.5	100	50 / 600	C	59023TE
TE7508	Blue	8	2x0.75	100	50 / 600	C	59024TE
TE1008	Red	8	2x1.0	100	50 / 600	C	59025TE
TE1508	black	8	2x1.5	100	30 / 360	C	59026TE
TE2510	grey	10	2x2.5	100	30 / 300	C	59027TE
TE4010	orange	10	2x4.0	100	20 / 240	C	59028TE
TE6014	green	14	2x6.0	100	5 / 120	C	59029TE
TE10-14	dark green	14	2x10.0	100	8 / 96	C	59030TE
TE16-14	milky yellow	14	2x16.0	100	6 / 60	C	59031TE



ISOLATED CABLE TERMINALS - PTV TYPE

Type	Shape	Colour	Conductor (mm ²)	Shoe width	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
PTV 1.25 - 10	male	red	0.25-1.0	1.9	100	20 / 240	C	59101
PTV 1.25 - 12	male	red	0.25-1.0	1.9	100	20 / 240	C	59102
PTV 2 - 10	male	blue	1.5-2.5	1.9	100	20 / 240	C	59103
PTV 2 - 12	male	blue	1.5-2.5	1.9	100	15 / 180	C	59104
PTV 5.5 - 13	male	yellow	4.0-6.0	2.9	100	8 / 96	C	59105



ISOLATED CABLE TERMINALS - RVL TYPE



Type	Size of the opening (mm)	Colour	Conductor (mm ²)	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
RVL 1.25-4	4	red	0.5-1.0	100	20 / 240	C	59021
RVL 1.25-5	5	red	0.5-1.0	100	15 / 180	C	59022
RVL 2-4	4	blue	1.5-2.5	100	15 / 180	C	59018
RVL 2-5	5	blue	1.5-2.5	100	10 / 120	C	59019
RVL 5.5-4	4	yellow	4.0-6.0	100	8 / 96	C	59020
RV 5.5-5	5	yellow	4.0-6.0	100	8 / 96	C	59016
RV 5.5-6	6	yellow	4.0-6.0	100	8 / 96	C	59017



ISOLATED CABLE TERMINALS - PBDD TYPE



Type	Shape	Colour	Conductor (mm ²)	Shoe width	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
PBDD 1.25 - 250	male	red	0.25-1.0	6.3	100	5 / 60	C	59106
PBDD 2 - 250	male	blue	1.5-2.5	6.3	100	5 / 60	C	59107
PBDD 5.5 - 250	male	yellow	4.0-6.0	6.3	100	5 / 60	C	59108



ISOLATED CABLE TERMINALS - MPD TYPE



Type	Shape	Colour	Conductor (mm ²)	Shoe width	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
MPD 1.25 - 156	male	red	0.25-1.0	6.3	100	10 / 240	C	59109
MPD 2 - 195	male	blue	1.5-2.5	6.3	100	10 / 120	C	59110
MPD 5.5 - 195	male	yellow	4.0-6.0	6.3	100	10 / 120	C	59111



ISOLATED CABLE TERMINALS - MDFN/FDFNY



Type	Shape	Colour	Conductor (mm ²)	Shoe width	Packing (pcs.)	Packing / Box (pcs.)	Product category	Catalogue number
MDFN 1.0 - 250	male	red	0.25-1.0	4	100	5 / 60	C	59112
MDFN 2 - 250	male	blue	1.5-2.5	4	100	5 / 60	C	59113
MDFN 5 - 250	male	yellow	4.0-6.0	5	100	4 / 48	C	59114
FDFNY 1.0 - 250	female	red	0.25-1.0	4	100	10 / 60	C	59242
FDFNY 2 - 250	female	blue	1.5-2.5	4	100	10 / 60	C	59243
FDFNY 5 - 250	female	yellow	4.0-6.0	5	100	10 / 60	C	59244





PLASTIC CABLE TRUNKING CT2

Cable trunkings are practical solution of organizing power and communication cables in office and residential buildings. They increase the reliability in operation of the electrical systems and allow quick adaptation if necessary to rearrange the interior. Fast and simple installation. In combination with a wide range of accessories, building irregularities are quickly overcome. Non-flammable material, easy to cut and paint.

Type	Size (mm)	Length	Colour	Packing (pcs)	Product category	Catalogue number
PLASTIC CABLE TRUNKING CT2	12x12	2m	white	100	C	5621212
PLASTIC CABLE TRUNKING CT2	15X10	2m	white	100	C	5621510
PLASTIC CABLE TRUNKING CT2	16X16	2m	white	100	C	5621616
PLASTIC CABLE TRUNKING CT2	20X10	2m	white	100	C	5622010
PLASTIC CABLE TRUNKING CT2	25X16	2m	white	80	C	5622516
PLASTIC CABLE TRUNKING CT2	30X16	2m	white	70	C	5623016
PLASTIC CABLE TRUNKING CT2	25X25	2m	white	50	C	5622525
PLASTIC CABLE TRUNKING CT2	40X16	2m	white	50	C	5624016
PLASTIC CABLE TRUNKING CT2	40X25	2m	white	50	C	5624025
PLASTIC CABLE TRUNKING CT2	40X40	2m	white	40	C	5624040
PLASTIC CABLE TRUNKING CT2	60X40	2m	white	30	C	5626040
PLASTIC CABLE TRUNKING CT2	60X60	2m	white	32	C	5626060
PLASTIC CABLE TRUNKING CT2	80X40	2m	white	18	C	5628040
PLASTIC CABLE TRUNKING CT2	80X60	2m	white	24	C	5628060
PLASTIC CABLE TRUNKING CT2	100X40	2m	white	16	C	56210040
PLASTIC CABLE TRUNKING CT2	100X60	2m	white	16	C	56210060



SWITCHES AND SOCKETS FRAMES FOR CABLE TRUNKING

Cable trunking frames are decorative solution for installation of switches and sockets on places where their normal mounting is not possible. The assembly set includes subframe and main white frame. Universal sizes, suitable for mounting of switches and sockets from different manufacturers. Single, double and triple frames are offered.

Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
SINGLE FRAME	100X40/100X60	White	20	C	562100441
DOUBLE FRAME	100X40/100X60	White	14	C	562100442
TRIPLE FRAME	100X40/100X60	White	5	C	562100443



OUTSIDE CORNER



Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
OUTSIDE CORNER	12x12	white	50	C	56212121
OUTSIDE CORNER	15X10	white	50	C	56215101
OUTSIDE CORNER	16X16	white	50	C	56216161
OUTSIDE CORNER	25X16	white	30	C	56225161
OUTSIDE CORNER	30X16	white	48	C	56230161
OUTSIDE CORNER	25X25	white	30	C	56225251
OUTSIDE CORNER	40X16	white	30	C	56240161
OUTSIDE CORNER	40X25	white	30	C	56240251
OUTSIDE CORNER	40X40	white	30	C	56240401
OUTSIDE CORNER	60X40	white	10	C	56260401
OUTSIDE CORNER	60X60	white	10	C	56260601
OUTSIDE CORNER	80X40	white	8	C	56280401
OUTSIDE CORNER	80X60	white	8	C	56280601
OUTSIDE CORNER	100X40	white	6	C	562100401
OUTSIDE CORNER	100X60	white	6	C	562100601

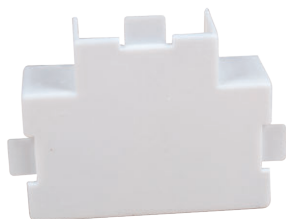


INSIDE CORNER



Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
INSIDE CORNER	12x12	white	50	C	56212122
INSIDE CORNER	15X10	white	50	C	56215102
INSIDE CORNER	16X16	white	50	C	56216162
INSIDE CORNER	25X16	white	30	C	56225162
INSIDE CORNER	30X16	white	35	C	56230162
INSIDE CORNER	25X25	white	30	C	56225252
INSIDE CORNER	40X16	white	30	C	56240162
INSIDE CORNER	40X25	white	30	C	56240252
INSIDE CORNER	40X40	white	30	C	56240402
INSIDE CORNER	60X40	white	10	C	56260402
INSIDE CORNER	60X60	white	10	C	56260602
INSIDE CORNER	80X40	white	8	C	56280402
INSIDE CORNER	80X60	white	8	C	56280602
INSIDE CORNER	100X40	white	6	C	562100402
INSIDE CORNER	100X60	white	6	C	562100602





T- CORNER

Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
T- corner	12x12	white	50	C	56212123
T- corner	15X10	white	50	C	56215103
T- corner	16X16	white	50	C	56216163
T- corner	25X16	white	20	C	56225163
T-corner	30X16	white	40	C	56230163
T- corner	25X25	white	20	C	56225253
T- corner	40X16	white	30	C	56240163
T- corner	40X25	white	30	C	56240253
T- corner	40X40	white	30	C	56240403
T- corner	60X40	white	16	C	56260403
T- corner	60X60	white	16	C	56260603
T- corner	80X40	white	8	C	56280403
T- corner	80X60	white	8	C	56280603
T- corner	100X40	white	8	C	562100403
T- corner	100X60	white	8	C	562100603



L- CORNER

Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
L- corner	12x12	white	50	C	56212124
L- corner	15X10	white	50	C	56215104
L- corner	16X16	white	50	C	56216164
L- corner	25X16	white	30	C	56225164
L-corner	30X16	white	50	C	56230164
L- corner	25X25	white	30	C	56225254
L- corner	40X16	white	30	C	56240164
L- corner	40X25	white	30	C	56240254
L- corner	40X40	white	30	C	56240404
L- corner	60X40	white	16	C	56260404
L- corner	60X60	white	16	C	56260604
L- corner	80X40	white	12	C	56280404
L- corner	80X60	white	12	C	56280604
L- corner	100X40	white	8	C	562100404
L- corner	100X60	white	8	C	562100604



CONNECTOR



Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
Connector	12x12	white	50	C	56212125
Connector	15X10	white	50	C	56215105
Connector	16X16	white	50	C	56216165
Connector	25X16	white	30	C	56225165
Connector	30X16	white	100	C	56230165
Connector	25X25	white	30	C	56225255
Connector	40X16	white	30	C	56240165
Connector	40X25	white	30	C	56240255
Connector	40X40	white	30	C	56240405
Connector	60X40	white	25	C	56260405
Connector	60X60	white	25	C	56260605
Connector	80X40	white	50	C	56280405
Connector	80X60	white	50	C	56280605
Connector	100X40	white	50	C	562100405
Connector	100X60	white	30	C	562100605



END CAP



Type	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
End cap	12x12	white	50	C	56212126
End cap	15X10	white	50	C	56215106
End cap	16X16	white	50	C	56216166
End cap	25X16	white	50	C	56225166
End cap	30X16	white	100	C	56230166
End cap	25X25	white	50	C	56225256
End cap	40X16	white	30	C	56240166
End cap	40X25	white	30	C	56240256
End cap	40X40	white	30	C	56240406
End cap	60X40	white	50	C	56260406
End cap	60X60	white	50	C	56260606
End cap	80X40	white	60	C	56280406
End cap	80X60	white	60	C	56280606
End cap	100X40	white	50	C	562100406
End cap	100X60	white	50	C	562100606



SEPARATOR



Type	Length (m)	Used for cable trunking	Colour	Packing (pcs)	Product category	Catalogue number
SEPARATOR 40	2	100x40	white	40	C	56261111
SEPARATOR 60	2	100x60	white	40	C	56261112



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.



PLASTIC CABLE TRUNKING SELF-ADHESIVE

Type	Size (mm)	Length	Colour	Packing m/pcs	Product category	Catalogue number
Plastic cable trunking self-adhesive	12x12	2m	white	250/125	C	5621212A
	15x10	2m	white	250/125	C	5621510A
	16x16	2m	white	250/125	C	5621616A
	20x10	2m	white	200/100	C	5622010A
	25x16	2m	white	100/50	C	5622516A
	30x16	2m	white	140/70	C	5623016A
	25x25	2m	white	100/50	C	5622525A
	40x16	2m	white	50/25	C	5624016A
	40x25	2m	white	80/40	C	5624025A
	40x40	2m	white	80/40	C	5624040A



PLASTIC CABLE TRUNKING - DARK WALNUT

Type	Size (mm)	Length	Colour	Packing m/pcs	Product category	Catalogue number
Plastic cable trunking dark walnut	12x12	2m	dark walnut	250/125	C	5621212DW
	15x10	2m	dark walnut	250/125	C	5621510DW
	16x16	2m	dark walnut	250/125	C	5621616DW
	25x16	2m	dark walnut	150/75	C	5622516DW
	25x25	2m	dark walnut	100/50	C	5622525DW
	40x25	2m	dark walnut	80/40	C	5624025DW



PLASTIC CABLE TRUNKING - LIGHT BEECH

Type	Size (mm)	Length	Colour	Packing m/pcs	Product category	Catalogue number
Plastic cable trunking light beech	12x12	2m	light beech	250/125	C	5621212LB
	15x10	2m	light beech	250/125	C	5621510LB
	16x16	2m	light beech	250/125	C	5621616LB
	25x16	2m	light beech	150/75	C	5622516LB
	25x25	2m	light beech	100/50	C	5622525LB
	40x25	2m	light beech	80/40	C	5624025LB





PLASTIC CABLE TRUNKING - PEAR

Type	Size (mm)	Length	Colour	Packing m/pcs	Product category	Catalogue number
Plastic cable trunking pear	12x12	2m	pear	250/125	C	5621212P
	15x10	2m	pear	250/125	C	5621510P
	16x16	2m	pear	250/125	C	5621616P
	25x16	2m	pear	150/75	C	5622516P
	25x25	2m	pear	100/50	C	5622525P
	40x25	2m	pear	80/40	C	5624025P



SLOTTED PLASTIC CABLE TRUNKING CT2

Type	Size (mm)	Length	Colour	Packing (pcs)	Product category	Catalogue number
Slotted plastic cable trunking CT2	25x25	2m	grey	196	C	5622525S
	25x40	2m	grey	64	C	5622540S
	40x40	2m	grey	64	C	5624040S
	40x60	2m	grey	60	C	5624060S
	60x40	2m	grey	60	C	5626040S
	60x60	2m	grey	48	C	5626060S
	80x60	2m	grey	40	C	5628060S
	100x60	2m	grey	32	C	56210060S



FLOOR TYPE PLASTIC CABLE TRUNKING CT2

Type	Size (mm)	Length	Colour	Packing (pcs)	Product category	Catalogue number
Floor type plastic cable trunking CT2	75x20	2m	grey	40	C	5627520F
	90x20	2m	grey	20	C	5629020F
	60x15	2m	white	60	C	5626015F/WH
	75x20	2m	white	40	C	5627520F/WH
	90x20	2m	white	20	C	5629020F/WH





AIR CONDITIONING TRUNKING

Type	Size (mm)	Length	Colour	Packing m/pcs	Product category	Catalogue number
PLASTIC TRUNKING	75x60	2	White	15/30	C	5627560



56275608



56275608



56275607



56275607



56275602



56275602



56275601



56275601



56275606



56275606



56275604



56275605

AIR CONDITIONING TRUNKING ACCESSORIES

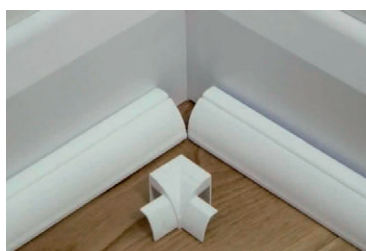
Type	Used for cable trunking	Colour	Packing pcs	Product category	Catalogue number
OUTSIDE CORNER	75x60	White	24	C	56275601
INSIDE CORNER	75x60	White	24	C	56275602
L- CORNER	75x60	White	18	C	56275604
CONNECTOR	75x60	White	40	C	56275605
INTERNAL CAP	75x60	White	30	C	56275606
EXTERNAL CAP	75x60	White	18	C	56275607
WALL PENETRATION	75x60	White		C	56275608
CABLE HOLDER	75x60	White		C	56275609





CORNER TRUNKING

Type	Size (mm)	Length	Colour	Packing m/pcs	Product category	Catalogue number
Plastic cable trunking	23X23	2	White	60/120	C	5622323



CORNER TRUNKING ACCESSORIES

Type	Used for cable trunking	Colour	Packing pcs	Product category	Catalogue number
T- corner	23X23	White	60	C	56223233
L- corner	23X23	White	60	C	56223234
Connector	23X23	White	100	C	56223235
End cap	23X23	White	100	C	56223236



KITCHEN COUNTER CORNER CABLE TRUNKIN

Type	Size	Length (m)	Colour	Packing pcs	Product category	Catalogue number
PLASTIC TRUNKING	25	2	White	30	C	56225K



FLEXIBLE DOUBLECOAT CORRUGATED PIPE

TECHNICAL DATA:

Material- HDPE;
Compression resistance- 450 N/ 5 cm;
Colour- red

Minimum bending radius: 350 mm;
Temperature assembly resistance: -5 - +60 °C;
Halogen free

Type	Inner Diameter Φ (mm)	Outer Diameter Φ (mm)	Packing (m)	Product category	Catalogue number
Flexible doublecoat corrugated pipe	52	63	25	C	M006017



SELF-EXTINGUISHING PLIABLE CONDUITS EC



TECHNICAL DATA:

Material- technopolymer on PVC base, Self extinguishing V0 degree to UL94;
Compression resistance- 320N; Standard- EN 61386-1; EN61386-22; RAL- 7035

Type	Inner Diameter Ø (mm)	Outer Diameter Ø (mm)	Packing (m)	Product category	Catalogue number
Self-extinguishing pliable conduits	10,7	16	100	C	500M16
Self-extinguishing pliable conduits	14,1	20	100	C	500M20
Self-extinguishing pliable conduits	18,2	25	50	C	500M25
Self-extinguishing pliable conduits	24,3	32	25	C	500M32
Self-extinguishing pliable conduits	32,3	40	25	C	500M40
Self-extinguishing pliable conduits with draw tape	10,7	16	100	C	500N16
Self-extinguishing pliable conduits with draw tape	14,1	20	100	C	500N20
Self-extinguishing pliable conduits with draw tape	18,2	25	50	C	500N25
Self-extinguishing pliable conduits with draw tape	24,3	32	25	C	500N32
Self-extinguishing pliable conduits with draw tape	32,3	40	25	C	500N40



SPIRAL FLEXIBLE PVC CONDUITS- UV RAYS RESISTANT EC



TECHNICAL DATA:

Material (spiral+cover)- shock resistance technopolymer on PVC base; Self extinguishing V0 degree to UL94;
Compression resistance- 320N; Instalation temperature: -15/+70°C; Operating temperature: -5/+65°C; Type: UV rays resistance

Type	Inner Diameter Ø (mm)	Outer Diameter Ø (mm)	Packing (m)	Product category	Catalogue number
UV flexible pvc conduit	12	16,2	30	C	500UV12
	14	18,2	30	C	500UV14
	16	20,2	30	C	500UV16
	20	24,2	30	C	500UV20
	25	29,6	30	C	500UV25
	32	37,2	30	C	500UV32



SPIRAL FOR CABLES



Type	Colour	Internal diameter (mm)	External diameter (mm)	Coil length (m)	Product category	Catalogue number
Spiral 6x8mm	transparent	6	8	25	C	500SP6T
Spiral 6x8mm	black	6	8	25	C	500SP6B
Spiral 10x12mm	transparent	10	12	25	C	500SP10T
Spiral 10x12mm	black	10	12	25	C	500SP10B
Spiral 14x16mm	transparent	14	16	20	C	500SP14T
Spiral 14x16mm	black	14	16	20	C	500SP14B



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.



NYLON CABLE DRAW TAPE EC

Type	Diameter Φ (mm)	Length (m)	Colour	Packing (pcs)	Product category	Catalogue number
Nylon cable draw tape	3	5	Transparent	1/340	C	500305
	3	15	Transparent	1/120	C	500315



PVC INSULATED STEEL SPIRALS

TECHNICAL DATA:

Material - Galvanized steel, helically wound, flexible steel conduit with PVC coating

PVC-resistance against corrosion

Colour- black

Operating temperature: -5/+65

Type	Inner Diameter Φ (mm)	Outer Diameter Φ (mm)	Packing (m)	Product category	Catalogue number
PVC insulated steel spirals	11	15,2	50	C	500P11
	14	18,4	50	C	500P14
	16	20,4	50	C	500P16
	18	22,4	50	C	500P18
	26	30,4	25	C	500P26
	37	42,4	25	C	500P37



PVC SELF-EXTINGUISHING RIGID INSULATING CONDUIT EC

Rigid insulating conduit are practical solution of organizing power and communication cables in office and residential buildings. They increase the reliability in operation of the electrical systems. Fast and simple installation. In combination with a wide range of accessories, building irregularities are quickly overcome. Non-flammable material, easy to cut and paint.

TECHNICAL DATA:

Material - shock resistance technopolymer on rigid PVC base

Self extinguishing V0 degree to UL94

Compression resistance- 320N

Standard- EN 61386-1; EN 61386-21

Type	External diameter Ø (mm)	Length (m)	Colour	IP code	Packing (pcs)	Product category	Catalogue number
Plastic cable conduit, with sleeve	16	3	GREY	40	34	C	50016
	20	3	GREY	40	34	C	50020
	25	3	GREY	40	20	C	50025
	32	3	GREY	40	10	C	50032
	40	3	GREY	40	10	C	50040



ACCESSORIES FOR PVC SELF-EXTINGUISHING RIGID INSULATING CONDUITS AND FLEXIBLE SPIRAL CONDUITS, IP 65 EC

TECHNICAL DATA:

Material- shock resistant technopolymer on PVC base
Self-extinguishing V0 degree to UL94
Glow wire test: up to 960°C
O-ring to compensate the conduit tolerances
Standard- EN 61386-1; EN61386-21
RAL- 7035



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC bend flexible	16	65	GREY	50/200	C	500FB16
	20	65	GREY	50/200	C	500FB20
	25	65	GREY	35/140	C	500FB25
	32	65	GREY	20/80	C	500FB32



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC bend 90°	16	65	GREY	100/1000	C	500BB16
	20	65	GREY	50/600	C	500BB20
	25	65	GREY	25/300	C	500BB25
	32	65	GREY	100	C	500BB32
	40	65	GREY	100	C	500BB40





Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
Conduit-conduit PVC joint	16	65	GREY	10/350	C	500CM16
	20	65	GREY	10/350	C	500CM20
	25	65	GREY	10/200	C	500CM25
	32	65	GREY	10/100	C	500CM32
	40	65	GREY	5/80	C	500CM40



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
Conduit-box PVC joint	16	65	GREY	10/350	C	500CB16
	20	65	GREY	10/350	C	500CB20
	25	65	GREY	10/200	C	500CB25
	32	65	GREY	10/100	C	500CB32
	40	65	GREY	5/80	C	500CB40



Type	Conduit diameter (mm)	Flexible spiral diameter (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC rigid conduit - flexible spiral conduits joint	16	12	65	GREY	10/350	C	500DD16
	20	16	65	GREY	10/350	C	500DD20
	25	20	65	GREY	10/200	C	500DD25
	32	25	65	GREY	10/100	C	500DD32
	40	32	65	GREY	5/100	C	500DD40



ACCESSORIES FOR PVC SELF-EXTINGUISHING RIGID INSULATING CONDUITS AND FLEXIBLE SPIRAL CONDUITS, IP 40 EC

TECHNICAL DATA:

Material- shock resistant technopolymer on PVC base
Self-extinguishing V0 degree to UL94
Glow wire test: up to 960°C
Standard- EN 61386-1; EN61386-21
RAL- 7035



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC bend flexible	16	44	GREY	50/200	C	500FK16
	20	44	GREY	50/200	C	500FK20
	25	44	GREY	35/140	C	500FK25
	32	44	GREY	20/80	C	500FK32



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC bend 90°	16	40	GREY	100/1000	C	500BK16
	20	40	GREY	50/600	C	500BK20
	25	40	GREY	25/300	C	500BK25
	32	40	GREY	100	C	500BK32
	40	40	GREY	100	C	500BK40



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
Plastic bend small 90°	16	40	GREY	100/400	C	500SK16
	20	40	GREY	100/300	C	500SK20
	25	40	GREY	100/200	C	500SK25
	32	40	GREY	50/150	C	500SK32



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC T-joint	16	40	GREY	100/300	C	500T16
	20	40	GREY	100/200	C	500T20
	25	40	GREY	50/100	C	500T25
	32	40	GREY	50/100	C	500T32



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.



Type	Used for cable conduit ϕ (mm)	IP code	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC coupling	16	40	GREY	100/1200	C	500C16
	20	40	GREY	100/800	C	500C20
	25	40	GREY	50/500	C	500C25
	32	40	GREY	25/250	C	500C32
	40	40	GREY	25/150	C	500C40



Type	Used for cable conduit ϕ (mm)	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC conduit clips	16	GREY	100/1500	C	500CC16
	20	GREY	100/1000	C	500CC20
	25	GREY	100/1000	C	500CC25
	32	GREY	50/800	C	500CC32
	40	GREY	50/400	C	500CC40



Type	Used for cable conduit ϕ (mm)	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC conduit clips with plug and steel screw	16	GREY	100/1000	C	500CS16
	20	GREY	100/1000	C	500CS20
	25	GREY	100/800	C	500CS25
	32	GREY	50/400	C	500CS32



Type	Used for cable conduit ϕ (mm)	Colour	Packing/Box (pcs)	Product category	Catalogue number
PVC collar conduit clips	16	GREY	100/1000	C	500CO16
	20	GREY	100/1000	C	500CO20
	25	GREY	100/800	C	500CO25
	32	GREY	50/500	C	500CO32



Type	Length (mm)	Colour	Packing	Product category	Catalogue number
PVC modular fixing guide for clips	200	GREY	400	C	500BC



METAL CABLE TRAYS AND ACCESSORIES

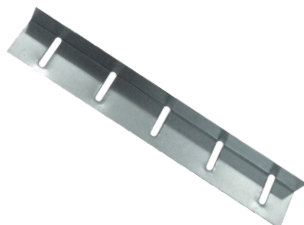
The universal cable support systems are used for construction of cable link in closed production premises for direct mounting on even vertical surfaces. They are perforated metal grates and accessories with standard lengths and sizes. They allow quick construction of cable systems with many angles and derivations.



Type	Size (mm)	Thickness	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
CT1 UT CABLE TRAY	40x50	0,8	2500	1	C	56050825U
CT1 UT CABLE TRAY	40x100	0,8	2500	1	C	56100825U
CT1 UT CABLE TRAY	40x150	0,8	2500	1	C	56150825U
CT1 UT CABLE TRAY	40x200	0,8	2500	1	C	56200825U
CT1 UT CABLE TRAY	40x300	0,8	2500	1	C	56300825U
CT1 UT CABLE TRAY	60x100	0,8	2500	1	C	56100826U
CT1 UT CABLE TRAY	60x200	0,8	2500	1	C	56200826U
CT1 UT CABLE TRAY	60x300	0,8	2500	1	C	56300826U



Type	Size (mm)	Thickness	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
CT1 CABLE TRAY COVER	10x50	0,8	2500	1	C	56050825C
CT1 CABLE TRAY COVER	10x100	0,8	2500	1	C	56100825C
CT1 CABLE TRAY COVER	10x150	0,8	2500	1	C	56150825C
CT1 CABLE TRAY COVER	10x200	0,8	2500	1	C	56200825C
CT1 CABLE TRAY COVER	10x300	0,8	2500	1	C	56300825C

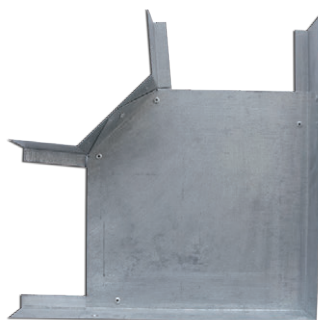


Type	Size (mm)	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
CT1 COUPLER FOR TRAYS WITH THE SAME SIZE	40	250	1	C	56250C

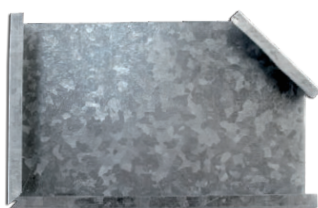


Type	Thickness	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
CT1 HANGING SUPPORT	1,5	100	1	C	56100HSW
CT1 HANGING SUPPORT	1,5	150	1	C	56150HSW
CT1 HANGING SUPPORT	1,5	200	1	C	56200HSW
CT1 HANGING SUPPORT	1,5	300	1	C	56300HSW





Type	Thickness	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
ANGLE 90D	1.5	100X100	1	C	5690100
ANGLE 90D	1.5	150X150	1	C	5690150
ANGLE 90D	1.5	200X200	1	C	5690200
ANGLE 90D	1.5	300X300	1	C	5690300



Type	Metric bolt diameters	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
ANGLE COVER 90D	1.5	100x100	1	C	5690100C
ANGLE COVER 90D	1.5	150x150	1	C	5690150C
ANGLE COVER 90D	1.5	200x200	1	C	5690200C
ANGLE COVER 90D	1.5	300x300	1	C	5690300C



Type	Thickness	Usage	Packing/Box (pcs)	Product category	Catalogue number
CT1 HOLDER	1,5	for cable trays from 50-200mm	1	C	56200HOL
CT1 HOLDER	1,5	for cable trays 300mm	1	C	56300HOL



Type	Thread	Length (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
THREADED HANGING ROD	M6	1000	4.8	100	C	M517079
THREADED HANGING ROD	M8	1000	4.8	50	C	M517080
THREADED HANGING ROD	M10	1000	4.8	40	C	M517078

Application: Suitable for fixing skirting, stud battens to wall and long runs of shelf support





AIR-TERMINATION ROD

Suitable for wind loads according to Eurocode 1: DIN EN 50164 - 2. Last metre is tapered from Ø 16 mm to Ø 10 mm, material: AlMgSi. Matches stand system FangFix. Material: Aluminium

Model	Length (mm)	Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
101 VL2000	2000	10/16	1/10	G	ME014066
101 VL2500	2500	10/16	1/10	G	ME014071
101 VL3000	3000	10/16	1/10	G	ME014063
101 VL3500	3500	10/16	1/10	G	ME014069



STAND FOR AIR-TERMINATION ROD, FANGFIX SYSTEM

System consists of FangFix stone with base and clamp. FangFix clamp made of VA. Lightning current tested with 100 kA (10/350). 16 kg stone with high level of stability. Quick and easy mounting of interception rod using anchors. Concrete, frost-resistant. The FangFix stone can be stacked

Model	Length (mm)	Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
F-FIX-16	373	84/119	1	G	M014102



PROFILE EARTHING ROD WITH CONNECTION LUG

Cross-profile 50 x 50 x 3 mm. With connecting strap. Hot-dip galvanized. 1 through hole with diameter 13 mm. 2 through holes with diameter 11 mm. For the construction of earthing systems e.g. antenna or earthing of building site distribution boards. Material: Steel

Model	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
213 1500 DIN	1500	1	G	M014007



EARTHING ROD WITH STRIP

Cold galvanized: have been coated in zinc to make them corrosion resistant. Material: Steel

Model	Rog length (mm)	Strip length (mm)	Rog thickness (mm)	Strip thickness (mm)	Rog width (mm)	Strip width (mm)	Product category	Catalogue number
50/50/5	1500	1500	5	3	50	30	G	M014048
60/60/6	1500	1500	6	3	60	40	G	M014012





COPPER-BONDED EARTHING ROD, THREADED

It guarantees trouble-free removal of energy up to 50 years since the copper layer does not allow corrosion. Can be extended to the desired length with brass couplers. 99.9% pure electrolytic copper coating 300µm. Rods have a high steel Q 235 core and tip that provide superior strength when driving. Copper coating will not crack when bent or tear when driven.

Model	Length (mm)	Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-ER17	1500	17.2	1/10	G	ME014011



COUPLERS FOR THREADED RODS

To connection two or many threaded copper-bonded ground rods

Model	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-CTR	68	1	G	ME014012



DRIVING STUD FOR COPPER-BONDED THREADED RODS

Material: Tempered steel.

Depending on the hardness of the soil, usually 1pc. enough for an object.

Model	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-DS	58	1	G	ME014013



CONNECTORS EARTHING ROD TO STRIP / CONDUCTOR

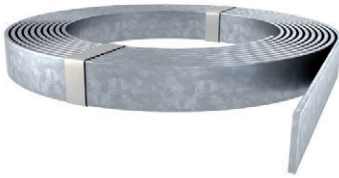
Material: stainless steel 304

Conductor size: 50mm² stranded

Strip size: 40x4mm max

Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-1204	65	65	1/45	G	ME014014





HOT-DIP GALVANIZED STRIP FOR EARTH

Continuously hot dip galvanized Earthing strip, DD11
Zinc coating: 500g/m² = 80mk
For lightning protection, earthing systems and ring equipotential bonding
Material: Steel

Model	Length (mm)	Thickness (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-EP 30x3	48.6	3	30	1	G	ME301089
EL-EP 40x4	39.6	4	40	1	G	ME301090



COLD GALVANIZED STRIP FOR EARTH

Coated in zinc to make them corrosion resistant
Material: Steel

Model	Length (mm)	Thickness (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
40/4	6	4	40	1	G	M014008



ALUMINIUM ROUND CONDUCTOR

Conductor material: AlMgSi
EL-LP 8 - without isolation
EL-LP 11 - with not flammable halogen free isolation

Model	Length (mm)	Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-LP 8	140	8	1/140	G	ME301092
EL-LP 11	100	11	1/100	G	ME301096



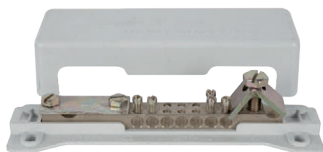
CABLE HOLDER FOR FLAT ROOFS

Fixing the wire on flat roofs
Plastic stabilized PE against UV radiation with inserted concrete block

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL- RCH	144	92	66	1	G	ME301082



EQUIPOTENTIAL BONDING BAR



Equipotential busbar for equipotential bonding to DIN VDE 0100-410/-540 and DIN 62561-15.

Material of bar: Ms. Material of clamps: St galvanized

Connection options: 7 single or multi-wire cables 25mm² or fine-wire cables to 16 mm² (max. D- 7 mm)

1 D8-12mm

1 up to 30x5 / D8-12mm

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-EBR	182	52	42	1	G	ME301084



VARIABLE EARTHING CONNECTOR FOR ALUMINIUM CONDUCTORS



Aluminium- AlCu4MgSi(A)

Suitable for conductors with diameter 8 and 11mm. Type of fastening screw: Hexagonal bolt

Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-V	38	40	1	G	ME301088



SCREWLESS CABLE BRACKET FOR EARTHING CONDUCTORS



Suitable for conductors with diameter 8 mm & 11 mm

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-VA	24.2	22	33.4	1/50	G	ME301006



ATTACHING CLAMP



Attaching the round conductors to metal parts of the premises

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-AC	78	40	36	1/100	G	ME014070





ROOF GUTTER CLAMP

Suitable for all bulge and bead thicknesses
Suitable for conductors with diameter 8 and 11 mm
Material: Steel

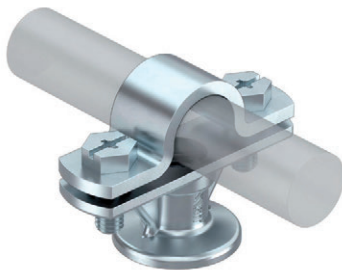
Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-RGC	50	45	1/100	G	ME301008



CROSSBAR FOR EARTHING CONDUCTOR

Suitable for conductors with diameter 8 and 11 mm. Hot-dip galvanized
Material: Steel

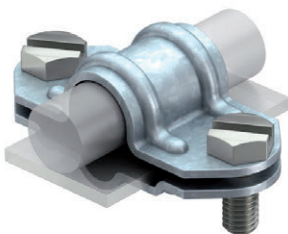
Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
156 K8-10 ST	43	20	1/100	G	M301083



ROD HOLDER

For interception and earth entry rods 101 VL. Installed with crossbar and hexagonal bolts M6 x 16.
With female thread M8 or through hole with D- 7 mm
Material: Die-cast zinc, Galvanized

Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
113 Z-16	56	20	1/10	G	M014014

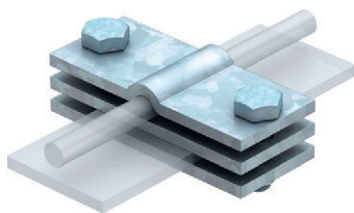


BRIDGE CONNECTOR FOR ROD HOLDER

For fitting round conductors with D 8 and 10 mm to earthing rods or flat strip 30x3.5. Including 2 hexagonal bolts M8 x 20 high-grade stainless steel (V2A). Conforms to the requirements according to VDE 0185-305 (IEC 62305)
Material: Steel, Hot-dip Galvanized

Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
226 8-10	70	30	1/20	G	M014054





EARTH CONNECTION TERMINAL FOR CONDUCTOR TO STRIP

For round conductor and flat strips. Suitable for cable 50 mm² and strips with width 40 mm.
With 2 hexagonal bolts M6 x 20 mm
Material: Steel, Hot-dip galvanized

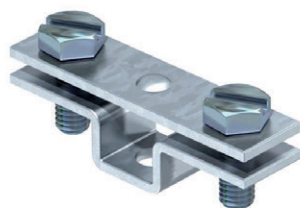
Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
937 50	60	25	1/10	G	M031239



CROSS-CONNECTORS FOR STRIPS AND CONDUCTORS

Material: stainless steel 304
Conductor size: 50mm² stranded
Strip size: 40x4mm max

Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
EL-1203	65	65	1/45	G	ME301087



SPACER CLIP FOR STRIPS

Suitable for strips with width 40 mm
With thread M6 and 2 hexagonal bolts M6 x 16 (F)
Hot-dip galvanized
Material: Steel

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
831 40 M6	65	14	14	1/10	G	M301059



BRIDGE CONNECTOR FOR ROD HOLDER

With 1 attaching hole with D- 11 mm
With 2 x 4 mounting hole with D- 5.2 mm
With 2 x 2 mounting hole with D- 6.9 mm
Material: Aluminium

Model	Length (mm)	Width (mm)	Packing/Box (pcs)	Product category	Catalogue number
288 DIN	170	30	1/20	G	M014017



INSPECTION DOOR



Lightweight design for flush-mounted separation points

Claw length approx. 80 mm

Strip galvanized

Material: Steel

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
5800 VZ	180	13.5	230	1	G	M500684



FLUSH MOUNTING JUNCTION BOX EC350 SERIES



TECHNICAL DATA:

Rated voltage: up to 1000V

Box material: Shock resistant technopolymer

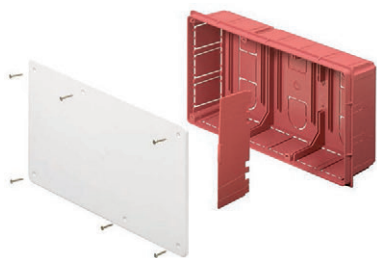
Screw material: Anticorrosive galvanized steel

For quick and easy cables or conduits inlet- Side are pre-cutting

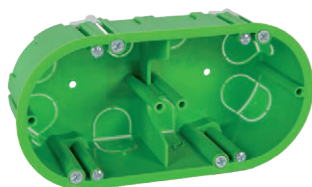
By the separator it is possible to divide the box into separate sections for different circuits

IP code: IP40

Type	Description	Box dimensions (mm)			Packing / Box	Product category	Catalogue number
		L	H	W			
EC350C4	Junction box	152	100	70	1/80	C	1927410
EC350C6	Junction box	196	152	70	1/40	C	1927411
EC350C7	Junction box	294	152	70	1/28	C	1927412
EC350C8	Junction box	392	152	70	1/20	C	1927413
EC350S	Separator				10/100	C	1927415



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.



CONSOLE BOX FOR PLASTERBOARD

Type	Packing (pcs)	Product category	Catalogue number
Single	240	C	19274
Double	120	C	19275
Triple	60	C	19276



UNIVERSAL CONSOLE BOX-FLUSH MOUNTING

Type	d (mm)	Packing (pcs)	Product category	Catalogue number
Console box- Ø65	65	300	C	1927302



CONSOLE BOX MULTI

Type	d (mm)	Packing (pcs)	Product category	Catalogue number
Console box multi- Ø65	65	250	C	1927301



CONSOLE FOR BRICK AND CONCRETE ITALIAN TYPE

Type	Packing (pcs)	Product category	Catalogue number
Triple Console box for brick and concrete	10/300	C	24203
Quadruple Console box for brick and concrete	10/200	C	71304
Sixfold Console box for brick and concrete	10/200	C	68206





CONSOLE BOX FOR PLASTERBOARD ITALIAN TYPE

Type	Packing (pcs)	Product category	Catalogue number
Triple Console box for plasterboard	160	C	24205
Quadruple Console box for plasterboard	150	C	24206



CONSOLE BOX FOR PLASTERBOARD ITALIAN TYPE

Type	Packing (pcs)	Product category	Catalogue number
Sixfold Console box for plasterboard	10/160	C	26636



DISTRIBUTION BOXES-SQUARE TYPE

Type	Size			Packing (pcs)	Product category	Catalogue number
	L	W	H			
80/80/50	80	80	50	100	C	1927402
100/100/50 without screws	100	100	50	40	C	1927400



DB FOR PLASTERBOARD-SQUARE TYPE

Type	Size			Packing (pcs)	Product category	Catalogue number
	L	W	H			
Distribution Box 80/80/45	80	80	45	100	C	1927405
Distribution Box 100/100/45	100	100	45	100	C	1927404





DB FOR PLASTERBOARD-ROUND TYPE

Type	d (mm)	Packing (pcs)	Product category	Catalogue number
Distribution Box Ø65	65	240	C	1927403
Distribution Box Ø70	70	200	C	1927407
Distribution Box Ø80	80	100	C	1927409



DISTRIBUTION BOXES - ROUND TYPE

Type	d (mm)	Packing (pcs)	Product category	Catalogue number
Distribution Box Ø70	70	300	C	1927406
Distribution Box Ø80	80	200	C	1927408



CAP WITH FASTENING CLIPS

Type	Suitable for holes with a diameter (mm)	Packing (pcs)	Product category	Catalogue number
Cap with clips	60-90	1/200	C	19277



WATERPROOF JUNCTION BOXES IP44



Plastic junction boxes with different shapes and dimensions. Designed for cable lines extension or tapping at cable installations laying. Made of ABS material with openings for input - output conductors, with rubber gasket to provide the corresponding IP code. Resistant to chemical, thermal and UV rays. Direct wall mounting with screws.

Documentation corresponding to the product:

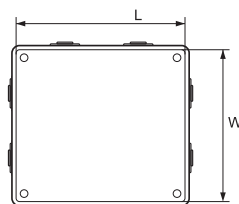
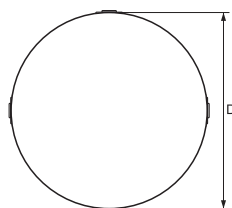
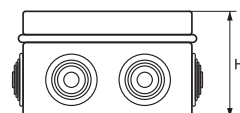
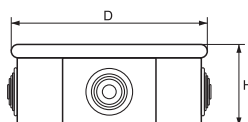
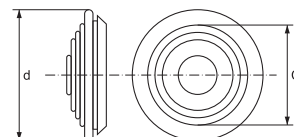
Standard: EN 60670-1

TECHNICAL DATA:

* Rated voltage: up to 1000V

* Material: ABS

* IP code: IP 44



Box type	Box dimensions (mm)				Gasket dimensions (mm)		IP code	Packing / Box	Product category	Catalogue number
	D	L	H	W	d	C				
WB50/50	50	-	-	50	22.5	17	44	320	C	8070
WB80/50	80	-	-	50	22.5	17	44	240	C	8071
WB85/85/50	-	85	85	50	22.5	18.5	44	200	C	8072



WATERPROOF JUNCTION BOXES IP65



Box type	Box dimensions (mm)				Hole/pcs	IP code	Packing / Box	Product category	Catalogue number
	L	H	W	d					
WBG 100/100/70	100	100	70	27	7	65	100	C	8001
WBG 150/110/70	150	110	70	27	10	65	60	C	8002
WBG 150/150/70	150	150	70	27	7	65	60	C	8003
WBG 200/100/70	200	100	70	27	8	65	50	C	8004
WBG 200/155/80	200	155	80	35	10	65	30	C	8005
WBG 200/200/80	200	200	80	35	12	65	30	C	8006
WBG 255/200/80	255	200	80	35	12	65	30	C	8007
WBG 300/250/120	300	250	120	35	12	65	20	C	8008
WBG 400/350/120	400	350	120	35	16	65	5	C	8009



WATERPROOF JUNCTION BOXES IP66 WITH TRANSPARENT COVER



Box type	Box dimensions (mm)			IP code	Packing / Box	Product category	Catalogue number
	L	H	W				
WBT 65/95/55	65	95	55	66	200	C	8010
WBT 100/100/50	100	100	50	66	150	C	8011
WBT 80/110/70	80	110	70	66	100	C	8012
WBT 80/130/85	80	130	85	66	100	C	8013
WBT 80/180/70	80	180	70	66	86	C	8014
WBT 80/250/85	80	250	85	66	60	C	8015
WBT 125/125/75	125	125	75	66	48	C	8016
WBT 125/125/100	125	125	100	66	36	C	8022
WBT 125/175/100	125	175	100	66	40	C	8017
WBT 150/200/100	150	200	100	66	24	C	8018
WBT 150/250/130	150	250	130	66	18	C	8019
WBT 200/200/130	200	200	130	66	27	C	8020
WBT 280/190/130	280	190	130	66	18	C	8021



JUNCTION BOXES B SERIES, IP54



Model	Box dimensions (mm)			Colour	Packing / Box	Product category	Catalogue number
	L	H	W				
B8	80	80	45	Grey	100	C	8030
B10	100	100	45	Grey	100	C	8031



THERMOPLASTIC CABLE JUNCTION BOX, A SERIES, IP54



Model	Box dimensions (mm)			Colour	Packing / Box	Product category	Catalogue number
	L	H	W				
A6	80	43	34	Grey	10/100	G	M008128
A8	75	75	36	Grey	10/150	G	M008129
A11	85	85	40	Grey	10/80	G	M008106
A14	100	100	38	Grey	10/100	G	M008107
A18	125	100	38	Grey	10/80	G	M008091



THERMOPLASTIC CABLE JUNCTION BOXES, T SERIES WITH PLUG-IN SEAL, IP66



Model	Box dimensions (mm)			Colour	Packing / Box	Product category	Catalogue number
	L	H	W				
T25 (round)	80	80	51	Grey	5/125	G	M008140
T40	90	90	52	Grey	5/80	G	M008127
T60	114	114	57	Grey	6/60	G	M008125
T100	150	116	67	Grey	1/40	G	M008123
T160	190	150	77	Grey	1/20	G	M008058
T250	240	190	95	Grey	1/8	G	M008118
T350	285	201	120	Grey	1/5	G	M008141



THERMOPLASTIC CABLE JUNCTION BOXES, T OE SERIES, ENCLOSED, IP66



Model	Box dimensions (mm)			Colour	Packing / Box	Product category	Catalogue number
	L	H	W				
T60 OE	114	114	57	Grey	6/60	G	M008105
T100 OE	150	116	67	Grey	1/40	G	M008055
T160 OE	190	150	77	Grey	1/20	G	M008124
T250 OE	240	190	95	Grey	1/8	G	M008142
T350 OE	285	201	120	Grey	1/5	G	M008143

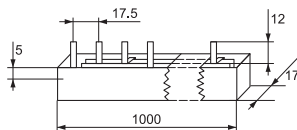
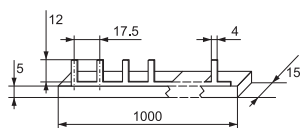
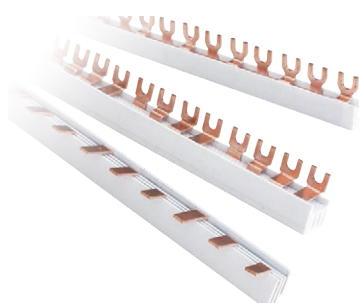
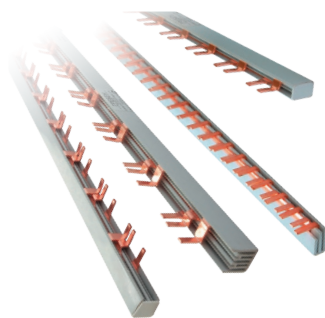


JUNCTION BOX WITH PERFORATION MEMBRANE B 9/T, IP67



Model	Box dimensions (mm)			Colour	Packing / Box	Product category	Catalogue number
	L	H	W				
B 9/T	110	110	50	Grey	5/40	G	M008144





SUPPLY BUSBAR

FUNCTIONS:

- enables the supply of a group of conductors
- provides simultaneous supply
- conducting section – electrotechnical copper
- insulation of the conducting section

TECHNICAL DATA:

- Rated operating voltage: 230/400V
- Isolating voltage: 500V
- Abnormal heating wear resistance and fire of the outer parts: 960°C/3sec.
- Rated current (phase): 63/100A

CONNECTING:

- to the joining terminal of the breaker

Type (copper busbar)	Length (m)	Poles (number)	In with one point of power supply	In with two points of power supply	Packing / Box (pcs)	Product category	Catalogue number
1P 63	1	54	63A	90A	20 / 100	C	14163
1P 100	1	54	100A	120A	20 / 100	C	14190
2P 63	1	28	63A	90A	10 / 50	C	14263
3P 63	1	18	63A	90A	6 / 30	C	14363
3P 100	1	18	100A	120A	5 / 50	C	14390
DP 1N	1	56	63A	90A	10 / 50	C	14463
C100 1P	1	-	125A	150A	20 / 100	C	14190T
C100 2P	1	-	125A	150A	10 / 50	C	14290T
C100 3P	1	-	125A	159A	5 / 20	C	14390T
U 1P 63	1	54	63A	90A	20 / 100	C	14163U
U 2P 63	1	28	63A	90A	10 / 50	C	14263U
U 3P 63	1	18	63A	90A	6 / 30	C	14363U
U 4P 63	1	13	63A	90A	5 / 20	C	14463U



MOUNTING (DIN) RAIL

FUNCTIONS:

- serves for mounting breakers, residual current devices, contactors and other elements
- provides a firm fixation of the elements

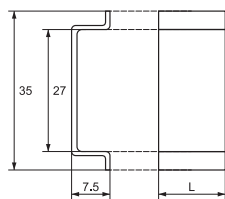
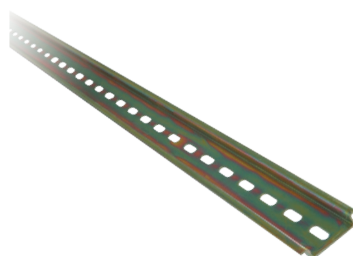
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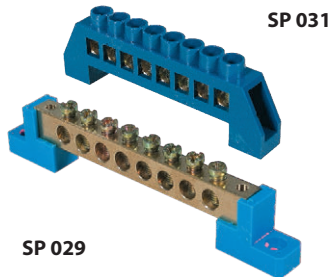
- brass alloy with galvanic cover
- factory drilled mounting openings
- length up to 1m

CONNECTING:

- with bolts or other fixing elements to the mounting surface

Length (m)	Packing / Box (pcs)	Product category	Catalogue number
1m	20 / 100	C	14001





ZERO TERMINALS

Rail type	L (mm)	H (mm)	W (mm)	M	Packing / Box (pcs)	Product category	Catalogue number
SP 029-4	82.9	21.5	12	5x10	10 / 500	C	14204
SP 029-6	100.9	21.5	12	5x10	10 / 800	C	14206
SP 029-8	118.9	21.5	12	5x10	20 / 300	C	14208
SP 029-10	136.9	21.5	12	5x10	20 / 300	C	14210
SP 029-12	182.4	21.5	12	5x10	20 / 250	C	14212
SP 031-4	59.5	31.5	12.4	5x10	5 / 400	C	14304
SP 031-6	76.5	31.5	12.4	5x10	5 / 400	C	14306
SP 031-8	93	31.5	12.4	5x10	5 / 400	C	14308
SP 031-10	111	31.5	12.4	5x10	5 / 400	C	14310
SP 031-12	128	31.5	12.4	5x10	5 / 300	C	14312



ZERO RAILS

They represent a brass rail with rectangular section with factory made openings for the conductors and bolts for clamping of the conductor. They are offered in types with insulated and non-insulated rail. They are used in the electrical distribution boxes for zeroing and earthing.

TECHNICAL DATA:

- Material: brass for the current leading elements
- Insulation material: plastic

- Colour: gray/blue
- Application: general
- Ambient temperature: -40 to +65°C

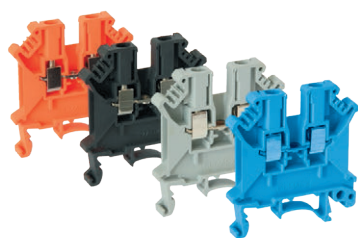
Rail type	Length L (mm)	Height H (mm)	Width W (mm)	Ø D (mm)	Bolt	Number of terminals	Packing / Box (pcs)	Product category	Catalogue number
BRASS	1000	7.8	6	5	M4	54	100	C	14002
ZERO insulated	250	-	-	5	M4	16	200	C	14012



TERMINAL BLOCKS TBH TYPE

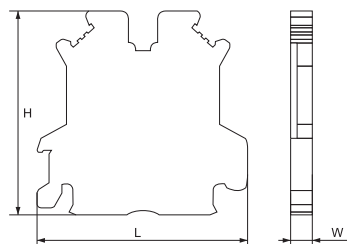
Type	Pieces in a strip	In (A)	Un (V)	Colour	Section of the conductor (mm²)	Packing / Box (pcs)	Product category	Catalogue number
TBH 3A	12	3	660	semitransparent	to 1.5	10 / 1000	C	31003
TBH 6A	12	6	660	semitransparent	to 4	10 / 1000	C	31006
TBH 10A	12	10	660	semitransparent	to 6	10 / 500	C	31010
TBH 15A	12	15	660	white	to 6	10 / 500	C	31015
TBH 20A	12	20	660	white	to 10	10 / 400	C	31020



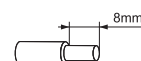


FIXED TERMINAL BLOCKS - LTU2 UK SERIES

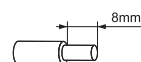
Fixed terminal blocks with universal application into electrical distribution boxes. For DIN-rail mounting. Variety of sizes for optimum using of available space by selection of appropriate terminals for the corresponding conductors. Made of non-flammable insulation polymeric material.



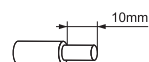
Type	Section of the conductor (mm ²)		Size of the terminal (mm)			In (A)	Un (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
	single-core	multicore	L	H	W						
LTU2UK 3N	0.2-4	0.2-2.5	42.5	47	5.2	32	800	grey	50 / 3000	C	31033
LTU2UK 3N	0.2-4	0.2-2.5	42.5	47	5.2	32	800	red	50 / 3000	C	31032
LTU2UK 3N	0.2-4	0.2-2.5	42.5	47	5.2	32	800	black	50 / 3000	C	31031
LTU2UK 3N	0.2-4	0.2-2.5	42.5	47	5.2	32	800	blue	50 / 3000	C	31035



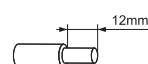
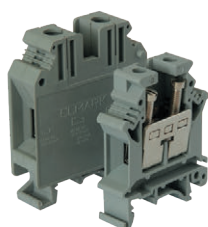
Type	Section of the conductor (mm ²)		Size of the terminal (mm)			In (A)	Un (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
	single-core	multicore	L	H	W						
LTU2UK 5N	0.2-6	0.2-4	42.5	47	6.2	41	800	grey	50 / 2000	C	31053
LTU2UK 5N	0.2-6	0.2-4	42.5	47	6.2	41	800	red	50 / 2000	C	31052
LTU2UK 5N	0.2-6	0.2-4	42.5	47	6.2	41	800	black	50 / 2000	C	31051
LTU2UK 5N	0.2-6	0.2-4	42.5	47	6.2	41	800	blue	50 / 2000	C	31055



Type	Section of the conductor (mm ²)		Size of the terminal (mm)			In (A)	Un (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
	single-core	multicore	L	H	W						
LTU2UK 6N	0.2-10	0.2-6	42.5	47	8.2	57	800	grey	50 / 1000	C	31063
LTU2UK 6N	0.2-10	0.2-6	42.5	47	8.2	57	800	red	50 / 1000	C	31062
LTU2UK 6N	0.2-10	0.2-6	42.5	47	8.2	57	800	black	50 / 1000	C	31061
LTU2UK 6N	0.2-10	0.2-6	42.5	47	8.2	57	800	blue	50 / 1000	C	31065



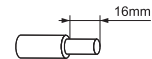
Type	Section of the conductor (mm ²)		Size of the terminal (mm)			In (A)	Un (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
	single-core	multicore	L	H	W						
LTU2UK 10N	0.5-16	0.5-10	42.5	47	10.2	76	800	grey	50 / 1000	C	31103
LTU2UK 10N	0.5-16	0.5-10	42.5	47	10.2	76	800	red	50 / 1000	C	31102
LTU2UK 10N	0.5-16	0.5-10	42.5	47	10.2	76	800	black	50 / 1000	C	31101
LTU2UK 10N	0.5-16	0.5-10	42.5	47	10.2	76	800	blue	50 / 1000	C	31105



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



Type	Section of the conductor (mm ²)		Size of the terminal (mm)			In (A)	Un (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
	single-core	multicore	L	H	W						
LTU2UIK 16	2.5-25	4-16	42.5	47	12.2	101	800	grey	30 / 1200	C	31163
LTU2UIK 35	10-35	10-35	55	62	15.2	125	800	grey	20 / 400	C	31353

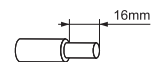


FIXED TERMINAL BLOCKS - JD SERIES

Two-sided insulated fixed terminal blocks designed to connect grounders conductors. Made of non-flammable insulation polymeric material.



Type	Section of the conductor (mm ²)		Size of the terminal (mm)			In (A)	Un (V)	Colour	Packing / Box (pcs)	Product category	Catalogue number
	single-core	multicore	L	H	W						
5JD	0.2-4	0.2-4	42.5	47	6.2	34	800	yellow-green	50 / 1000	C	31054
6JD	0.2-10	0.2-6	42.5	47	8.2	37	800	yellow-green	50 / 1000	C	31064
10JD	0.5-10	0.5-6	42.5	47	8.2	61	800	yellow-green	50 / 1000	C	31104
16JD	2.5-25	2.5-16	42.5	47	12.2	108	800	yellow-green	50 / 600	C	31164
35JD	2.5-35	2.5-35	42.5	47	15	135	800	yellow-green	20 / 400	C	31354



MARKING TAGS - ZB TYPE

Accessories for marking and separation of different electrical circuits, different voltages and fixing of elements for DIN-rail mounting.



Type	Pieces in a strip	Colour	Size (mm)	Packing / Box (pcs)	Product category	Catalogue number
ZB6	20	white	6	100 / 1200	C	31906
ZB8	10	white	8	100 / 1200	C	31908



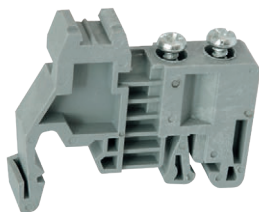
END COVER



Type	Colour	Thickness (mm)	Packing / Box (pcs)	Product category	Catalogue number
EC	grey	8	200 / 6000	C	31901

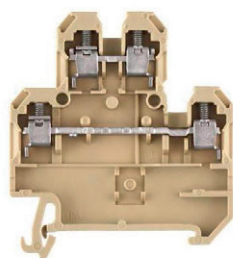


In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



UNIVERSAL END FIXED PIECES E/UK TYPE

Type	Colour	Thickness (mm)	Packing / Box (pcs)	Product category	Catalogue number
E/UK	grey	5	200 / 2400	C	31902



DOUBLE DECK TERMINAL BLOKS

Type	Section of the conductor (mm ²)		Rated current (A)	Rated voltage (V)	Colour	Dimensions (mm)			Packing (pcs.)	Product category	Catalogue number
	single-core	multicore				L	H	W			
DDTB4/5N	0.2-6	0.2-4	32	500	baige	59.9	54	6	50/1000	C	31056D
DDTB4/5N	0.2-6	0.2-4	32	500	grey	59.9	54	6	50/1000	C	31053D
End cover for DDTB4/5N					grey	54	43.5	1.5	200/6000	C	31901D

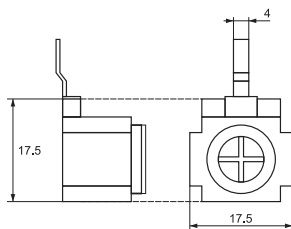


INSULATING MOUNTING TERMINAL - TB25

FUNCTIONS:

- provides a firm joining of rigid or flexible conductors up to 35mm² to power supply busbar
- provides a firm joining of the power supply conductor to the breaker
- provides enough contact surface of the conductor
- Brass alloy with galvanic cover
- Fabric isolated with plastic cover
- Appropriate for joining to copper or aluminum cables
- Rated voltage: 230V
- Rated current: up to 63A
- Isolating voltage: ≥500V
- IP code: IP>20
- Section of power supply conductor: up to 35mm²

Type	Section of the conductor (mm ²)	Rated current In (A)	Packing / Box (pcs)	Product category	Catalogue number
TB 25	2.5 to 35	63	20 / 2000	C	31025





UNIPOLAR DISTRIBUTION TERMINAL BLOCKS FOR COPPER AND ALUMINIUM CONDUCTORS

TECHNICAL DATA:

- Housing material: PA Nylon
- Terminal material: tin plated brass
- Grade of flame retardant: UL94v-0
- Mounting: DIN rail or screw fixing

Type	Current (A)	Quantity cross sections mm ²	Dimensions (mm)			Packing (pcs.)	Product category	Catalogue number
			L	H	W			
PPDTB80	80A	1x 6-16 mm ² 4x 2.5-6 mm ² 2x 2.5-16 mm ²	30	69	49	C		319080
PPDTB125	125A	1x 10-35 mm ² 6x 2.5-16 mm ²	29	77	46	C		319125
PPDTB160	160A	1x 10-70 mm ² 6x 2.5-16 mm ²	29	77	46	C		319160
PPDTB250	255A	1x 35-120 mm ² 8x 2.5-16 mm ² 4x 2.5-10 mm ²	47	96	50	C		319250
PPDTB400	400A	1x 95-185 mm ² 8x 2.5-16 mm ² 4x 2.5-10 mm ²	47	96	50	C		319400



TERMINAL BLOCKS TBF TYPE

Type	Pieces in a terminal	Section of the conductor (mm ²)	Rated current (A)	Rated voltage (V)	Dimensions (mm)			Product category	Catalogue number
					L	H	W		
two terminal block	2	4 mm ²	32	400	12.4	14.5	20.5	C	31021
three terminal block	3	4 mm ²	32	400	17.0	14.5	20.5	C	31022
five terminal block	5	4 mm ²	32	400	26.6	14.5	20.5	C	31023



FAST LIGHTING CABLE CONNECTOR

Type	Pieces in a terminal	Section of the conductor (mm ²)	Rated current (A)	Rated voltage (V)	Dimensions (mm)			Product category	Catalogue number
					L	H	W		
lighting connector	3	1.0-2.5 mm ² /0.5-2.5 mm ²	25	400				C	31024



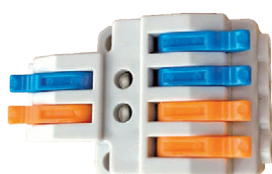
QUICK CONNECTION TERMINAL BLOCK



Type	Pieces in a terminal	Section of the conductor (mm ²)	Rated current (A)	Rated voltage (V)	Dimensions (mm)			Packing (pcs.)	Product category	Catalogue number
					L	W	H			
2P- 2 in/ 2 out	4	0,75mm ² - 4mm ²	32	250	41.4	25.5	14.4	1/100	C	31026
3P- 3 in/ 3 out	6	0,75mm ² - 4mm ²	32	250	41.4	30.5	14.4	1/70	C	31027
5P- 5 in/ 5 out	10	0,75mm ² - 4mm ²	32	250	41.4	40.5	14.4	1/50	C	31028



QUICK CONNECTION TERMINAL BLOCK



Type	Pieces in a terminal	Section of the conductor (mm ²)	Rated current (A)	Rated voltage (V)	Dimensions (mm)			Packing (pcs.)	Product category	Catalogue number
					L	W	H			
2P- 2 in/ 4 out	6	0,75mm ² - 4mm ²	32	250	41.4	25.9	14.55	1/50	C	31029
2P- 2 in/ 6 out	8	0,75mm ² - 4mm ²	32	250	41.4	35.9	14.55	1/50	C	31030



QUICK CONNECTION TERMINAL BLOCK



Type	Pieces in a terminal	Section of the conductor (mm ²)	Rated current (A)	Rated voltage (V)	Dimensions (mm)			Packing (pcs.)	Product category	Catalogue number
					L	W	H			
3P- 3 in/ 6 out	9	0,75mm ² - 4mm ²	32	250	41.4	35.9	14.6	1/50	C	31034
3P- 3 in/ 9 out	12	0,75mm ² - 4mm ²	32	250	41.4	48.5	14.6	1/50	C	31036



MODULE TERMINAL BLOCK FOR QUICK CABLE CONNECTION

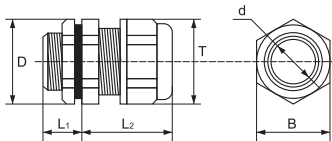


Type	Pieces in a terminal	Section of the conductor (mm ²)	Rated current (A)	Rated voltage (V)	Dimensions (mm)			Packing (pcs.)	Product category	Catalogue number
					L	W	H			
1P- 1 in/ 1 out	2	0,75mm ² - 4mm ²	32	250	39.3	8.5	14.5	1/100	C	31037





Standard: EN 60 423; 48580-81



CABLE GLANDS PG TYPE

Plastic pipes supplied with the corresponding gaskets and nuts. Designed to provide necessary IP code on the points where conductors pass through the walls of the electric distribution boxes. All cable gland elements are made of high quality plastic (PE) and rubber.

- Material: polyethylene (PE)
- Colour: gray
- Application: general
- Ambient temperature: -40 to +65°C
- IP code: IP 68

TECHNICAL DATA:

Type	Overlapping field	T (mm)	B (mm)	d (mm)	D (mm)	L1 (mm)	L2 (mm)	Packing / Box (pcs)	Product category	Catalogue number
PG-7	3.5-6.8	16.3	18	12	6.6	10	22	100 / 4000	C	500070
PG-9	5-8	18.9	21.7	15.5	8.5	10	25	100 / 4000	C	500090
PG-11	6-10	21.7	23.5	18.5	10.4	8.5	29	100 / 3000	C	500110
PG-13.5	7-12	23.6	26.5	20	13	10	29	100 / 2000	C	500135
PG-16	8-14	26.5	29.3	21.5	14	9	29	100 / 2000	C	500160
PG-19	9-17	29	32	23	17	12	29	100 / 2000	C	500190
PG-21	10-18	32.3	35.6	28	19	12	35	100 / 1000	C	500210
PG-25	15-22	32.6	32.6	29.8	24	13	31	100 / 1000	C	500250
PG-29	16-24	41.1	45.4	36	26	12.5	40	50 / 500	C	500290
PG-36	18-28	52	58	46	31.5	12.5	45	50 / 350	C	500360
PG-42	26-36	57.4	61.9	51	37.6	17.5	47	20 / 200	C	500420
PG-48	32-39	65.2	70.7	58	43	21	50	20 / 200	C	500480



CABLE CONNECTOR

The cable connectors are hopeful way for assembling both cables. The high-temperature and water resistant stability assure to the connector assure a high degree of security even in extreme conditions.

Type	Section of the conductor (mm ²)	Length (mm)	Φ (mm)	Cable glands type	IP code	Packing / Box (pcs)	Product category	Catalogue number
CABLE CONNECTOR 11	2x0,5-2,5	78,3	26,2	PG11	68	50	C	31072
CABLE CONNECTOR 16	5x1,5- 2,5	115	26,5	PG16	67	50	C	59245
CABLE CONNECTOR 21	5x4-6	124	33,5	PG21	67	50	C	59246



WATERPROOF TERMINAL BOX

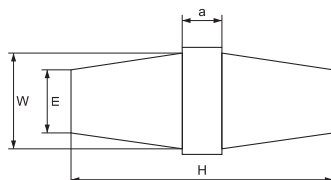
Type	Section of the conductor (mm ²)	Rated current (A)	Voltage (V)	Material	Product category	Catalogue number
TERMINAL BOX IP44	0.5-4.0	6	450	Polycarbonate	C	31071
TERMINAL BOX IP65	0.5-2.5	10	450	Polycarbonate	C	31070



Terminal box IP65



Terminal box IP44



SUPPORT INSULATOR FOR LOW VOLTAGE

Support insulators are used in control and distribution cabinets mounting when bars isolation is required. Provides reliable insulation of live parts.

TECHNICAL SPECIFICATION:

- Rated voltage: 1000V
- Insulating voltage: 5000 V
- Ambient temperature : -40 to +65°C

Type	Impulse voltage kV	Strength	Fasting strength	Bolt	Dimmensions (mm)				Packing (pcs.)	Product category	Catalogue number
					H	W	a	ø			
SM 25	6	500	6	6	25	30	13	23	10 / 600	C	31725
SM 30	8	550	8	8	30	32	10	27	10 / 500	C	31730
SM 35	10	600	10	8	35	32	10	28	10 / 400	C	31735
SM 40	12	650	12	8	40	40	10	33	10 / 240	C	31740
SM 51	15	1000	20	8	51	50	12	28	10 / 240	C	31751
SM 76	25	1500	40	10	76	45	16	34	10 / 120	C	31776



CABLE FIXING CLIPS



Support insulators are used in control and distribution cabinets mounting when bars isolation is required. Provides reliable insulation of live parts.

TECHNICAL SPECIFICATION:

- Rated voltage: 1000V
- Insulating voltage: 5000 V
- Ambient temperature : -40 to +65°C

Type	Diameter Ø (mm)	Packing (pcs)	Packing / Box (pcs)	Product category	Catalogue number
CHR-4	4	100	100/500	C	500004
CHR-5	5	100	100/ 500	C	500005
CHR-6	6	100	100/ 300	C	500006
CHR-7	7	100	100/ 300	C	500007
CHR-8	8	100	100/ 250	C	500008
CHR-9	9	100	100/ 200	C	500009
CHR-10	10	100	100/ 200	C	500010
CHR-12	12	100	100/ 100	C	500012
CHR-14	14	100	100/ 50	C	500014
CHR-16	16	100	100/ 50	C	500016



PVC INSULATING TAPE



Colour	Thickness (mm)	Width (mm)	Length (m)	Packing / Box (pcs)	Product category	Catalogue number
Black	0.15	19	9,14	10 / 200	C	51007
Blue	0.15	19	9,14	10 / 200	C	51009
Red	0.15	19	18,28	10 / 200	C	51002
White	0.15	19	18,28	10 / 200	C	51005
Blue	0.15	19	18,28	10 / 200	C	51006





PVC INSULATING TAPE

Soft, flexible with good adhesiveness and flame retardant. Working temperature: 0-80°C. Electrical strength: 40kV/mm

Colour	Thickness (mm)	Width (mm)	Length (m)	Packing / Box (pcs)	Product category	Catalogue number
Black	0.15	19	10	1/300	C	51011
White	0.15	19	10	1/300	C	51012
Blue	0.15	19	10	1/300	C	51013
Red	0.15	19	10	1/300	C	51014
Yellow / Green	0.15	19	10	1/300	C	51015
Black	0.15	19	20	1/200	C	51021
White	0.15	19	20	1/200	C	51022
Blue	0.15	19	20	1/200	C	51023
Red	0.15	19	20	1/200	C	51024
Yellow / Green	0.15	19	20	1/200	C	51025



PVC INSULATING TAPE 3M TEMFLEX 1500

Colour	Thickness (mm)	Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
Black	0.15	19	20	10/100	G	M151016





BLACK SELF - AMALGAMATING HIGH VOLTAGE TAPE BISHOP 963

69kV | Waterproof | UV-Resistant | Moisture, corrosion and chemical resistance

Colour	Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
Black	19	9	1	G	M051004



ALUMINIUM TAPE



Ideal for temporary exhaust pipe repair heating, ventilation - electrics and electronics insulation and construction industries

Colour	Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
Aluminium	50	10	1	G	M499469



DUCT TAPE



Ideal for temporary exhaust pipe repair heating, ventilation - electrics and electronics insulation and construction industries

Colour	Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
Grey	50	25	1	C	51055
Black	50	25	1	G	M499153



MASKING TAPE



Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
25	50	1	G	M516400
50	50	1	G	M516401



DOUBLE SIDED MOUNTING TAPE



Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
25	5	1	G	M516402
50	25	1	G	M516403



HAZARD TAPE



Width (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
50	100	1	G	M500179



HEAT SHRINKAGE TUBES WITH GLUE GL TYPE

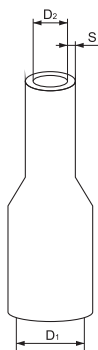


Type	colour	Diameter before shrinking (mm)	Wall thickness (mm)	Shrinkage ratio	Packing (pcs; m)	Product category	Catalogue number
GL	black	D2.4 (≥ 2.4)	0.7 \pm 0.15	3:1	200	C	3010024GL
GL	black	D3.2 (3.5 \pm 0.3)	0.9 \pm 0.15	3:1	200	C	3010032GL
GL	black	D4.8 (5.2 \pm 0.3)	1.0 \pm 0.15	3:1	100	C	3010048GL
GL	black	D6.4 (6.8 \pm 0.4)	1.2 \pm 0.15	3:1	100	C	3010064GL
GL	black	D7.9 (8.4 \pm 0.4)	1.3 \pm 0.15	3:1	100	C	3010079GL
GL	black	D9.5 (9.9 \pm 0.4)	1.4 \pm 0.15	3:1	1,22	C	3010095GL
GL	black	D12.7 (13.2 \pm 0.5)	1.6 \pm 0.20	3:1	1,22	C	3010127GL
GL	black	D15.0 (15.6 \pm 0.5)	1.8 \pm 0.20	3:1	1,22	C	3010150GL
GL	black	D19.1 (19.6 \pm 0.5)	2.0 \pm 0.20	3:1	1,22	C	3010191GL
GL	black	D25.4 (25.4 \pm 0.8)	2.1 \pm 0.20	3:1	1,22	C	3010254GL
GL	black	D30.0 (≥ 30)	2.2 \pm 0.20	3:1	1,22	C	3010300GL
GL	black	D39 (≥ 40)	2.4 \pm 0.20	3:1	1,22	C	3010390GL
GL	black	D50 (≥ 50)	2.7 \pm 0.25	3:1	1,22	C	3010500GL
GL	black	D64 (≥ 60)	3.0 \pm 0.25	3:1	1,22	C	3010640GL





Standard: EN 60 684



HEAT SHRINKAGE TUBES ZDG TYPE

Thin-wall heat shrinkage tubes are used for insulation of cable connection, at conductors repair to protect the cable head from corrosion, for protection of the cable insulation from water and moisture, for restoring the cable insulation integrity, etc. It is a plastic thin wall pipe which at temperature higher than 120°C shrinks its initial diameter to a certain degree. The material has high temperature and UV rays wear resistance. The material represents the so called permanently netted plastic. This material is obtained as the plastic billet is processed with the help of high energy electron rays so that inner molecular bonds between adjacent molecules are formed. After that the pipe is heated to the boiling point, the pipe inflates, so do the inner molecular bonds. Then the pipe is sharply refrigerated and the molecules stay in the condition of inflated bonds for indefinite long time. Heating the pipe repeatedly (after being mounted to the given cable) the crystals melt again but due to

the net structure, they resume the initial pipe diameter and take the form of the cable, pressing it and not allowing the moisture to get under the pipe.

TECHNICAL DATA:

- Material: triple cross - linked polyolefin
- Colours: blue, black, red, yellow, yellow-green, green, white
- Shrinkage ratio: min 2 : 1
- Ambient temperature: -40 to + 100°C
- Shrinkage temperature: min 120°C
- Condition of the material during fire exposure: slight burning
- The material does not emit hazardous substances
- Insulation resistance: 1x 10¹² Ω/cm
- Application: general
- Insulating voltage 1000 V

Type	D1 (mm)	D2 (mm)	S (mm)	Packing / Box (m)	Product category	Catalogue number *
ZDG	1	0.5	0.04	200 / 4000	C	301001X
ZDG	1.5	0.75	0.04	200 / 4000	C	301115X
ZDG	2	1.0	0.05	200 / 4000	C	301002X
ZDG	3	1.5	0.05	200 / 2000	C	301003X
ZDG	4	2.0	0.08	100 / 1700	C	301004X
ZDG	5	2.5	0.08	100 / 1200	C	301005X
ZDG	6	3.0	0.08	100 / 1000	C	301006X
ZDG	7	3.5	0.08	100 / 1000	C	301007X
ZDG	8	4.0	0.08	100 / 1500	C	301008X
ZDG	9	4.5	0.08	100 / 1500	C	301009X
ZDG	10	5.0	0.08	100 / 1500	C	301010X
ZDG	11	5.5	0.08	100 / 1500	C	301011X
ZDG	12	6.0	0.08	100 / 1200	C	301012X
ZDG	13	6.5	0.08	100 / 1200	C	301013X
ZDG	14	7.0	0.08	100 / 1200	C	301014X
ZDG	15	7.5	0.08	100 / 1200	C	301015X
ZDG	16	8.0	0.08	100 / 1200	C	301016X
ZDG	18	9.0	0.08	50 / 600	C	301018X
ZDG	20	10	0.08	50 / 500	C	301020X
ZDG	22	11	0.08	50 / 500	C	301022X
ZDG	25	12.5	0.08	25 / 600	C	301025X
ZDG	28	14	0.08	25 / 300	C	301028X
ZDG	30	15	0.08	25 / 300	C	301030X
ZDG	35	17.5	0.08	25 / 300	C	301035X
ZDG	40	20	0.08	25 / 250	C	301040X
ZDG	50	25	0.08	25 / 200	C	301050X
ZDG	60	30	0.08	25 / 300	C	301060X
ZDG	70	35	0.08	25 / 250	C	301070X
ZDG	80	40	0.08	25 / 100	C	301080X
ZDG	90	45	0.08	25 / 150	C	301090X
ZDG	100	50	0.08	25 / 100	C	301100X
ZDG	120	60	0.08	25 / 200	C	301120X
ZDG	150	75	0.08	25 / 100	C	301150X

Note: * At orders after the catalogue number of the corresponding diameter a letter showing the colour must be added: B – blue; R – red; K – black; G – green; Y – yellow;



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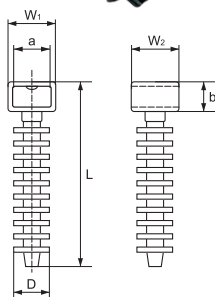
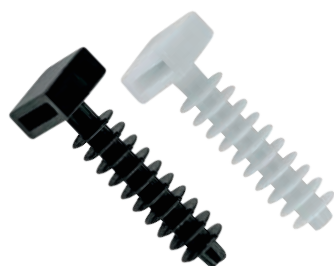
CABLE TAGS – SETS

Type	Section (mm)	Number in a roller	Packing / Box (pcs)	Product category	Catalogue number	Type	Section (mm)	Number in a roller	Packing / Box (pcs)	Product category	Catalogue number
EC-0-0	1.5 - 3.2	1000	100	C	318000	EC-1-0	2.6 - 4.2	1000	150	C	318010
EC-0-1	1.5 - 3.2	1000	100	C	318001	EC-1-1	2.6 - 4.2	1000	150	C	318011
EC-0-2	1.5 - 3.2	1000	100	C	318002	EC-1-2	2.6 - 4.2	1000	150	C	318012
EC-0-3	1.5 - 3.2	1000	100	C	318003	EC-1-3	2.6 - 4.2	1000	150	C	318013
EC-0-4	1.5 - 3.2	1000	100	C	318004	EC-1-4	2.6 - 4.2	1000	150	C	318014
EC-0-5	1.5 - 3.2	1000	100	C	318005	EC-1-5	2.6 - 4.2	1000	150	C	318015
EC-0-6	1.5 - 3.2	1000	100	C	318006	EC-1-6	2.6 - 4.2	1000	150	C	318016
EC-0-7	1.5 - 3.2	1000	100	C	318007	EC-1-7	2.6 - 4.2	1000	150	C	318017
EC-0-8	1.5 - 3.2	1000	100	C	318008	EC-1-8	2.6 - 4.2	1000	150	C	318018
EC-0-9	1.5 - 3.2	1000	100	C	318009	EC-1-9	2.6 - 4.2	1000	150	C	318019
EC-0-a	1.5 - 3.2	1000	100	C	31800A	EC-1-a	2.6 - 4.2	1000	150	C	31801A
EC-0-b	1.5 - 3.2	1000	100	C	31800B	EC-1-b	2.6 - 4.2	1000	150	C	31801B
EC-0-R	1.5 - 3.2	1000	100	C	31800R	EC-1-R	2.6 - 4.2	1000	150	C	31801R
EC-0-S	1.5 - 3.2	1000	100	C	31800S	EC-1-S	2.6 - 4.2	1000	150	C	31801S
EC-0-T	1.5 - 3.2	1000	100	C	31800T	EC-1-T	2.6 - 4.2	1000	150	C	31801T
EC-0-N	1.5 - 3.2	1000	100	C	31800N	EC-1-N	2.6 - 4.2	1000	150	C	31801N
EC-0-P	1.5 - 3.2	1000	100	C	31800P	EC-1-P	2.6 - 4.2	1000	150	C	31801P
EC-0-E	1.5 - 3.2	1000	100	C	31800E	EC-1-E	2.6 - 4.2	1000	150	C	31801E
EC-0-A	1.5 - 3.2	1000	100	C	31800A	EC-1-A	2.6 - 4.2	1000	150	C	31801A
EC-0-B	1.5 - 3.2	1000	100	C	31800B	EC-1-B	2.6 - 4.2	1000	150	C	31801B
EC-0-C	1.5 - 3.2	1000	100	C	31800C	EC-1-C	2.6 - 4.2	1000	150	C	31801C
EC-0-Q	1.5 - 3.2	1000	100	C	31800Q	EC-1-Q	2.6 - 4.2	1000	150	C	31801Q
Type	Section (mm)	Number in a roller	Packing / Box (pcs)	Product category	Catalogue number	Type	Section (mm)	Number in a roller	Packing / Box (pcs)	Product category	Catalogue number
EC-2-0	3.6 - 5.2	500	150	C	318020	EC-3-0	5 - 7.2	250	150	C	318030
EC-2-1	3.6 - 5.2	500	150	C	318021	EC-3-1	5 - 7.2	250	150	C	318031
EC-2-2	3.6 - 5.2	500	150	C	318022	EC-3-2	5 - 7.2	250	150	C	318032
EC-2-3	3.6 - 5.2	500	150	C	318023	EC-3-3	5 - 7.2	250	150	C	318033
EC-2-4	3.6 - 5.2	500	150	C	318024	EC-3-4	5 - 7.2	250	150	C	318034
EC-2-5	3.6 - 5.2	500	150	C	318025	EC-3-5	5 - 7.2	250	150	C	318035
EC-2-6	3.6 - 5.2	500	150	C	318026	EC-3-6	5 - 7.2	250	150	C	318036
EC-2-7	3.6 - 5.2	500	150	C	318027	EC-3-7	5 - 7.2	250	150	C	318037
EC-2-8	3.6 - 5.2	500	150	C	318028	EC-3-8	5 - 7.2	250	150	C	318038
EC-2-9	3.6 - 5.2	500	150	C	318029	EC-3-9	5 - 7.2	250	150	C	318039
EC-2-a	3.6 - 5.2	500	150	C	31802A	EC-3-a	5 - 7.2	250	150	C	31803A
EC-2-b	3.6 - 5.2	500	150	C	31802B	EC-3-b	5 - 7.2	250	150	C	31803B
EC-2-R	3.6 - 5.2	500	150	C	31802R	EC-3-R	5 - 7.2	250	150	C	31803R
EC-2-S	3.6 - 5.2	500	150	C	31802S	EC-3-S	5 - 7.2	250	150	C	31803S
EC-2-T	3.6 - 5.2	500	150	C	31802T	EC-3-T	5 - 7.2	250	150	C	31803T
EC-2-N	3.6 - 5.2	500	150	C	31802N	EC-3-N	5 - 7.2	250	150	C	31803N
EC-2-P	3.6 - 5.2	500	150	C	31802P	EC-3-P	5 - 7.2	250	150	C	31803P
EC-2-E	3.6 - 5.2	500	150	C	31802E	EC-3-E	5 - 7.2	250	150	C	31803E
EC-2-A	3.6 - 5.2	500	150	C	31802A	EC-3-A	5 - 7.2	250	150	C	31803A
EC-2-B	3.6 - 5.2	500	150	C	31802B	EC-3-B	5 - 7.2	250	150	C	31803B
EC-2-C	3.6 - 5.2	500	150	C	31802C	EC-3-C	5 - 7.2	250	150	C	31803C
EC-2-Q	3.6 - 5.2	500	150	C	31802Q	EC-3-Q	5 - 7.2	250	150	C	31803Q



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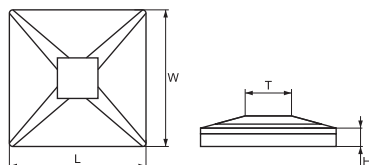
CABLE TIE HOLDER



Type	colour	Bore diameter (mm)	a (mm)	b (mm)	D (mm)	W1 (mm)	W2 (mm)	L (mm)	Packing (pcs)	Product category	Catalogue number
MT-8	black	φ8	9,7	6,3	9,9	12,7	12,6	43	100	C	500046
MT-8	white	φ8	9,7	6,3	9,9	12,7	12,6	43	100	C	500047



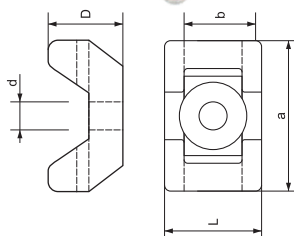
CABLE TIE MOUNTS-ADHESIVE



Type	colour	Dimensions (mm)				Packing (pcs.)	Product category	Catalogue number
		L	W	H	T			
MT-25	white	25	25	7,5	6,2	100	C	500041
MT-25	black	25	25	7,5	6,2	100	C	500042
MT-30	white	30	30	8,7	6,4	100	C	500043
MT-30	black	30	30	8,7	6,4	100	C	500039



CABLE TIE BASES FIXED WITH SCREWS



Type	Color	a (mm)	b (mm)	L (mm)	d (mm)	D (mm)	Packing (pcs)	Product category	Catalogue number
CTH-2C	white	22	16,5	9	5,8	9,5	100	C	500048
CTH-2C	black	22	16,5	9	5,8	9,5	100	C	500038





CABLE TIES - WHITE

Type	Length (mm)	Colour	Width (mm)	Packing (pcs)	Packing / Box (pcs)	Product category	Catalogue number
Cable ties	100	white	2.5	100	10 / 800	C	500100
Cable ties	150	white	2.5	100	10 / 500	C	500152
Cable ties	160	white	2.5	100	10 / 500	C	500162
Cable ties	200	white	2.5	100	10 / 400	C	500202
Cable ties	250	white	3.5	100	10 / 250	C	500253
Cable ties	280	white	3.5	100	10 / 200	C	500283
Cable ties	300	white	3.5	100	10 / 200	C	500303
Cable ties	300	white	4.8	100	10 / 120	C	500304
Cable ties	370	white	3.5	100	10 / 120	C	500373
Cable ties	380	white	4.8	100	10 / 100	C	500384
Cable ties	450	white	4.8	100	10 / 70	C	500454
Cable ties	500	white	7.9	100	5 / 40	C	500507



CABLE TIES - BLACK

Type	Length (mm)	Colour	Width (mm)	Packing (pcs)	Packing / Box (pcs)	Product category	Catalogue number
Cable ties	150	black	2.5	100	10 / 500	C	500151
Cable ties	160	black	2.5	100	10 / 500	C	500161
Cable ties	250	black	3.5	100	10 / 250	C	500251
Cable ties	280	black	3.5	100	10 / 200	C	500281
Cable ties	300	black	3.5	100	10 / 200	C	500301
Cable ties	500	black	7.9	100	40	C	500501



CABLE HOLDER WITH TIE

Type	Color	a (mm)	b (mm)	c (mm)	d (mm)	Packing (pcs)	Product category	Catalogue number
cable holder with tie	black	27	14	140	0,5	20	C	500444
cable holder with tie	grey	27	14	140	0,5	20	C	500445





WALL PLUG WITH CABLE TIE

Type	Color	Bore diameter (mm)	Tie Length (mm)	Packing (pcs)	Product category	Catalogue number
wall plug with cable tie	black	Ø6	95	50	C	500427
wall plug with cable tie	black	Ø8	95	50	C	500425



WIRE GRIP BAND FOR FLAT CABLE

Type	Color	Bore diameter (mm)	width of the head	Packing (pcs)	Product category	Catalogue number
wire grip band for flat cable 1	white	6-7	18	50	C	500432
wire grip band for flat cable 2	white	6-7	12	50	C	500434
wire grip band for flat cable 3	white	6-7	10	50	C	500436

Wire grip band 1 is Suitable for flat cables with section- 2x1.0; 2x1.5mm²

Wire grip band 2 is Suitable for flat cables with section- 2x2.5; 3x1.0

Wire grip band 3 is Suitable for flat cables with section- 2x4; 2x6; 3x1.5; 3x2.5mm²



WIRE GRIP BAND FOR ROUND CABLE

Type	Color	Bore diameter (mm)	width of the head	Packing (pcs)	Product category	Catalogue number
wire grip band for round cable 4	white	6-7	6	50	C	500438
wire grip band for round cable 5	white	6-7	8	50	C	500440
wire grip band for round cable 6	white	6-7	10	50	C	500439
wire grip band for round cable 7	white	6-7	14	50	C	500441
wire grip band for round cable 8	white	8-9	20	50	C	500442

Wire grip band 4 is Suitable for round cables with section- 2x1.0; 2x1.5; 3x1.0; 3x2.5mm²; RG6

Wire grip band 5 is Suitable for round cables with section- 2x0.5; 2x0.75; UTP; FTP

Wire grip band 6 is Suitable for round cables with section- 2x2.5; 3x1.5; 4x1

Wire grip band 7 is Suitable for round cables with section- 3x6; 4x4; 5x2.5

Wire grip band 8 is Suitable for round cables with diameter D20mm



HARDENED STEEL NAILS, SIKO

Model	Length (mm)	Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
Siko 16	16	2	100/2000	G	M499108
Siko 30	30	2	100/1000	G	M499489



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 30 days.



LAMP HOLDER

Type	Lamp	Material	Dimensions (mm)				Packing (pcs.)	Product category	Catalogue number
			Diameter	Width	Height	d			
Lamp holder	GU10	ceramic	27	20	16	3.4	100	C	99292

Length of the cable: 140 mm



LAMP HOLDER

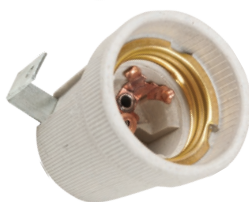
Type	Lamp	Material	Dimensions (mm)				Packing (pcs.)	Product category	Catalogue number
			Diameter	Width	Height	d			
Lamp holder	G 4 / G 5.3 / GY 6.35	ceramic	16	11	10	3.4	200	C	99293

Length of the cable: 90 mm



CERAMIC LAMP HOLDER

Type	Lamp	Material	Dimensions (mm)				Packing (pcs.)	Product category	Catalogue number
			Length	Diameter	Width	d			
Lamp holder	E 14	ceramic	44	33	20	4,3	40/400	C	99296
Lamp holder	E 27	ceramic	48	41	20	4,3	40/400	C	99294
Lamp holder with support	E 27	ceramic	48	41	20	4,3	16/320	C	99295
Lamp holder	E 40	ceramic	72	56	23	4,3	100	C	99298





HANGING LAMP HOLDER

Type	Lamp	Material	Dimensions (mm)		Section of power supply conductors	Product category	Catalogue number
			Diameter	Length			
Screw	E27	bakelite	38.5	55	0.5-2.5mm ²	C	99196



HANGING LAMP HOLDER

Type	Lamp	Material	Dimensions (mm)		Section of power supply conductors	Product category	Catalogue number
			Diameter	Length			
Screw	E27	bakelite	38.5	55	0.5-2.5mm ²	C	99197



HANGING LAMP HOLDER

Type	Lamp	Material	Dimensions (mm)		Section of power supply conductors	Product category	Catalogue number
			Diameter	Length			
Screwless	E14	plastic	44	56,3	0.5-2.5mm ²	C	99194



HANGING LAMP HOLDER

Type	Lamp	Material	Dimensions (mm)		Section of power supply conductors	Product category	Catalogue number
			Diameter	Length			
Screwless	E27	plastic	55	62,5	0.5-2.5mm ²	C	99195





LAMP BASES

Type	Lamp	Material	Rated current	Diameter (mm)	Length (mm)	Section of power supply conductors	Product category	Catalogue number
Oblique	E27	plastic	4A	78	38	0.5-2.5mm ²	C	99200
Straight	E27	plastic	4A	63	40	0.5-2.5mm ²	C	99199



TWIN SOCKET LAMP HOLDER

Type	Lamp	Material	Rated current	Diameter (mm)	Length (mm)	Section of power supply conductors	Product category	Catalogue number
E27-2xE27	E27	Iron + PBT	4A	76	74	0.5-2.5mm ²	C	99198



LAMP HOLDER ADAPTORS TO E27

Type	Voltage	Rated current (A)	Used for holder	Convert to lamp socket	Material	Packing (pcs.)	Product category	Catalogue number
E40/E27	250V	4A	E40	E27	iron/plastic	15/500	C	192168
G24/E27	250V	4A	G24-4 pin	E27	PBT+ copper	25/300	C	192169

Ambient temperature: 85°C



INTERMEDIATE SWITCH

Type	Voltage	Rated current (A)	Colour	Packing (pcs.)	Product category	Catalogue number
IS-RW	250V	6	red & white	1	G	M300018
IS-B	250V	6	black	1	G	M300002





INFRARED MOTION SENSOR ST02A

3+0
standard
+extended
 3 YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	Width	Height			
ST02A	160°	LED - 200W IL - 500W	max.9m	white	80	54	59.9	100	C	99DS100

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3-2000lux (adjustable); Detection motion speed: 0.6 - 1.5m/s; Two wire line; Installation height: 1 - 1.8m



INFRARED MOTION SENSOR ST42

3+0
standard
+extended
 3 YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	d1	d2			
ST42	360°	LED - 300W IL - 1200W	max.6m	white	75,6	76	100	50	C	99DS104

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable); Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m



INFRARED MOTION SENSOR ST41

3+0
standard
+extended
 3 YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	d1	d2			
ST41	360°	LED - 300W IL - 1200W	max.6m	white	75,6	61,5	76	50	C	99DS103

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable); Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m



INFRARED MOTION SENSOR ST40

3+0
standard
+extended
 3 YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	d1	d2			
ST40	360°	LED - 800W IL - 1200W	max.6m	white	50	50	35	50	C	99DS402

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable); Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m





INFRARED MOTION SENSOR ST11

3+0 standard +extended
3 YEAR TOTAL WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	Width	Height			
ST11	180°	LED - 500W IL - 800W	max.12m	white	80	55	65	50	C	99DS403

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable); Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m



INFRARED MOTION SENSOR ST07

3+0 standard +extended
3 YEAR TOTAL WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)		Packing (pcs.)	Product category	Catalogue number
					Height	Diameter			
ST07	380°	LED - 300W IL - 1200W	max.6m	white	58	115	50	C	99DS101
ST07	380°	LED - 300W IL - 1200W	max.6m	black	58	115	50	C	99DS102

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable); Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m



INFRARED MOTION SENSOR ST24

3+0 standard +extended
3 YEAR TOTAL WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	Width	Height			
ST24	120°/360°	LED - 200W IL - 800W	max.6m	white	55.8	34	24.6	100	C	99DS109

Time Delay: 5s, 30s, 1min, 3min, 5min, 8min(choice); Ambient Light: 10LUX/2000LUX (choice)
 Detection Distance: 3m/6m(choice) (<24°C); Detection motion speed: 0.6 - 1.5m/s





MICROWAVE SENSOR ST701F

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
				Length	Width	Height			
ST701F	180°/360°	LED - 200W IL - 500W	white	58	40.5	25.5	100	C	99DS400

Time Delay: 10sec ± 3sec to 12min ± 1min (adjustable); Ambient Light: <3 - 2000LUX (adjustable)
 HF System: 5.8GHz CW radar,ISM band; Detection Distance: Wall: 5 - 15m (adjustable); Ceiling: 2 - 8m(radius), adjustable; Installation Height: Wall:1.5 - 3.5m; Ceiling: 2 - 10m



INFRARED MOTION SENSOR ST15

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	Width	Height			
ST15	180°	LED - 300W IL - 1200W	max.12m	white	80	117,2	31,5	50	C	99DS108

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable)
 Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m IP65



INFRARED MOTION SENSOR ST10A

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Detection range	Rated load	Detection distance	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
					Length	Width	Height			
ST10A	180°	LED - 300W IL - 1200W	5-12m	white	87,4	120	144	50	C	99DS107

Time-Delay: 10sec ± 3sec to 7min ± 2min (adjustable); Ambient light: <3 - 2000lux (adjustable)
 Detection motion speed: 0.6 - 1.5m/s; Installation height: 2.2 - 4m IP44



INFRARED MOTION SENSOR ST05CA

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Rated load	Time-Delay	Ambient Light	Height (mm)	Diameter (mm)	Product category	Catalogue number
ST05CA	LED - 300W, IL - 800W	10s to 15min	<3 - 2000LUX	24.9	102	C	99DS110

Detection Distance: max 6m.





LIGHT-CONTROL SENSOR ST300, IP44

3+0 standard +extended **3** YEAR TOTAL WARRANTY

Type	Rated current	Colour body	Size (mm)		Packing (pcs.)	Product category	Catalogue number
			Length	Height			
ST300	10A	white	35	108,6	50	C	99DS404

Ambient light: 3-500 lux (adjustable) IP44; Timer Built-in from 1-9 hours



LIGHT-CONTROL SENSOR ST306, IP44

3+0 standard +extended **3** YEAR TOTAL WARRANTY

Type	Rated current	Colour body	Size (mm)		Packing (pcs.)	Product category	Catalogue number
			Length	Height			
ST306	6A	black/white	100	200	50	C	99DS405

Ambient light: <5 - 15lux (adjustable) IP44



LIGHT-CONTROL SENSOR ST303, IP44

3+0 standard +extended **3** YEAR TOTAL WARRANTY

Type	Rated current	Colour body	Size (mm)		Packing (pcs.)	Product category	Catalogue number
			Height	Diameter			
ST303	25A	white	70,5	78,3	50	C	99DS300

Ambient light: <5 - 50lux (adjustable) IP44



LIGHT-CONTROL SENSOR ST302, IP44

3+0 standard +extended **3** YEAR TOTAL WARRANTY

Type	Rated current	Colour body	Size (mm)		Packing (pcs.)	Product category	Catalogue number
			Height	Diameter			
ST302	10A	white	76,7	63	100	C	99DS301

Ambient light: <5 - 50lux (adjustable) IP44





LIGHT-CONTROL SENSOR ST308, IP65

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

Type	Rated current	Colour body	Size (mm)			Packing (pcs.)	Product category	Catalogue number
			Length	Width	Height			
ST308	20A	white	35	66	90	100	C	99DS302

Ambient light: <2 - 100lux (adjustable) IP65



TOUCHING SENSOR ST125

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

Type	Rated load	Length (mm)	Width (mm)	Height (mm)	Diameter (mm)	Product category	Catalogue number
ST125	LED - 200W, IL - 500W	89.7	40.2	16.8	-	C	99DS115



ON-OFF MOVING HAND SENSOR ST122

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

Type	Rated current	Size (mm)			Product category	Catalogue number
		Length	Width	Height		
ST122	500W	78.2	35.5	20	C	99DS122





CABLE REEL WITH THERMAL PROTECTION - MAK - 2A



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
H05VV-F	3 x 1.5mm ²	10	4	E	47911



CABLE REEL WITH THERMAL PROTECTION - MAK - 3



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
H05VV-F	3 x 1.5mm ²	20	4	E	47921



CABLE REEL WITH THERMAL PROTECTION - MAK - 4



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
H05VV-F	3 x 1.5mm ²	25	2	E	47927
H05VV-F	3 x 1.5mm ²	40	1	E	47940
H05VV-F	3 x 1.5mm ²	50	2	E	47950



CABLE REEL - HJR TYPE, IP 44



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
HJR - 10AP	H07RN-F	3 x 1.5mm ²	25	2	E	47960
HJR - 10P	H07RN-F	3 x 1.5mm ²	50	1	E	47959



EMPTY CABLE REEL 029A



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Suitable for cable type	Outlets	Product category	Catalogue number
H05VV-F 3G1.5mm ² - max 40m / 3G1.0mm ² - max 50m	4 socket 16A/230V	E	47910





EXTENSION CORDS


3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Cable colour	Product category	Catalogue number
Extension cord	H05VV-F	3G1.5mm ²	10	orange	E	47333
Extension cord	H05VV-F	3G1.5mm ²	15	orange	E	47334

Rated current: 16A, Voltage: 230VAC



MULTIPLUGS 3 HOLES WITH KEY


3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
3 holes	H05VV-F	3G1.5mm ²	2	1/40	E	47332



MULTIPLUGS 4 HOLES WITH KEY


3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
4 holes	H05VV-F	3G1.5mm ²	2	1/40	E	47432



MULTIPLUGS 6 HOLES WITH KEY


3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
6 holes	H05VV-F	3G1.5mm ²	2	1/25	E	47632



MULTIPLUGS 8 HOLES WITH KEY


3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing / Box (pcs)	Product category	Catalogue number
8 holes	H05VV-F	3G1.5mm ²	2	1/25	E	47732



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



MULTIPLUG - HX-3N TYPE



Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
HX-3N	H05VV-F	3 x 1.0mm ²	1.5m	40	E	47031
HX-3N	H05VV-F	3 x 1.5mm ²	3.0m	5 / 40	E	47080
HX-3N	H05VV-F	3 x 1.5mm ²	5.0m	5 / 40	E	47081

Max.3500W,16/250~



MULTIPLUG - HX-4N TYPE



Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
HX-4N	H05VV-F	3 x 1.0mm ²	1.5m	50	E	47041
HX-4N	H05VV-F	3 x 1.5mm ²	3.0m	30	E	47082
HX-4N	H05VV-F	3 x 1.5mm ²	5.0m	25	E	47083

Max.3500W,16/250~



MULTIPLUG - HX-6N TYPE



Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
HX-6N	H05VV-F	3 x 1.0mm ²	1.5m	50	E	47061
HX-6N	H05VV-F	3 x 1.5mm ²	3.0m	40	E	47063
HX-6N	H05VV-F	3 x 1.5mm ²	5.0m	40	E	47065

Max.3500W,16/250~



UNTIL SUPPLY
LAST

MULTIPLUG - ODL, IP44



Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
ODL - PYX - 2E	H07RN-F	3 x 1.5mm ²	1.5m	40	F	47802





MULTIPLUG WITH KEY HKX-3N TYPE



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
HKX-3N	H05VV-F	3 x 1.0mm ²	1.5m	5 / 40	E	47131
HKX-3N	H05VV-F	3 x 1.5mm ²	3.0m	5 / 30	E	47133
HKX-3N	H05VV-F	3 x 1.5mm ²	5.0m	5 / 25	E	47135

Max.3500W,16/250~



MULTIPLUG WITH KEY HKX-4N TYPE



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
HKX-4N	H05VV-F	3 x 1.0mm ²	1.5m	5 / 40	E	47142
HKX-4N	H05VV-F	3 x 1.5mm ²	3.0m	5 / 30	E	47143
HKX-4N	H05VV-F	3 x 1.5mm ²	5.0m	5 / 25	E	47145

Max.3500W,16/250~



MULTIPLUG WITH KEY HKX-6N TYPE



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Type	Cable type	Cable specification	Cable length (m)	Packing (pcs)	Product category	Catalogue number
HKX-6N	H05VV-F	3 x 1.0mm ²	1.5m	5 / 40	E	47162
HKX-6N	H05VV-F	3 x 1.5mm ²	3.0m	5 / 30	E	47163
HKX-6N	H05VV-F	3 x 1.5mm ²	5.0m	5 / 25	E	47165

Max.3500W,16/250~





THREE WAY CLIP MULTIPLUG



Cable type	Cable specification	Cable length (m)	Colour	Material	Product category	Catalogue number
H05VV-F	3 x 1.0mm ²	1.5m	White & Grey	PP+ABS	C	47003



POWER CABLES

Cable type	Cable specification	Cable length (m)	Cable colour	Product category	Catalogue number
H05VV-F	3G1.5mm ²	2	white	E	47001



ADAPTERS

Type	Colour	Rated current in (A)	Rated power in (W)	Packing (pcs)	Product category	Catalogue number
Adapter double	White	16	3500	50	C	192213
Adapter double	Graphite	16	3500	50	C	192212
Adapter double with key	White	16	3500	50	C	192211
Adapter double with key	Graphite	16	3500	50	C	192210
Adapter triple	White	16	3500	40	C	192209
Adapter triple	Graphite	16	3500	40	C	192208
Adapter triple with key	White	16	3500	40	C	192207
Adapter triple with key	Graphite	16	3500	40	C	192206





MULTISOCKET

Type	Colour	Rated current in (A)	Rated power in (W)	Packing (pcs)	Product category	Catalogue number
Multisocket double	black	16	3500	60	C	192216
Multisocket double	white	16	3500	60	C	192217
Multisocket triple	black	16	3500	60	C	192218
Multisocket triple	white	16	3500	60	C	192219



RUBBER MULTISOCKET

Type	Colour	Rated current in (A)	Rated power in (W)	Packing (pcs)	Product category	Catalogue number
Multisocket triple	White	16	3500	20	C	192120/WH
Multisocket triple	Black	16	3500	20	C	192120/BL



RUBBER SCHUKO SOCKETS

Type	Colour	Rated current In (A)	Material	Packing (pcs)	Product category	Catalogue number
Socket	White	16	Rubber	25	C	192119/WH
Socket	Black	16	Rubber	25	C	192119/BL



RUBBER SCHUKO SOCKETS WITH COVER IP44

Type	Colour	Rated current In (A)	Material	Packing (pcs)	Product category	Catalogue number
Socket	Black	16	Rubber	1/30/150	C	192122/BL





RUBBER SCHUKO PLUG

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Plug	16	White	Rubber	25	C	192118/WH
Plug	16	Black	Rubber	25	C	192118/BL
Plug	16	Red	Rubber	25	C	192118/R



ANGLE BAKELITE SCHUKO PLUG

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Plug	16	White	Bakelite	20/100	C	192117/WH
Plug	16	Black	Bakelite	20/100	C	192117/BL



PLUG BAKELITE

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Plug	16	white	bakelite	80	C	19211102
Plug	16	black	bakelite	80	C	19211101



TWO PIN PLUG

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Plug	6	White	PP	100	C	192116/WH
Plug	6	Black	PP	100	C	192116/BL





TWO PIN PLUG WITH EXTRACTION RING

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Plug	10	White	PC	1/500	C	192115/WH
Plug	10	Black	PC	1/500	C	192115/BL



TWO POLE SOCKET WITH HOOK

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Socket	10	Black	PC	1/500	C	192123/BL
Socket	10	White	PC	1/500	C	192123/WH



BRITISH PLUG

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
British plug	13	white	PMMA	1/20	C	192114



FOOT SWITCH

Type	Rated current In (A)	Colour	Material	Packing (pcs)	Product category	Catalogue number
Switch	10	White	PC	1/100	C	192124/WH





OUTSIDE POWER CABLES



Standards:

DIN VDE 0293-308 - Colour coded acc
DIN VDE 0276 part 603 or HD 186
DIN VDE 0295 - Wire class acc

NY Y

Power cable, Cu-conductor, PVC-insulation, PVC-sheathing

5+2
standard
+extended
7 YEAR TOTAL
WARRANTY

NY Y; PP00; PP00; PP00; NY Y; NY Y; CY Y; NY Y; NY Y

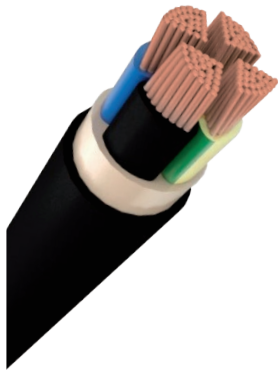
Power cable for construction of underground distribution grids and installations of industrial and public projects, where mechanical damages are not to be expected. Suitable for transmission and distribution of electric power at nominal voltage U_0/U 0,6/1 kV.

TECHNICAL DATA:

- Power cable acc. to DIN VDE 0276 part 603
- Ambient temperature
- fixed installation: -30°C to +50°C
- Temperature of laying: min. -5°C
- Max. operating temperature: +70°C
- Short circuit temperature: +160°C
- (short circuit duration up to 5 sec.)
- Nominal voltage U_0/U 0,6/1 kV
- Test voltage: AC-4 kV/50 Hz

CONSTRUCTION::

- Solid or stranded Cu wires cl. 1 or cl. 2 acc. to DIN VDE 0295
- Insulation: PVC compound
- Inner sheath: filling compound
- Outer sheath: PVC compound
- Outer sheath colour: black
- **re** - round solid
- **rm** - round multi-core
- **sm** - sector multi-core
- **se** - sector solid conductor



Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2x1,5	re	black	12,2	28	192	100	E	833019
2x2,5	re	black	12,9	46	229	100	E	833020
2x4	re	black	14,9	75	315	100	E	833021
2x6	re	black	15,9	112	382	100	E	833022
2x10	re	black	17,5	188	509	1	E	833023
2x16	re	black	19,4	298	676	1	E	833024



Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3x1,5	re	black	12,1	43	201	100	E	833030
3x2,5	re	black	12,9	70	247	100	E	833031
3x4	re	black	15	112	350	100	E	833032
3x6	re	black	16,1	168	435	100	E	833034
3x10	re	black	18	282	606	1	E	833036
3x16	re	black	20,1	447	828	1	E	833038



Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
4x1,5	re	black	12,9	57	232	100	E	833060
4x2,5	re	black	13,8	93	289	100	E	833061
4x4	re	black	16,2	149	419	100	E	833062
4x6	re	black	17,4	223	525	100	E	833063
4x10	re	black	19,5	376	741	1	E	833064
4x16	re	black	21,8	595	1024	1	E	833065



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Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
5x1,5	re	black	13,7	71	272	100	E	833077
5x2,5	re	black	14,8	116	341	100	E	833078
5x4	re	black	17,4	187	494	100	E	833079
5x6	re	black	19	279	635	100	E	833080
5x10	re	black	21,6	470	911	1	E	833081
5x16	re	black	24,1	744	1262	1	E	833082

**Standards:**

BDS 904-84 - according to construction
IEC60332-1 - according to flame
retardant

CBT-C

5+2
standard
+extended
7 YEAR TOTAL
WARRANTY

POWER CABLE WITH SOLID OR STRANDED CU WIRES, PVC INSULATION AND SHEATHING

CBT-c; CBT-c; CBT-c; CBT-c; CBT-c; CBT-c; CBT-c; CBT-c; CBT-c; CBT-c

A cable with solid or stranded CU wires, resistant to the sun radiance and atmospheric influences. It is suitable for spread and transfer of electrical energy if it is installed steady outside or in indoor spaces -cable trunking, electrical cable conduit, cable trays, directly into tunnels, earthworks, pits and etc.

TECHNICAL DATA:

- Nominal voltage U₀- 0.6kV
- Nominal voltage U- 1kV
- Ambient temperature- from -30°C to +50°C
- Max. operating temperature- +70°C
- Temperature of laying- ≥-5°C
- Conductor material- Copper (Cu)
- Conductors insulation - PVC compound

- Outer sheath material-filling sheath and PVC compound
- Conductor construction- solid or stranded CU wires, class 1 or class 2
- **re** - round solid
- **rm** - round multi-core
- **sm** - sector multi-core
- **se** - sector solid conductor

Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2X1	re	black	9.5	20	100	100	E	817020
2X1.5	re	black	10.0	28	120	100	E	817021
2X2.5	re	black	10.6	46	150	100	E	817022
2X4	re	black	12.5	73	210	100	E	817023
2X6	re	black	13.3	110	260	100	E	817024
2X10	re	black	15.2	182	370	1	E	817025
2X16	rm	black	18	305	560	1	E	817026





Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3X1	re	black	9.7	28	120	100	E	817036
3X1.5	re	black	10.2	42	140	100	E	817037
3X2.5	re	black	11.0	69	180	100	E	817039
3X4	re	black	13.0	110	260	100	E	817041
3X6	re	black	14.0	165	340	100	E	817043
3X10	re	black	16.0	275	480	1	E	817045
3X16	rm	black	19.5	450	695	1	E	817047



Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3X4+2.5	re/re	black	13.4	132	293	100	E	817042
3X6+4	re/re	black	14.4	202	380	100	E	817044
3X10+6	re/re	black	16.7	330	545	1	E	817046
3X16+10	rm/re	black	20.2	540	870	1	E	817048

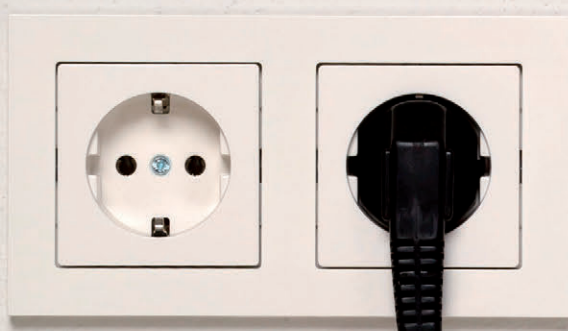


Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
4X1	re	black	10.4	37	140	100	E	817067
4X1.5	re	black	11.0	55	165	100	E	817068
4X2.5	re	black	11.9	91	215	100	E	817069
4X4	re	black	14.1	146	315	100	E	817070
4X6	re	black	15.4	220	410	100	E	817071
4X10	re	black	17.4	365	595	1	E	817072
4X16	rm	black	20.6	585	950	1	E	817073



Cross section (n x mm ²)	Wires shape	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
5X1	re	black	11.2	45	160	100	E	817083
5X1.5	re	black	11.8	69	195	100	E	817084
5X2.5	re	black	12.8	114	260	100	E	817085
5X4	re	black	15.5	182	380	100	E	817086
5X6	re	black	16.8	275	500	100	E	817087
5x10	re	black	19,2	455	735	1	E	817088
5x16	re	black	23,2	745	1150	1	E	817089





INSIDE POWER CABLES

Standards:

Flat conductor acc. to BDS IEC 60227-5
Flexible Cu-wires, cl. 6 acc. to IEC 60228

H03VH-H

Flat conductor, flexible Cu-wires, PVC-insulation



ШВПЛ-А; PL; H03VH-H; P/L; H03VH-H; H03VH-H; H03VH-H; RVV; H03VH-H

Designed for connection of electrical appliances to the electrical grid, for connection of mobile users, devices and appliances.

TECHNICAL DATA:

- Ambient temperature: -40°C to +50°C
- Max. operating temperature: +70°C
- Nominal voltage U₀/U: 300/300 V
- Test voltage: 2000 V

CONSTRUCTION:

- Flexible Cu-wires, cl. 6 acc. to IEC 60228
- Flat conductor acc. to BDS IEC 60227-5
- Insulation: PVC compound
- Insulation colour: white or black-red

Cross section (n x mm ²)	Colour	Thickness (mm)	Width (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2x0,50	white or black-red	6,0	3,0	9	25	100	E	820001
2x0,75	white or black-red	6,4	3,2	14	30	100	E	820002
2x1	white or black-red	6,8	3,4	19,2	31	100	E	820017
2x1,50	white or black-red	7,6	4,0	28,8	38	100	E	820018

**Standards:**

Conductor acc. to HD 21,5 S3
Flexible Cu-wires, cl. 5 acc. to IEC 60228

H03VV-F

Conductor with flexible Cu-wires, PVC insulation and sheath



ШВПЛ-Б; PP/L; PP/L; PP/L; H03VV-F; H03VV-F; MYUP; H03VV-F; H03VV-F

Conductor with parallel or stranded in a bundle insulated cores, designed for connection of electrical appliances to the electrical grid, for connection of mobile users, devices and appliances.

TECHNICAL DATA:

- Variant of the conductor: H03VVH2-F - flat type
- Ambient temperature: -30°C to +50°C
- Max. operating temperature: +70°C
- Nominal voltage U₀/U: 300/300 V
- Test voltage: 2000 V

CONSTRUCTION:

- Flexible Cu-wires, cl. 5 acc. to IEC 60228
- Insulation: PVC compound
- Sheafing: PVC compound
- Outer sheath colour: white

Type (flat)	Cross section (n x mm ²)	Colour	Thickness (mm)	Width (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
H03VVH2-F	2x0,5	white	6,0	3,6	10,0	30	100	E	820004
H03VVH2-F	2x0,75	white	6,4	3,9	14,5	39	100	E	820006



Type (round)	Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
H03VV-F	2X0,5	white	9.5	100	25	100	E	820003
H03VV-F	3X0,5	white	10.0	120	30	100	E	820007



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Standards:

Flexible cable acc. to HD 21.5 S3, DIN VDE 0281 part 5
Flexible Cu-wires, cl. 5 acc. to DIN VDE 0295, IEC 60228
Colour coding: acc. to DIN VDE 0293-308

H05VV-F

Conductor with flexible Cu-wires, PVC insulation and sheath

5+2
standard
+extended
7 YEAR TOTAL
WARRANTY

ШБПГ; PP/J; PP/J; PP/J; H05VV-F; H05VV-F; MYM; H05VV-F; H05VV-F

Conductor with parallel or stranded in a bundle insulated cores, designed for connection of electrical appliances to the electric grid, for connection of mobile users, devices and appliances.

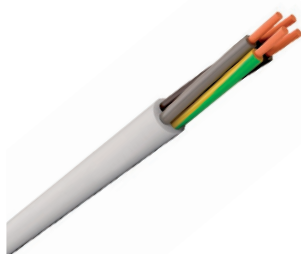
TECHNICAL DATA:

- Variant of the conductor: H05VH2-F - flat type
- Ambient temperature: -30°C to +50°C
- Max. operating temperature: +70°C
- Nominal voltage Uo/U: 300/500 V

- Test voltage: 2000 V

CONSTRUCTION:

- Flexible Cu-wires, cl. 5 acc. to DIN VDE 0295, IEC 60228
- Insulation/outer sheath: PVC compound;
- Outer sheath colour: white



Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2 x 0,75	white	7,6	14,0	62	100	E	821001
2 x 1	white	8,0	19,5	71	100	E	821002
2 x 1,5	white	9,0	28,0	94	100	E	821003
2 x 2,5	white	11,0	47,0	114	100	E	821004
2 X 4	white	12,0	75,0	197	100	E	821005



Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3 x 0,75	white	8,0	21,5	74	100	E	821008
3 x 1	white	8,4	29,0	85	100	E	821009
3 x 1,5	white	9,8	42,0	120	100	E	821010
3 x 2,5	white	12,0	70,0	182	100	E	821011
3 x 4	white	13,0	114,0	252	100	E	821012



Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
4 x 0,75	white	8,6	29,0	92	100	E	821016
4 x 1	white	9,4	38,5	109	100	E	821017
4 x 1,5	white	11,0	56,0	151	100	E	821018
4 x 2,5	white	13,0	93,5	225	100	E	821019
4 x 4	white	14,0	151,0	315	100	E	821020



Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
5 x 0,75	white	9,6	36,0	115	100	E	821024
5 x 1	white	10,0	48,0	132	100	E	821025
5 x 1,5	white	12,0	70,0	188	100	E	821026
5 x 2,5	white	14,0	117,0	280	100	E	821027
5 X 4	white	15,5	189,0	395	100	E	821028



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 30 days.



INSTALLATION CONDUCTORS

Standards:

Conductor acc. to HD 21.3 S3, DIN VDE 0281 part 3
Solid Cu wires cl. 1 acc. to DIN VDE 0295, IEC 60228

H05V-U, H07V-U

Conductor, Cu-wires, PVC-insulation



ПБ-A1; P; P; P; P; P; H05V-U, H07V-U; H05V-U, H07V-U (CY); H05V-U, H07V-U (FY);
 H05V-U, H07V-U; H05V-U, H07V-U

For fixed installation in lighting networks, electric power installations, wiring of electrical switchboards, machines and equipment.

TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. -5°C
- Max. operating temperature: +70°C
- Nominal voltage U₀/U:
 - H05V-U 300/500 V
 - H07V-U 450/750 V
- Test voltage:
 - H05V-U 2000 V
 - H07V-U 2500 V

CONSTRUCTION:

- Solid Cu wires cl. 1 acc. to DIN VDE 0295, IEC 60228
- Insulation: PVC compound
- Insulation colour:
 - yellow-green: available cross sections from 0.5 to 10 (mm²)
 - white: available cross sections from 0.5 to 4 (mm²)
 - black: available cross sections from 0.5 to 10 (mm²)
 - blue: available cross sections from 0.5 to 10 (mm²)
 - brown: available cross sections from 0.5 to 10 (mm²)
 - red: available cross sections from 0.5 to 10 (mm²)

Type	Cross section (n x mm ²)	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
H05V-U	0,5	2,4	4,5	9	100	E	822001
H05V-U	0,75	2,6	7,0	12	100	E	822002
H05V-U	1	2,8	9,0	15	100	E	822003

Note: At orders of the desired colour, must be added after the catalogue number:

BL – blue; R – red; B – black; W – white; YG – yellow green; BR – brown



Type	Cross section (n x mm ²)	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
H07V-U	1,5	3,3	13,5	21	100	E	822004
H07V-U	2,5	3,9	22,0	33	100	E	822005
H07V-U	4	4,4	35,0	48	100	E	822006
H07V-U	6	4,6	52,5	68	100	E	822007
H07V-U	10	6,4	87,5	113	100	E	822008

Note: At orders of the desired colour, must be added after the catalogue number:

BL – blue; R – red; B – black; W – white; YG – yellow green; BR – brown



Standards:

PVC conductor acc. to HD 21.3 S3, DIN VDE 0281 part 3
Flexible Cu wires cl. 5 acc. to DIN VDE 0295, IEC 60228

H05V-K, H07V-K

Conductor, Cu-wires, PVC-insulation

5+2
standard
+extended
7 YEAR TOTAL
WARRANTY

ПБ-A2; PF; P/F; P/F; H05V-K, H07V-K; H05V-K, H07V-K (CYA); MYF;
 H05V-K, H07V-K; H05V-K, H07V-K

For fixed installation wiring of electrical switchboards, machines and equipment, where small bending radius is required.

TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. -5°C
- Max. operating temperature: +70°C
- Nominal voltage U₀/U:
 - H05V-K 300/500 V
 - H07V-K 450/750 V
- Test voltage:
 - H05V-K 2000 V
 - H07V-K 2500 V

CONSTRUCTION:

- Flexible Cu wires cl. 5 acc. to DIN VDE 0295, IEC 60228
- Insulation: PVC compound
- Insulation colour:
 - yellow-green: available cross sections from 0.5 to 25 (mm²)
 - white: available cross sections from 0.5 to 4 (mm²)
 - black: available cross sections from 0.5 to 25 (mm²)
 - blue: available cross sections from 0.5 to 25 (mm²)
 - brown: available cross sections from 0.5 to 10 (mm²)
 - red: available cross sections from 0.5 to 25 (mm²)

Type	Cross section (n x mm ²)	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
H05V-K	0,5	2,6	5,0	10	100	E	823002
H05V-K	0,75	2,8	7,0	13	100	E	823003
H05V-K	1	3,0	9,5	16	100	E	823004

Note: At orders of the desired colour, must be added after the catalogue number:
BL – blue; R – red; B – black; W – white; YG – yellow green; BR – brown



Type	Cross section (n x mm ²)	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
H07V-K	1,5	3,5	14,0	23	100	E	823005
H07V-K	2,5	4,2	23,0	36	100	E	823006
H07V-K	4	4,8	36,5	52	100	E	823007
H07V-K	6	6,3	57,0	74	100	E	823008
H07V-K	10	7,6	96,0	131	100	E	823009
H07V-K	16	8,8	151,0	195	100	E	823010
H07V-K	25	11,0	235,0	300	100	E	823011

Note: At orders of the desired colour, must be added after the catalogue number:
BL – blue; R – red; B – black; W – white; YG – yellow green; BR – brown



Standards:

Flat conductor acc. to BDS 4305-90
Solid Cu wires cl. 1 acc. to BDS 904-84

NYIFY-O/J

Flat installation conductor, Cu-wires, PVC-insulation, PVC-sheath



ПBB-MБ1; PG; PP/R; PP/R; NYIFY-O/J; NYIFY-O/J; NYIFY-O/J; NYIFY-O/J; NYFAZ

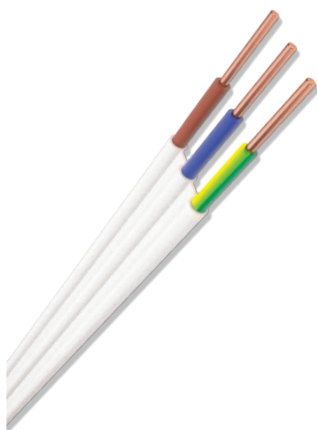
Installation conductor with parallel Cu-wires for fixed installation in lighting networks and electric power installations.

TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. -5°C
- Max. operating temperature: +70°C
- Nominal voltage Uo/U: 220/380 V
- Test voltage: 2000 V

CONSTRUCTION:

- Solid Cu wires cl. 1 acc. to BDS 904-84
- Insulation: PVC compound
- Sheath: PVC compound
- Outer sheath colour: white



Cross section (n x mm ²)	Colour	Conductor Thickness (mm)	Conductor Width (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2 x 1	white	3,70	10,30	17,9	55	100	E	834001
2x1,5	white	4,10	11,20	26,6	65	100	E	834002
2 x 2,5	white	5,00	12,90	44,3	97	100	E	834003
2x4	white	5,60	14,20	70,6	135	100	E	834004
2x6	white	6,50	16,00	104,4	190	100	E	834005

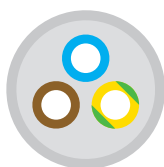
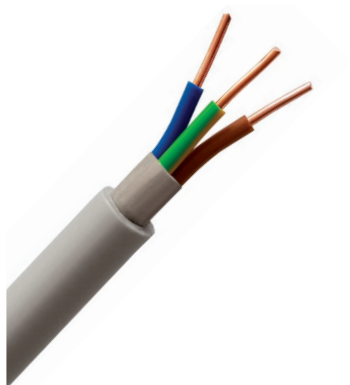


Cross section (n x mm ²)	Colour	Conductor Thickness (mm)	Conductor Width (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3x1	white	3,70	14,00	26,8	73	100	E	834007
3x1,5	white	4,10	15,30	39,8	95	100	E	834008
3x2,5	white	5,00	16,90	66,4	142	100	E	834009
3x4	white	5,60	19,80	104,2	200	100	E	834010
3x6	white	6,50	22,50	156,5	280	100	E	834011



Standards:

DIN VDE 0295; IEC 60228- according to construction DIN VDE 0250-204- according to multi-core conductors IEC60332-1- according to flame retardant

**NYM**

Multi-core conductor with Cu wires and PVC insulation



NYM; PGP; PGP; PP-Y; PGP; NYM; NYM; NYM; NYM; NYM

For fixed instalations in , or on under plasterboard, in lighting networks in dry places. Can be used and in damp or wet rooms, in wall and concrete, in switchboards and mashines. Is suitable for outdoor use if cable is protected against direct sunshine.

TECHNICAL DATA:

- Nominal voltage: Uo- 300V; U- 500V
- Ambient temperature- from -20°C to +50°C
- Max. oprating temperature- +70C°
- Instalation temperature- ≥-5°C

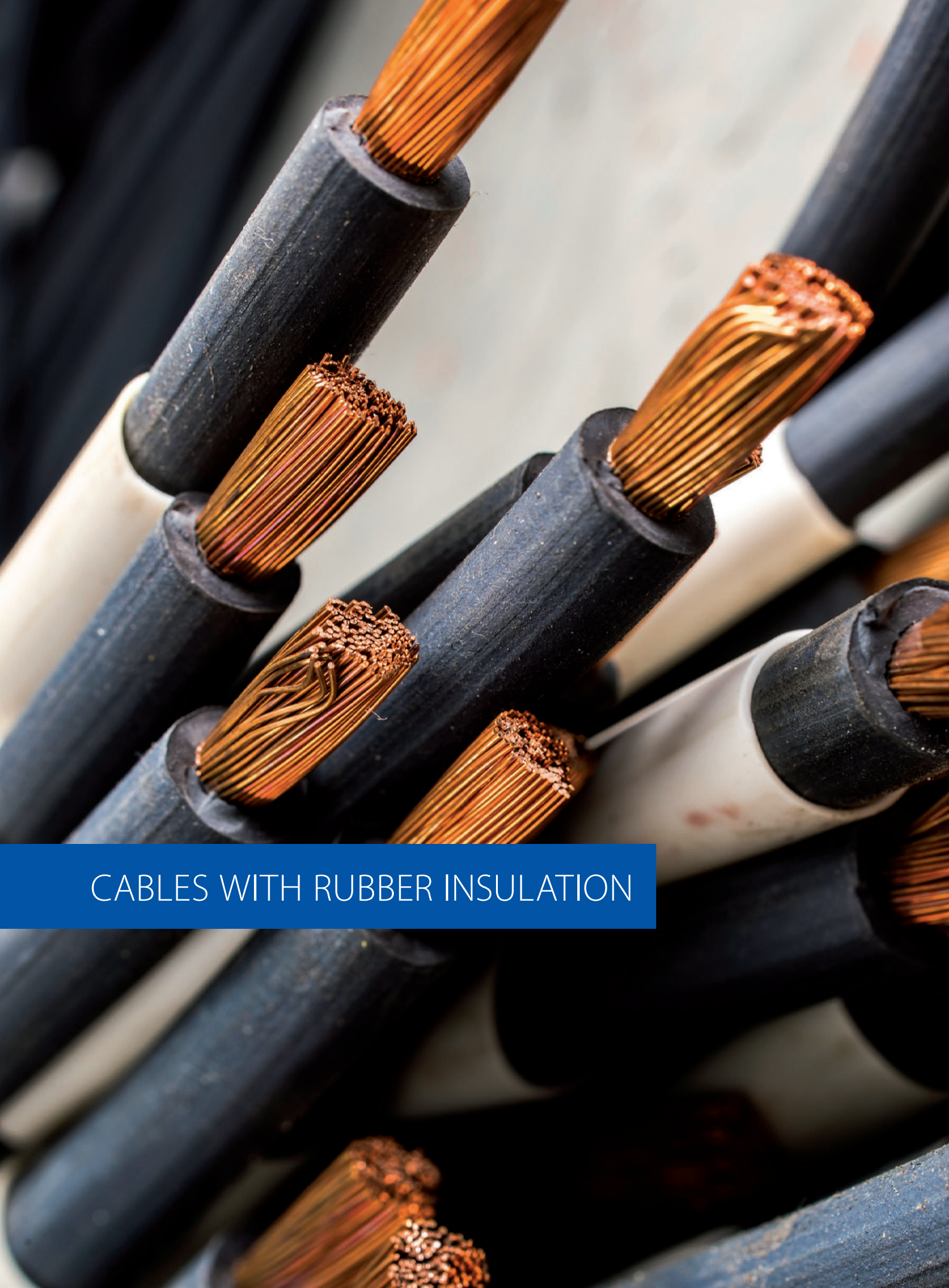
- Conductor material- Copper (Cu)
- Conductors insulation - PVC compaund
- Outer steath material-filling sheath and PVC compaund
- Conductor construction- solid CU wires, class 1 and class 2 for cross section above 10mm²

Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2X1.5	grey	9.8	29	120	100	E	832008
2X2.5	grey	11.0	48	160	100	E	832009
2X4	grey	12.5	76	220	100	E	832010



Cross section (n x mm ²)	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3X1.5	grey	10.5	43	136	100	E	832016
3X2.5	grey	11.5	72	190	100	E	832017
3X4	grey	13.0	115	260	100	E	832018





CABLES WITH RUBBER INSULATION

Standards:

DIN VDE 0295; IEC 60228- according to construction

DIN VDE 0293-308 and HD 186- according to colour coating

DIN VDE 0482-332-1-2; IEC60332-1- according to flame retardant

H05RR-F

Rubber flexible cable



ШКПЛ; GG/J; GG/J; GG/J; H05RR-F; H05RR-F; MCCM; H05RR-F; H05RR-F

For connection of electrical appliances and consumers with low and middle mechanical stress to Alternating Current (AC). It has wide use in household, office, for cable reels, for connecting of mobile consumers and etc.

TECHNICAL DATA:

- Nominal voltage U_0/U : 300V/500V
- Ambient temperature: from -30°C to +60°C

- Conductor material: Copper (Cu) wires, class 5
- Conductors insulation: Rubber EPR
- Outer sheath material: Rubber EPR

Cross section (n x mm ²)	Type	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
2X1	H05RR-F	black	6.1 - 8.0	19.0	71.0	100	E	814002
2X1.5	H05RR-F	black	7.6 - 9.8	29.0	99.0	100	E	814003
2X2.5	H05RR-F	black	9.0 - 11.6	48.0	148.0	100	E	814004



Cross section (n x mm ²)	Type	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
3X1	H05RR-F	black	6.5 - 8.5	29.0	88.0	100	E	814007
3X1.5	H05RR-F	black	8.0 - 10.4	43.0	125.0	100	E	814008
3X2.5	H05RR-F	black	9.6 - 12.4	72.0	175.0	100	E	814009
3X4	H05RR-F	black	11.3 - 14.5	115.0	246.0	100	E	814010



Cross section (n x mm ²)	Type	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
4X1	H05RR-F	black	9.0 - 11.6	58.0	165.0	100	E	814012
4X1.5	H05RR-F	black	9.0 - 11.6	58.0	165.0	100	E	814013
4X2.5	H05RR-F	black	10.7 - 13.8	96.0	225.0	100	E	814014
4X4	H05RR-F	black	12.7 - 16.2	154.0	315.0	100	E	814015
4X6	H05RR-F	black	14.2 - 18.1	231.0	440.0	100	E	814017



Cross section (n x mm ²)	Type	Colour	Outer diameter (mm)	Cu weight (kg/km)	Total weight (kg/km)	Packing (m)	Product category	Catalogue number
5X1.5	H05RR-F	black	9.8 - 12.7	72.0	185.0	100	E	814020
5X2.5	H05RR-F	black	11.9 - 15.3	120.0	275.0	100	E	814021
5x4	H05RR-F	black	15,6-19,9	187	475	100	E	814022
5x6	H05RR-F	black	17,5-22,2	288	635	100	E	814023





COMMUNICATION CABLES

Construction:

CCA-wires - 4x2x0.24

CU-wires - 4x2x0.24

UTP

LAN cable, stranded in pairs, cat. 5e



UTP;
 UTP;
 UTP;
 UTP;
 UTP;
 UTP;
 UTP;
 UTP;
 UTP;
 UTP CAT5E

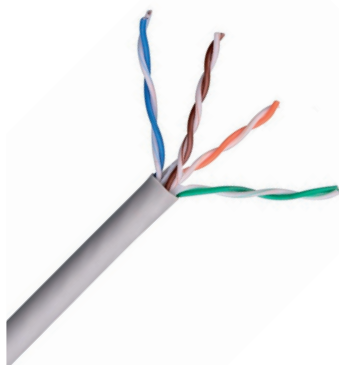
Cable, stranded by pairs, used for transmission of digital signals with high speed of transmission. Suitable for setting computer systems for data transmission, measuring and control systems with proper resistance to electromagnetic influences.

TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. 0°C
- Characteristic Impedance: $100 \Omega \pm 15 \Omega$
- Loop resistance: $\leq 192 \Omega / \text{km}$
- Unbalance of loop resistance: $\leq 3\%$
- Insulation resistance: $\geq 150 \text{ M}\Omega \times \text{km}$
- Operating capacity: $\leq 55,8 \text{ nF/km}$
- Cable diameter: 5 mm
- Cable weight: 27 kg/km

CONSTRUCTION:

- 879002 - CCA-wires - 24 AWG; 0,51 mm, acc. to IEC 60228
- 879017 - CU wires - 24 AWG; 0,51 mm, acc. to IEC 60228
- Insulation: PE compound
- Cable bundle: 4 stranded pairs
- Outer sheath: PVC compound or LSOH compound
- Outer sheath colour: for PVC-grey



Colour	Material	Category	Frequency - MHz	Characteristic of attenuation						Packing (m)	Product category	Catalogue number
				4	10	16	62,5	100	125			
grey	CCA	Cat. 5e	Attenuation - db/100 m	4,1	6,5	8,2	17	22	24,9	305	E	879002
			Attenuation (Next) - db	56,3	50,3	47,3	38,4	35,3	33,9			
grey	CU	Cat. 5e	Attenuation (Next) - db	56,3	50,3	47,3	38,4	35,3	33,9	305	E	879017



Insulation colour of stranded pairs - core a / core b:

- white with blue ring / blue
- white with orange ring / orange
- white with green ring / green
- white with brown ring / brown

Construction:

CCA-wires - 4x2x0.24

FTP

LAN cable, stranded in pairs, with screen, cat. 5e



FTP;
 FTP;
 FTP;
 FTP;
 FTP;
 FTP;
 FTP;
 FTP;
 FTP;
 FTP CAT5E

Cable, stranded in pairs, with screen of laminated foil, used for transmission of digital signals with high speed of transmission. FTP cable is suitable for setting computer systems for data transmission, measuring and control systems and for transmission of high-frequency analogue signals in automatic and industrial TV networks. High resistance to electromagnetic influences.

TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. 0°C
- Characteristic Impedance: $100 \Omega \pm 15 \Omega$
- Loop resistance: $\leq 192 \Omega / \text{km}$
- Unbalance of loop resistance: $\leq 3\%$
- Insulation resistance: $\geq 150 \text{ M}\Omega \times \text{km}$
- Operating capacity: $\leq 55,8 \text{ nF/km}$
- Cable diameter: 6 mm
- Cable weight: 31 kg/km

CONSTRUCTION:

- 879001 - CCA-wires - 24 AWG; 0,51 mm, acc. to IEC 60228
- Insulation: PE compound
- Cable bundle: 4 stranded pairs
- PETP foil
- Drain tinned Cu-wire
- Screen: laminated Al foil
- Outer sheath: PVC compound or LSOH compound
- Outer sheath colour: for PVC-grey



Material	Category	Frequency - MHz	Characteristic of attenuation						Packing (m)	Product category	Catalogue number
			4	10	16	62,5	100	125			
CCA	Cat. 5e	Attenuation - db/100 m	4,1	6,5	8,2	17	22	24,9	305	E	879001



Insulation colour of stranded pairs - core a / core b:

- white with blue ring / blue
- white with orange ring / orange
- white with green ring / green
- white with brown ring / brown

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

Construction:

CCA-wires - 4x2x0.24

STP

LAN cable, stranded in pairs, with screen on each pair, cat. 6

5+2
 standard
 +extended
7 YEAR TOTAL
 WARRANTY

 STP;  STP;  STP;  STP;  STP;  STP;  STP;  STP;  STP;  STP CAT6

Cable, stranded in pairs, with screen of laminated foil on each pair, used for transmission of digital signals with high speed of transmission, with spectrum of the frequency being used up to 300 MHz for cat. 6. The cable is suitable for setting computer systems for data transmission, measuring and control systems and for transmission of high-frequency analogue signals in automatic and industrial TV networks and is with high resistance to electromagnetic influences.

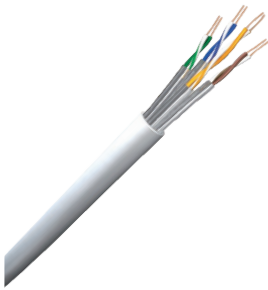
TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. 0°C
- Characteristic Impedance:
 - 100 Ω ± 15 Ω up to 100 MHz
 - 100 Ω ± (15 + 0,05(f-100)) above 100 MHz
- Loop resistance: ≤ 170 Ω / km
- Unbalance of loop resistance: ≤ 3%
- Insulation resistance: ≥ 150 MΩ x km
- Operating capacity: ≤ 50 nF/km
- Cable diameter: 7 mm

- Cable weight 42 kg/km

CONSTRUCTION:

- CCA-wires - 24 AWG; 0,57 mm acc. to IEC 60228
- Insulation: PE compound
- Screen: laminated Al foil on each pair
- Cable bundle: 4 stranded screened pairs
- Outer sheath: PVC compound or LSOH compound
- Outer sheath colour: for PVC-grey, for LSOH - orange



Colour	Category	Frequency - MHz	Characteristic of attenuation								Packing (m)	Product category	Catalogue number
			4	10	16	62,5	100	200	300				
grey	Cat. 6	Attenuation - db/100 m	3,8	6	7,6	15,5	19,9	29,5	35		305	E	879012
		Attenuation (Next) - db	65,3	59,3	56,2	47,4	44,3	39,8	38				



Insulation colour of stranded pairs - core a / core b:

- white with blue ring / blue
- white with orange ring / orange
- white with green ring / green
- white with brown ring / brown

Construction:

CCA-wires - 4x2x0.24

S-FTP

LAN cable, stranded in pairs, with duple-screen, cat. 5

5+2
 standard
 +extended
7 YEAR TOTAL
 WARRANTY

 S-FTP;  S-FTP;  S-FTP;  S-FTP;  S-FTP;  S-FTP;  S-FTP;  S/FTP;  S-FTP;  SFTP CAT5

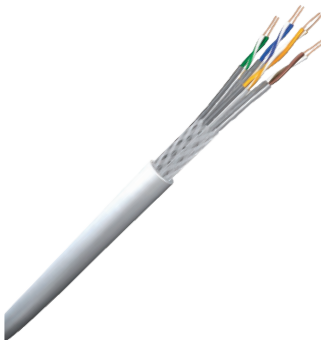
Cable, stranded in pairs, with screen of laminated foil, with braid of tinned copper wires used for transmission of digital signals with high speed of transmission, with spectrum of the frequency being used up to 100 MHz for cat. 5. The cable is suitable for setting computer systems for data transmission, measuring and control systems and for transmission of high-frequency analogue signals in automatic and industrial TV networks. High resistance to electromagnetic influences.

TECHNICAL DATA:

- Ambient temperature: -30°C to +50°C
- Temperature of laying: min. 0°C
- Characteristic Impedance: 100 Ω ± 15 Ω
- Loop resistance: ≤ 192 Ω / km
- Unbalance of loop resistance: ≤ 3%
- Insulation resistance: ≥ 150 MΩ x km
- Operating capacity: ≤ 55,8 nF/km
- Cable diameter: 6,9 mm

CONSTRUCTION:

- CCA-wires - 24 AWG; 0,51 mm acc. to IEC 60228
- Insulation: PE compound
- Cable bundle: 4 stranded pairs
- PETP foil
- Screen: laminated Al foil
- Braiding of tinned Cu-wires
- Outer sheath: PVC compound or LSOH compound
- Outer sheath colour: for PVC - grey



Colour	Category	Frequency - MHz	Characteristic of attenuation								Packing (m)	Product category	Catalogue number
			4	10	16	62,5	100	125					
grey	Cat. 5	Attenuation - db/100 m	4,3	6,6	8,2	17,1	22				305	E	879011
		Attenuation (Next) - db	53	47	44	35	32						



Insulation colour of stranded pairs - core a / core b:

- white with blue ring / blue
- white with orange ring / orange
- white with green ring / green
- white with brown ring / brown

COAXIAL CABLE RG6 / 96

5+2
standard
+extended 7 YEAR TOTAL
WARRANTY

Coaxial cable, suitable for connection of TV aerials to TV receivers.


 RG6/96; RG6/96; RG6; RG6; RG6/96; RG6/96; RG6/96; RG6/96; RG6

Suitable for high frequency equipment, measuring and control equipment and appliances, for setting up local computer networks, and data systems, for connection of TV aerials to TV receivers

TECHNICAL DATA:

- model - RG6 / 96;
- material and structure of the core cable: CCS 1.02 mm;
- type of insulation: PE 4.60 mm;
- external conductor (screen): 96 Al foil;
- diameter and cable material: 6.9 mm PVC;
- wave impedance: $75 \pm 5 \text{ Ohm}$;
- operating temperature: from -30°C to $+70^\circ \text{C}$;
- damping ratio: at 100 MHz 0.0637 dB / m.

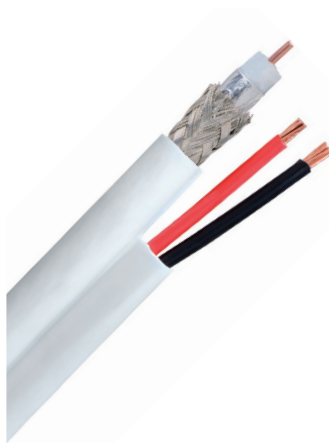
Colour	Description	Insulation Ø mm	Outer Ø mm	Wave resistance Ω	Max. capacity pF/m	Attenuation at 200 MHz max. dB/100m	Packing (m)	Product category	Catalogue number
white	RG6/96	PE 4,70	8,40 PVC	75 ± 3	68	12	100	E	856001



COAXIAL CABLE RG59 / + 2X0.5MM2

5+2
standard
+extended 7 YEAR TOTAL
WARRANTY

Coaxial cable, suitable for video surveillance systems.


 RG59+2x0.5; RG59+2x0.5; RG59; R59; RG59+2x0.5; RG59(CCTV)+2X0.5; RG59; RG59; RG59+2x0.5

TECHNICAL DATA:

• Coaxial cable: RG-59

- Inner conductor: $\varnothing 0.59 \text{ mm}$ - CCS wire
- Dielectric: $\varnothing 3.7 \text{ mm}$ PE full
- Braid: Stranded wire Cu, Indoor coverage area : 90 %
- Impedance: 75Ω
- Outer coating: Al foil + Al braiding
- Cable attenuation at 100m section:
 - 10.9 dB @ 100 MHz
 - 15.2 dB @ 200 MHz
 - 23.2 dB @ 450 MHz
 - 32.6 dB @ 800 MHz
 - 36.6 dB @ 1000 MHz

Electrical cable:

- Inner conductor: 2 x 0.5 m CU wires
- Power wires resistance: $4 \Omega / 100 \text{ m}$
- Outer coating: $\varnothing 5 \text{ mm}$

Colour	Description	Insulation Ø mm	Outer Ø mm	Wave resistance Ω	Max. capacity pF/m	Attenuation at 200 MHz max. dB/100m	Packing (m)	Product category	Catalogue number
white	RG59/U+2x0.5	PE 3,66	8/5mm	75 ± 3	53.4	12.4	100	E	856004



ALARM CABLE

5+2
standard
+extended
7 YEAR TOTAL
WARRANTY

Unshelles alarm cable



Алармен кабел; Alarmni kabel; Alarmni kabel; Alarmni kabl; Alarmni kabel;
Poplašný kábel; Cablu de alarmă; Riasztó kábel; Καλώδιο συναγερμού

Suitable for the connection of detectors, sensors, infra-red as well as micro wave or mixed technology systems to the switch board.

TECHNICAL DATA:

- Ambient temperature: -20°C to +60°C
- Operating voltage: 300V RMS max
- Capacitance between conductors: 1KHz - 33pF/ft Nom.
- Capacitance between conductors to shield: 1KHz - 60pF/ft Nom.
- Damping ratio: at 100 MHz 0.0637 dB / m.

CONSTRUCTION:

- Conductor: CCA
- Insulation: PVC
- Insulation colors: red, blue, yellow, black, green, white
- Shield: without
- Rip cord: syntetic fibers
- Drain wire: no

Cross section (n x mm ²)	Cable type	Colour	Outer diameter (mm)	Packing (m)	Product category	Catalogue number
6x0.22	CCA	white	4.2	100	E	879016





PROFESSIONAL DRILL EL-D10



10mm metal chuck: to tighten and hold bits steady
Forward and reverse: ability for easy adjustment according to tasks

Model	Power (W)	No-load speed (r/min)	Chuck size (mm)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-D10	500	4300	0.6- 6.5	2	1	D	59510



IMPACT DRILL EL-D14



Handle: soft grip handle
Switch: lockable
Speed: variable
Gear housing: aluminium

Model	Power (W)	No-load speed (r/min)	Chuck size (mm)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-D14	600	0-3000	13	2	1	D	59514



PROFESSIONAL IMPACT DRILL EL-D11



Impact and drill: two modes transformed
13mm metal chuck: to tighten and hold bits steady
Auxiliary handle: is convenient for operation at any angle
Variable large trigger: switch and 360° swivel side handle for added comfort speed
Lock-on button: for comfortable operation
Aluminium: diecast gear case

Model	Power (W)	No-load speed (r/min)	Chuck size (mm)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-D11	910	0-2800	13	2	1	D	59511





PROFESSIONAL TWO SPEED IMPACT DRILL EL-D12



Dual-mode selector: easily converts from rotation-only to hammer-drill mode

13mm metal chuck: to tighten and hold bits steady

Auxiliary handle: is convenient for operation at any angle

Variable large trigger: switch and 360° swivel side handle for added comfort speed

Lock-on button: for comfortable operation

Forward and reverse: ability for easy adjustment according to tasks

2- speed: transmission provides maximum torque in setting one and maximum speed in setting two

Model	Power (W)	No-load speed (r/min)	Chuck size (mm)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-D12	1050	0-1200/ 0-3200	13	2	1	D	59512



PROFESSIONAL LIGHT ROTARY HAMMER EL-RH13



Four functions: easily converts triem

Auxiliary handle: is convenient for operation at any angle

Variable large trigger: switch and 360° swivel side handle for added comfort speed

Lock-on button: for comfortable operation

Model	Power (W)	Single stroke power (J)	No-load speed (r/min)	Impact rate (b/min)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-RH13	800	3.2	0-1400	0-5700	2	1	D	59513



PROFESSIONAL ANGLE GRINDER EL-AG01



Compact grid design: for comfort & control

Cast metal gear case: increased josite durability and tool longevity

Spindle lock: for fast and easy wheel changes whit a single wrench

Epoxy-coated field windings: provides protection against abrasive dust

Soft grid side handle: allows greater and comfortable control in multiple positions. Compact and slim handle for easy operation. Auxiliary handle with rubber coated, can be set in two positions

Model	Power (W)	Diameter of wheel (mm)	No-load speed (r/min)	Theard size	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-AG01	900	125	11 000	M14	2	1	D	59501



ANGLE GRINDER EL-AG04


3+0 standard
+extended **3** YEAR TOTAL WARRANTY

Compact and slim body: for easy operation

Dust proof: motor and switch

Model	Power (W)	Diameter of wheel (mm)	No-load speed (r/min)	Theard size	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-AG04	750	125	11 000	M14	2	1	D	59504



PROFESSIONAL ANGLE GRINDER EL-AG02


5+0 standard
+extended **5** YEAR TOTAL WARRANTY

Compact grid design: for comfort & control

Cast metal gear case: increased josite durability and tool longevity

Spindle lock: for fast and easy wheel changes whit a single wrench

Epoxy-coated field windings: provides protection against abrasive dust

Soft grid side handle: allows greater and comfortable control in multiple positions. Compact and slim handle for easy operation. Auxiliary handle with rubber coated, can be set in two positions

Model	Power (W)	Diameter of wheel (mm)	No-load speed (r/min)	Theard size	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-AG02	2000	180	6500	M14	2	1	D	59502



PROFESSIONAL ANGLE GRINDER EL-AG03


5+0 standard
+extended **5** YEAR TOTAL WARRANTY

Compact grid design: for comfort & control

Cast metal gear case: increased josite durability and tool longevity

Spindle lock: for fast and easy wheel changes whit a single wrench

Epoxy-coated field windings: provides protection against abrasive dust

Soft grid side handle: allows greater and comfortable control in multiple positions. Compact and slim handle for easy operation. Auxiliary handle with rubber coated, can be set in two positions

Model	Power (W)	Diameter of wheel (mm)	No-load speed (r/min)	Theard size	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-AG03	2400	230	6500	M14	2	1	D	59503





PROFESSIONAL MULTI TOOL EL-MT40



Quick blade: changing system can fit widely-used blades

Oscilation angle: 4 degree

Powerful motor: for improved durability and strainghter cuts

Variable speed: for optimal performace and control in a variety of materials

Model	Power (W)	No-load speed (r/min)	Oscilation angle (mm)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-MT40	280	11000-21000	M14	2	1	D	59540



PROFESSIONAL JIG SAW EL-JS20



Model	Power (W)	No-load speed (r/min)	Stroke distance (mm)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-JS20	710	1500-3100	23	2	1	D	59520





PROFESSIONAL CORDED HEAT GUN EL-HG30



5+0
standard
+extended
5 YEAR TOTAL
WARRANTY

Dual fan speed selector delivers high and low fan speed settings
Integrated hands free support stand allow the gun to sit upright for hands free use
1800Watt motor delivers high heat and multiple fan setting

Model	Power (W)	Temperature (C°)	Air flow (L/M)	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-HG30	1800	50/400/550	250/250/500	2	1	D	59530



HEAT GUN NOZZLE FOR EL-HG30



Recommended for	Packing (pcs) / carton	Product category	Catalogue number
EL-HG30	1	D	59532



CORDED HEAT GUN EL-HG31 WITH HEAT GUN NOZZLE



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Protection: against over-heat
Settings: two steps airflow

Model	Power (W)	Temperature (C°)	Switch position	Cable length (m)	Packing (pcs) / carton	Product category	Catalogue number
EL-HG31	2000	350	0-I-II	2	1	D	59531





12V CORDLESS DRILL EL-CD53 WITH BATTERY & CHARGER, SET



3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Battery capacity: 12V/2A
Charger: 400mA
Drill gear box: two speed
Compact design: with soft grip handle
LED light: Integrated

Model	Voltage (V)	No-load speed (r/min)	Max. torque (N.m)	Torque settings	Chuck size (mm)	Packing (pcs) / carton	Product category	Catalogue number
EL-CD53	12	0-400/0-1500	30	19+1	10	1	D	59553



20V DRILL DRIVER EL-CD50



5+0
standard
+extended
5 YEAR TOTAL
WARRANTY

High performance 4-pole motor
PCB inside: to protect the motor from over-loading
Belt clip: for easy carrying
Soft grip: to reduce fatigue
Battery: Not Included. Suitable with battery with catalogue numbers **59560** and **59561**

Model	Voltage (V)	No-load speed (r/min)	Max. torque (N.m)	Torque settings	Chuck size (mm)	Packing (pcs) / carton	Product category	Catalogue number
EL-CD50	20	0-400/0-1500	30	21+1	10	1	D	59550



20V TWO SPEED IMPACT DRILL EL-CD51



5+0
standard
+extended
5 YEAR TOTAL
WARRANTY

All metal/ 2 speed transmission: for a wide range of drilling and driving applications
High performance 4-pole motor
PCB inside: to protect the motor from over-loading
Belt clip: for easy carrying
Soft grip: to reduce fatigue
Battery: Not Included. Suitable with battery with catalogue numbers **59560** and **59561**

Model	Voltage (V)	No-load speed (r/min)	Max. torque (N.m)	Torque settings	Impact rate (B/min)	Chuck size (mm)	Packing (pcs) / carton	Product category	Catalogue number
EL-CD51	20	0-450/0-1700	50	21+1+1	0-6400/24000	13- all metal	1	D	59551





20V ANGLE GRINDER EL-CAD52

**High performance motor****PCB inside:** to protect the motor from over-loading**Soft grip:** to reduce fatigue**Battery:** Not Included. Suitable with battery with catalogue numbers **59560** and **59561**

Model	Voltage (V)	No-load speed (r/min)	Diameter of wheel	Thread size	Packing (pcs) / carton	Product category	Catalogue number
EL-CAD52	20	7000	115	14	1	D	59552



20V LITHIUM BATTERIES

**Water protection barrier:** routes water away from the electronics and out of the battery pack**Smart electronics:** Protect from abuse. Optimum tool performance**Temp control frame:** Extend run-time and life by minimizing heat. Operates below -18°C/ 0°F**Fully exposed cell carrier and rubber overmold:** prevents pack failure from vibration or drops

Model	Voltage (V)	Type	Capacity (Ah)	Charge time (h)	Cells (pcs)	Packing (pcs) / carton	Product category	Catalogue number
EL-B60	20VDC	Li-ion	2	1	5	1	D	59560
EL-B61	20VDC	Li-ion	4	2	10	1	D	59561



FAST BATTERY CHARGER

**Features:**

Diagnostics with LED

Short circuit protection

Over heating protection

Over charging protection

Model	Rated Voltage (V)	Input Voltage (V)	Packing (pcs) / carton	Product category	Catalogue number
EL-CH62	20VDC	100-240VAC	1	D	59562





DIGITAL MULTIMETER EM890G

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

TECHNICAL FEATURES:

- DC voltage: 200m/ 2 / 20 / 200 / 600 V
- AC voltage : 2 / 20 / 200 / 600 V
- DC current: 2 / 20 / 200 / 10A
- AC current: 200m / 10A
- Resistance: 200 / 2K / 20K / 200K / 2M / 20MΩ
- Capacitors: 2n / 20n / 200n / 2μ / 20μ
- Frequency: 20kHz

- Temperature: -20° up to 1000°C
- Diodes control: yes
- Buzzer: yes
- Transistor test: yes
- Auto power: yes
- Dimensions: 170 x 87 x 33mm
- Weight: 326 g
- Battery: 1x9V

Type	Packing (pcs) / carton	Product category	Catalogue number
EM890G	1/40	C	519890



DIGITAL MULTIMETER EM850L

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

TECHNICAL FEATURES:

- DC voltage: 200m/ 2 / 20 / 200 / 600 V
- AC voltage : 200 / 600 V
- DC current: 200μ / 2 / 20 / 200 / 10A
- Resistance: 200 / 2K / 20K / 200K / 2MΩ
- Diodes control: yes
- Buzzer: yes

- Transistor test: yes
- Data hold: yes
- Back light function: yes
- Dimensions: 135x 67 x 33mm
- Weight: 147 g
- Battery: 1x9V

Type	Packing (pcs) / carton	Product category	Catalogue number
EM850L	1/40	C	519850



DIGITAL MULTIMETER EM83B

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

TECHNICAL FEATURES:

- DC voltage: 200m/2000m/ 20 / 200 / 400 V
- AC voltage : 200 / 400 V
- DC current: 2000μ / 20m / 200mA
- Resistance: 200 / 2000 / 20K / 200K / 2000KΩ
- Diodes control: yes

- Buzzer: yes
- Battery test (9V): yes
- Dimensions: 102x 60 x 24mm
- Weight: 60 g
- Battery: 12V

Type	Packing (pcs) / carton	Product category	Catalogue number
EM83B	1/100	C	519083





DIGITAL MULTIMETER EM5510

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

This is a digital device for measuring of humidity, illumination, temperature and all electric values. It features automatic range adjustment, manual value selection. It has an LCD display showing the measured value in digits with the size of 3 3/4. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off.

TECHNICAL FEATURES:

- DC voltage: 0.4 / 4 / 40 / 400 / 600 V
- AC voltage : 4 / 40 / 400 / 600V
- DC current: 400μ / 4000μ / 40m / 400m / 10A
- AC current: 400μ / 4000μ / 40m / 400m / 10A
- Resistance: 400 / 4K / 40K / 400K / 4M / 40MΩ
- Capacitors: 4n / 40n / 400n / 4μ / 40μ / 100μF
- Frequency: 10 / 100 / 1k / 10k / 100k / 200kHz
- Loading cycles: from 0.1% to 99.9%
- Temperature: -20° up to 1000°C
- Humidity: 30% to 95%
- Illumination: 4000 Lux / 40000 Lux
- Noise level: 35 to 100dB
- Circuit control: yes
- Diodes control: yes
- Weight: 310 g (including battery)
- Battery: 1x9V
- Dimensions: 83 x 162 x 47mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM5510	1/10	C	5195510



DIGITAL MULTIMETER EM420C

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

This is a digital device for measuring of humidity, illumination, temperature and all electric values. It features automatic range adjustment, manual value selection. It has an LCD display showing the measured value in 4 digits with the size of 16 mm. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off.

TECHNICAL FEATURES:

- DC voltage: 200m / 2 / 20 / 200 / 600 V
- AC voltage : 2 / 20 / 200 / 600V
- DC current: 200μ / 2000μ / 20m / 200m / 2 / 10A
- AC current: 00μ / 2000μ / 20m / 200m / 2 / 10A
- Resistance: 200 / 2K / 20K / 200K / 2M / 20MΩ
- Temperature: -20° up to 1000°C
- Battery test: 1.5 / 3 / 9 / 12 V
- Circuit control: yes
- Diodes control: yes
- Weight: 200 g (including battery)
- battery: 3x1.5 V
- dimensions: 75 x 158 x 35mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM420C	1/10	C	519420





DIGITAL MULTIMETER EM3055

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

This is a digital device for measuring of all electric values. It features manual range adjustment. It has an LCD display showing the measured value in 4 digits with the size of 3 1/2. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences.

TECHNICAL FEATURES:

- DC voltage: 200mV / 2 / 20 / 200 / 1000 V
- AC voltage: 2 / 20 / 200 / 750V
- DC current: 2m / 20m / 200m / 10A
- AC current: 200m / 10A
- Resistance: 200 / 2K / 20K / 200K / 2M / 20M / 200MΩ
- Capacity: 2000p / 20n / 200n / 20μF
- Temperature: 0° up to 1000°C
- Battery test: 1.5 / 3 / 9 / 12 V
- Transistor test: Vce≈3V, Ib≈10μF
- Circuit control: yes
- Diodes control: yes
- Weight: 495 g (including battery)
- battery: 1x9V
- dimensions: 97 x 200 x 48mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM3055	1/10	C	5193055



DIGITAL MULTIMETER EM3058

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

This is a digital device for measuring of temperature and all electric values. It features manual range adjustment, manual value selection. It has an LCD display showing the measured value in digits with the size of 3 3/4. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off.

TECHNICAL FEATURES:

- DC voltage: 200mV / 2 / 20 / 200 / 1000 V
- AC voltage: 200 m / 2 / 20 / 200 / 750V
- DC current: 20μ / 200 μ / 2m / 200m / 10A
- AC current: 20μ / 200μ / 2m / 200m / 2 / 10A
- Resistance: 200 / 2K / 20K / 200K / 2M / 20M / 200MΩ
- Capacitors: 2n / 20n / 200n / 2μ / 20μF
- Frequency: 20kHz to 2000kHz
- Loading cycles: 0.1% to 99.9%
- Temperature: 0° up to 1000°C
- Logical level: High > 2.0 V; Low < 0.8 V
- Circuit control: yes
- Diodes control: yes
- Weight: 495 g (including battery)
- battery: 1x9V
- dimensions: 97 x 200 x 47 mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM3058	1/10	C	5193058





DIGITAL MULTIMETER EM31

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

This is a digital device for measuring of electric values. It features automatic range adjustment, manual value selection. It has an LCD display showing the measured value in 4 digits with the size of 16 mm. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off and low battery indication.

TECHNICAL FEATURES:

- DC voltage: 240mV / 2400mV / 24V / 240V / 600V
- AC voltage: 240mV / 2400mV / 24V / 240V / 600V
- DC current: 240μA / 2400μA / 24mA / 240mA / 10A
- AC current: 240μA / 2400μA / 24mA / 240mA / 10A
- Resistance: 400Ω - 40MΩ
- Capacity: 51.2nF to 51.2μF
- Frequency: 50 / 500 / 5000 / 50kHz / 50MHz
- Circuit control: yes
- Diodes control: yes
- Weight: 137 g (including battery)
- battery: 9V
- dimensions: 70 x 126 x 28mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM31	1/10	C	519031



DIGITAL MULTIMETER / PEN EM3215

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

This is a digital device for measuring of electric values in the form of a pen. It features automatic range adjustment, manual value selection. It has an LCD display, data retain function, automatic reset, polarity selection, range overload indication. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off and low battery indication and a torch.

TECHNICAL FEATURES:

- DC voltage: 200mV / 2V / 20V / 200V / 600V
- AC voltage: 2V / 20V / 200V / 600V
- DC current: 20mA to 200mA
- AC current: 20mA to 200mA
- Resistance: 200Ω / 2KΩ / 20KΩ / 200KΩ / 2MΩ / 20MΩ
- Logical level: High > 2.3V; Low < 0.8V
- Circuit control: yes
- Diodes control: yes
- Weight: 182 g (including battery)
- battery: 1x9V
- dimensions: 57 x 230 x 30mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM3215	1/10	C	5193215





DIGITAL CLAMP METER EM202

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

This is a digital clamp meter for measuring of electric values. It features manual range adjustment, manual value selection. It has an LCD display showing the measured value in digits with the size of 3½ mm. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off.

TECHNICAL FEATURES:

- DC voltage: 1000 V
- AC voltage: 750V
- AC current: 20 / 200 / 1000A
- Resistance: 200 kΩ
- Temperature: -40° up to 1400°C
- Circuit control: yes
- Diodes control: yes
- Weight: 400 g (including battery)
- battery: 1x9V
- dimensions: 99 x 250 x 43mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM202	1/10	C	519202



DIGITAL CLAMP METER EM204

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

This is a digital clamp meter for measuring of electric values. It features automatic range adjustment, manual value selection. It has an LCD display, low battery indication, overload protection. It is of high accuracy of analogue-digital conversion, precision in measuring and resistance to electro-magnetic interferences. It has an automatic switch off.

TECHNICAL FEATURES:

- DC voltage: 1000 V
- AC voltage: 750V
- DC current: 200 / 1000A
- AC current: 200 / 1000A
- Resistance: 200 kΩ
- Frequency: 2 kHz
- Circuit control: yes
- Weight: 400 g (including battery)
- battery: 1x9V
- dimensions: 99 x 258 x 43mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM204	1/10	C	519204





DIGITAL CLAMP METER EM266

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

This is a digital clamp meter for measuring of electric values. It features manual range adjustment. It has an LCD display and retain function option, low battery indication and overload protection.

TECHNICAL FEATURES:

- DC voltage: 1000 V
- AC voltage: 750V
- AC current: 200 / 1000A
- Resistance: 200 / 20 kΩ
- Circuit control: yes
- Diodes control: yes
- Weight: 310 g (including battery)
- battery: 1x9V
- dimensions: 69 x 229 x 38mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM266	1/10	C	519266



INFRARED TEMPERATURE METER EM520A

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

This is a digital device for measuring of temperature. The temperature is measured with no contact. It has a laser counter for precision measuring, suitable large LCD display, battery low indication and overload protection.

TECHNICAL FEATURES:

- Temperature: -20° up to 320°C / -4° to 608 °F
- Distance to point size: 6:1
- Precision: $\pm 2^\circ \text{C}$ or 2% in reading
- battery: 1x9V
- dimensions: 90 x 155 x 45mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EM520A	1/5	C	519520



INDUSTRIAL REPAIR KIT ETK06A

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

A finely packaged repair kit containing four elements in a metal briefcase, sealed with special plastic foam and struts for each instrument.

THE KIT INCLUDES:

- Digital multimeter EM420
- Digital clamp-on ammeter EM465
- Phase meter GK7
- Infrared temperature meter EM520A

Type	Packing (pcs) / carton	Product category	Catalogue number
ETK06A	1/6	F	51906A



UNTIL SUPPLY
LAST



VOLTAGE TESTER

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

The voltage tester screwdriver is used for detecting the presence of electrical voltage. Existence of voltage is shown via lighting signal indicator located in the handle of the screwdriver. It can detect voltage in the range from 100V to 250V. The screwdriver has a flat tip.

TECHNICAL FEATURES:

- Length-3.5*140mm
- Voltage range 100-250V~
- GS, CE certificates

Type	Packing (pcs) / carton	Product category	Catalogue number
DN-8203	1/480	C	519203



VOLTAGE TESTER

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

TECHNICAL FEATURES:

- Length-3.5*190mm
- Voltage range 100-500V~
- ABS+PC

Type	Packing (pcs) / carton	Product category	Catalogue number
EL-1805	1/40/600	C	519205



NON-CONTACT VOLTAGE AC DETECTOR

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

FUNCTION:

- AC voltage detection
- Indicate AC null line and live line
- Auto power off in 5 minutes
- Buzzer: sound beeps when is detected AC voltage
- Green light: by power ON
- RED light: by live parts detection. Higher flashing frequency indicates stronger electric field

TECHNICAL FEATURES:

- Voltage range: from 50 to 1000V/AC
- Handle material: ABS
- Metal: carbon steel
- Light: LED
- Blade diameter: 3mm
- Length – 140mm

Type	Packing (pcs) / carton	Product category	Catalogue number
GK8	1/20	C	519GK8



PHASE METER GK7

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

A device indicating phase availability in the system. No contact phase indicator featuring sound and light indication of phase availability.

TECHNICAL FEATURES:

- Voltage range: from 50 to 1000V
- Frequency range: from 50 Hz to 500 Hz
- dimensions: length – 62mm

Type	Packing (pcs) / carton	Product category	Catalogue number
GK7	60	C	519GK7



MULTIFUNCTIONAL VOLTAGE TESTER

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY**FUNCTION:**

- AC voltage testing
- Line break testing
- Earth checking

TECHNICAL FEATURES:

- Voltage range: from 12 to 220V/AC
- Handle material: ABS
- Metal: carbon steel
- Light: LED
- Blade diameter: 4mm
- Length – 190mm

Type	Packing (pcs) / carton	Product category	Catalogue number
EL-8736	1/20	C	519207



VOLTAGE TESTER

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY**TECHNICAL FEATURES:**

- Length-2.0*185mm
- Voltage range 6-380V
- ABS

Type	Packing (pcs) / carton	Product category	Catalogue number
EL-EN08	1/10/200	C	519206





CUTTER

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Cutter	760	1	C	598245



MULTI-PURPOSE WIRING TOOL

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Ergonomic molded anti-slip grid handle
Crimp insulated and non insulated cable terminals

Type	Size (mm)	Cable size section	Packing (pcs) / carton	Product category	Catalogue number
Wiring tool	200	0.75-6.0mm	6/36	C	598030



AUTOMATIC WIRE STRIPPER

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Wire is automatically gripped and stripped with the same motion
Adjustable dial
Comfort grip handle

Type	Size (mm)	Cable size section	Packing (pcs) / carton	Product category	Catalogue number
Wire Stripper	168	1.0-3.2mm	6/36	C	598032





INSTRUMENT FOR MANUAL CRIMPING OF CONDUCTORS HD – 005 TYPE

2+0
standard
+extended

2 YEAR TOTAL WARRANTY

FUNCTIONS:

- Crimping of naked cable terminals

TECHNICAL DATA:

- Possibility for crimping of cable conductors up to 10mm²
- Form of the crimping head: hexahedral²
- Weight of the instrument: 0.49kg
- Length of the instrument: 220mm
- Packing: blister

Type	Packing (pcs) / carton	Product category	Catalogue number
HD – 005	20	C	59308



INSTRUMENT FOR MANUAL CRIMPING OF CONDUCTORS G – 301H TYPE

2+0
standard
+extended

2 YEAR TOTAL WARRANTY

FUNCTIONS:

- Crimping of isolated cable terminals

TECHNICAL DATA:

- Possibility for crimping of cable conductors up to 6mm²
- Form of the crimping head: hexahedral
- Weight of the instrument: 0.49kg
- Length of the instrument: 220mm
- Packing: blister

Type	Packing (pcs) / carton	Product category	Catalogue number
G – 301H	20	C	59307



CRIMPING PLIERS SN – 003 TYPE

2+0
standard
+extended

2 YEAR TOTAL WARRANTY

FUNCTIONS:

- Crimping of naked cable terminals and joining bushes

TECHNICAL DATA:

- Possibility for crimping of cable conductors from 6 to 16mm²
- Form of the crimping head: hexahedral
- Weight of the instrument: 0.39kg
- Length of the instrument: 190mm
- Packing: blister

Type	Packing (pcs) / carton	Product category	Catalogue number
SN – 003	10 / 20	C	59309





MECHANICAL CABLE CUTTING PLIERS CC – 325 TYPE

2+0
standard
+extended **2** YEAR TOTAL WARRANTY
FUNCTIONS:

- Cutting of aluminum or copper cable conductors
- Cutting of conductors with metal bearing core

TECHNICAL DATA:

- Maximum section of the cable:
 - for aluminum conductors up to 150mm²
 - for copper conductors up to 150mm²

- Cutting power: 15T
- Presence of cutting mechanism type ratchet
- Presence of brake of the cutting mechanism
- Weight of the instrument: 0.58kg
- Length of the instrument: 260mm
- Packing: blister

Type	Packing (pcs) / carton	Product category	Catalogue number
CC – 325	5 / 10	C	59305



MECHANICAL CABLE CUTTING PLIERS CC – 400 TYPE

2+0
standard
+extended **2** YEAR TOTAL WARRANTY
FUNCTIONS:

- Cutting of aluminum or copper cable conductors
- Cutting of conductors with metal bearing core

TECHNICAL DATA:

- Maximum section of the cable:
 - - for aluminum conductors up to 400mm²
 - - for copper conductors up to 350mm²

- Cutting power: 15T
- Presence of cutting mechanism type ratchet
- Presence of brake of the cutting mechanism
- Weight of the instrument: 1.25kg
- Length of the instrument: 360mm
- Packing: blister

Type	Packing (pcs) / carton	Product category	Catalogue number
CC – 400	5	C	59304



MECHANICAL CABLE CUTTING PLIERS HS – 250 TYPE

2+0
standard
+extended **2** YEAR TOTAL WARRANTY
FUNCTIONS:

- Cutting of aluminum or copper cable conductors
- Cutting of conductors with metal bearing core

TECHNICAL DATA:

- Maximum section of the cable:
 - for aluminum conductors up to 240mm²
 - for copper conductors up to 185mm²

- Weight of the instrument: 1.43kg
- Length of the instrument: 540mm
- Packing: blister

Type	Packing (pcs) / carton	Product category	Catalogue number
HS – 250	10	C	59306





HYDRAULIC CRIMPING PLIERS HT - 300 TYPE

2+0
standard
+extended

2 YEAR TOTAL
WARRANTY

FUNCTIONS:

- Crimping of aluminum or copper conductors with cable terminals or bush in the corresponding size

TECHNICAL DATA:

- Crimping head turning at 360° which facilitates the crimping of static conductors
- Device for automatic following of the effort at crimping completion
- Form of the crimping element: hexahedral
- Size of the crimping element: 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300 mm²

120, 150, 185, 240, 300 mm²

- Section of the crimping conductors:
 - Al conductors - from 16 to 300 mm²
 - Cu conductors - from 16 to 240 mm²
- Element pressing power: 60kN
- Width of the element: 17mm
- Weight of the instrument: 3.3 kg
- Length: 460mm
- Used hydraulic oil: #15 (hydraulic oil with viscosity 15)
- Metal box for the instrument
- A set of congestion hoops for the hydraulic cylinder

Type	Packing (pcs) / carton	Product category	Catalogue number
HT - 300	2	C	59300



HYDRAULIC CRIMPING PLIERS KYQ-300B TYPE

2+0
standard
+extended

2 YEAR TOTAL
WARRANTY

FUNCTIONS:

- Crimping of aluminum or copper conductors with cable terminals or bush in the corresponding size

TECHNICAL DATA:

- Device for automatic following of the effort at crimping completion
- Form of the crimping element: hexahedral
- Size of the crimping element: 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300 mm²

- Section of the crimping conductors:
 - Al conductors - from 16 to 300 mm²
 - Cu conductors - from 16 to 240 mm²
- Element pressing power: 100kN
- Width of the element: 22mm
- Weight of the instrument: 6.8 kg
- Length: 500mm
- Used hydraulic oil: #23 (hydraulic oil with viscosity 23)
- Metal box for the instrument
- A set of congestion hoops for the hydraulic cylinder

Type	Packing (pcs) / carton	Product category	Catalogue number
KYQ-300B	2	C	59302





HYDRAULIC CRIMPING PLIERS YQK-300 TYPE

2+0
standard
+extended
2 YEAR TOTAL
WARRANTY

FUNCTIONS:

- Crimping of aluminum or copper conductors with cable terminals or bush in the corresponding size

TECHNICAL DATA:

- Form of the crimping element: hexahedral
- Size of the crimping element: 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300 mm²

- Section of the crimping conductors:
 - Al conductors - from 10 to 300 mm²
 - Cu conductors – from 10 to 240 mm²
- Element pressing power: 100kN
- Width of the element: 22mm
- Weight of the instrument: 6.3 kg
- Length: 500mm
- Used hydraulic oil: #15 (hydraulic oil with viscosity 15)
- Metal box for the instrument
- A set of congestion hoops for the hydraulic cylinder

Type	Packing (pcs) / carton	Product category	Catalogue number
YQK-300	4	C	59301



HYDRAULIC CRIMPING PLIERS YQK – 50 TYPE

2+0
standard
+extended
2 YEAR TOTAL
WARRANTY

FUNCTIONS:

Crimping of aluminum or copper conductors with cable terminals or bush in the corresponding size

TECHNICAL DATA:

- Form of the crimping element: hexahedral
- Size of the crimping element: 4, 6, 10, 16, 25, 35, 50 mm²

- Section of the crimping conductors:
 - Al conductors - from 4 to 50mm²
 - Cu conductors – from 4 to 50 mm²
- Element pressing power: 8T
- Width of the element: 10mm
- Weight of the instrument: 2.8 kg
- Length: 310mm
- Used hydraulic oil: #15 (hydraulic oil with viscosity 15)
- Metal box for the instrument
- A set of congestion hoops for the hydraulic cylinder

Type	Packing (pcs) / carton	Product category	Catalogue number
YQK – 50	5	C	59303





HYDRAULIC PUNCHING PLIERS WK - 8 TYPE

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

FUNCTIONS:

- Cutting through openings in sheet metal with gauge up to 3mm without rotary motion

TECHNICAL DATA:

- Piercing head turning at 360°
- Form of the cutting element: round
- Size of the cutting element: Ø 22.5, 28.3, 34.6, 43.2, 49.6, 61.5mm
- Piercing capacity:
 - sheet metal 3mm – openings up to Ø 30mm
 - sheet metal 2mm – openings up to Ø 60mm

- Element pressing power: 80kN
- Thickness of the element: 25mm
- Weight of the instrument: 3.5 kg
- Used hydraulic oil: #15 (hydraulic oil with viscosity 15)
- Metal box for the instrument
- A set of congestion hoops for the hydraulic cylinder
- Additional set of cutting elements for cable glands – Ø16, 20, 26.2, 32.5, 39, 51, 63 and a square for display devices 46.5x46.5, 68x68 (ordered additionally); Catalogue number 54002

Type	Packing (pcs) / carton	Product category	Catalogue number
WK - 8	2	C	54000
Additional set	2	C	54002



HYDRAULIC PUNCHING PRESS SYK – 15 TYPE

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

FUNCTIONS:

- Cutting through openings in sheet metal with gauge up to 3mm without rotary motion

TECHNICAL DATA:

- Protracting piercing head supplied with a hose for the hydraulic oil that gives possibility for piercing openings everywhere on the metal surface
- Form of the cutting element:
 - round
 - square
- Size of the cutting element:
 - square: 32x32mm
 - round openings: Ø 22.5, 28.3, 34.6, 43.2, 49.6, 61.5mm

- Piercing capacity:
 - sheet metal 3mm – openings up to Ø 60.8mm
 - sheet metal 2mm – openings up to Ø 115.5mm
 - square opening up to 110x110mm
- Element pressing power: 15T
- Thickness of the element: 25mm
- Weight of the instrument: 11.5 kg
- Used hydraulic oil: #15 (hydraulic oil with viscosity 15)
- Metal box for the instrument
- A set of congestion hoops for the hydraulic cylinder
- Additional set of cutting elements for cable glands – Ø16, 20, 26.2, 32.5, 39, 51, 63 and a square for display devices 46.5x46.5, 68x68 (ordered additionally); Catalogue number 54002

Type	Packing (pcs) / carton	Product category	Catalogue number
SYK – 15	2	C	54001
Additional set	2	C	54002





CrV

1000V 

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED COMBINED PLIERS

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
COMBINED PLIERS 1000V	200	6 / 36	C	598001



CrV

1000V 

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED LONG NOSE PLIERS

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
LONG NOSE PLIERS 1000V	200	6 / 36	C	598002



CrV

1000V 

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED DIAGONAL PLIERS

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
CUTTING PLIERS 1000V	160	6 / 36	C	598003
CUTTING PLIERS 1000V	180	6 / 36	C	598013



CrV

1000V 

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED WIRE STRIPPER

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
WIRE STRIPPER 1000V	160	6 / 36	C	598004





CrV

1000V


3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED GROOVE JOINT PLIERS

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
GROOVE JOINT PLIERS 1000V	250	6/36	C	598005



CrV

1000V


3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED SCREWDRIVER- SLOTTED

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
SCREWDRIVER- SLOTTED	2.5X50	6/36	C	598006
SCREWDRIVER- SLOTTED	3.5X75	6/36	C	598007
SCREWDRIVER- SLOTTED	4X100	6/36	C	598008
SCREWDRIVER- SLOTTED	5.5X150	6/36	C	598009



CrV

1000V


3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

VDE INSULATED SCREWDRIVER- PH

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
SCREWDRIVER	PH0X75	6/36	C	598010
SCREWDRIVER	PH1X100	6/36	C	598011
SCREWDRIVER	PH2X125	6/36	C	598012

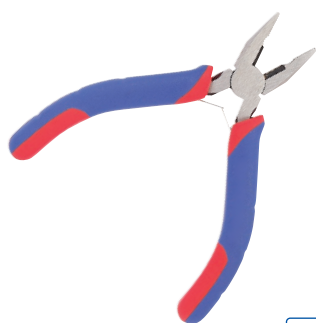
UNTIL SUPPLY
LAST

VDE CABLE CUTTING PLIERS, 1000V

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
VDE Cable Cutting Pliers	180	1 / 6 / 60	F	599200180





CrV

MINI COMBINED PLIERS

Chrome-vanadium steel for longer life and durability
Bi-material comfort grip handle

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Mini combined pliers	115	6/36	C	598040



CrV

MINI DIAGONAL PLIERS

Chrome-vanadium steel for longer life and durability
Bi-material comfort grip handle

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Mini diagonal pliers	115	6/36	C	598042



BENT NOSE MINI PLIERS

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Bent Nose Mini Pliers	115	1 / 12 / 120	F	592400115



UNTIL SUPPLY
LAST



CrV

COMBINED PLIERS

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Chrome-vanadium steel for longer life and durability
Bi-material comfort grip handle
Heat treated, fully polished

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Combined pliers	160	6/36	C	598043
Combined pliers	180	6/36	C	598044



CrV

DIAGONAL PLIERS

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Chrome-vanadium steel for longer life and durability
Bi-material comfort grip handle
Heat treated, fully polished

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Diagonal pliers	160	6/36	C	598046



CrV

LONG NOSE PLIERS

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Chrome-vanadium steel for longer life and durability
Bi-material comfort grip handle
Heat treated, fully polished

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Long nose pliers	160	6/36	C	598047





CrV



MAGNETIC SCREWDRIVER- SLOTTED

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	6x38	6/36	C	598070
Screwdriver	3x75	6/36	C	598071
Screwdriver	3x100	6/36	C	598072
Screwdriver	4x100	6/36	C	598073



MAGNETIC SCREWDRIVER- PH

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	PH2x38	6/36	C	598080



CrV



MAGNETIC SCREWDRIVER- PZ

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	PZ2x38	6/36	C	598089



CrV

MAGNETIC BIT HOLDER

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Packing (pcs) / carton	Product category	Catalogue number
Bit holder	6/36	C	598096





UNTIL SUPPLY
LAST

SIDE CUTTING PLIERS

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Side Cutting Pliers	180	1 / 6 / 36	F	592200180



UNTIL SUPPLY
LAST

CUTTING PLIERS, HEAVY DUTY

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Cutting Pliers, Heavy Duty	180	1 / 6 / 36	F	592201180





UNTIL SUPPLY
LAST

SCREWDRIVER SLOTTED

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	4	150	1 / 12 / 120	F	593140150
Screwdriver	5	100	1 / 12 / 120	F	593150100
Screwdriver	5	150	1 / 12 / 120	F	593150150
Screwdriver	6	100	1 / 12 / 120	F	593160100
Screwdriver	6	150	1 / 12 / 120	F	593160150
Screwdriver	8	150	1 / 6 / 60	F	593180150



UNTIL SUPPLY
LAST

SCREWDRIVER PH

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	PH0	75	1 / 12 / 120	F	593200075
Screwdriver	PH0	100	1 / 12 / 120	F	593200100
Screwdriver	PH0	150	1 / 12 / 120	F	593200150
Screwdriver	PH1	75	1 / 12 / 120	F	593201075
Screwdriver	PH1	100	1 / 12 / 120	F	593201100
Screwdriver	PH1	150	1 / 12 / 120	F	593201150
Screwdriver	PH2	100	1 / 12 / 120	F	593202100
Screwdriver	PH2	150	1 / 12 / 120	F	593202150
Screwdriver	PH3	150	1 / 6 / 60	F	593203150



UNTIL SUPPLY
LAST

SCREWDRIVER PZ

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	PZ0	75	1 / 12 / 120	F	593300075
Screwdriver	PZ1	100	1 / 12 / 120	F	593301100
Screwdriver	PZ2	150	1 / 12 / 120	F	593302150
Screwdriver	PZ3	150	1 / 6 / 60	F	593303150





SCREWDRIVER T

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver	T5	75	1 / 12 / 120	F	593400005
Screwdriver	T6	75	1 / 12 / 120	F	593400006
Screwdriver	T7	75	1 / 12 / 120	F	593400007
Screwdriver	T8	75	1 / 12 / 120	F	593400008
Screwdriver	T9	75	1 / 12 / 120	F	593400009
Screwdriver	T10	100	1 / 12 / 120	F	593400010
Screwdriver	T15	100	1 / 12 / 120	F	593400015
Screwdriver	T20	100	1 / 12 / 120	F	593400020
Screwdriver	T25	100	1 / 12 / 120	F	593400025
Screwdriver	T27	100	1 / 12 / 120	F	593400027
Screwdriver	T30	100	1 / 12 / 120	F	593400030
Screwdriver	T40	150	1 / 6 / 60	F	593400040


 UNTIL SUPPLY
LAST

SLOTTED BIT 1/4

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / hanging card	Packing (pcs) / carton	Product category	Catalogue number
Slotted bit	4,0	25	2	125 / 500	F	594104025
Slotted bit	4,5	25	2	125 / 500	F	594104525
Slotted bit	5,5	25	2	125 / 500	F	594105525
Slotted bit	6,0	25	2	125 / 500	F	594106025
Slotted bit	6,5	25	2	125 / 500	F	594106525
Slotted bit	8,0	25	2	125 / 500	F	594108025
Slotted bit	9,0	25	2	125 / 500	F	594109025


 UNTIL SUPPLY
LAST

SLOTTED BIT 1/4

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / hanging card	Packing (pcs) / carton	Product category	Catalogue number
Slotted bit	4,0	50	2	125 / 500	F	594114050
Slotted bit	4,5	50	2	125 / 500	F	594114550
Slotted bit	5,5	50	2	125 / 500	F	594115550
Slotted bit	6,0	50	2	125 / 500	F	594116050
Slotted bit	6,5	50	2	125 / 500	F	594116550
Slotted bit	8,0	50	2	125 / 500	F	594118050
Slotted bit	9,0	50	2	125 / 500	F	594119050


 UNTIL SUPPLY
LAST

PH BIT 1/4

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



UNTIL SUPPLY
LAST

Type	Size (mm)	Length (mm)	Packing (pcs) / hanging card	Packing (pcs) / carton	Product category	Catalogue number
PH bit	PH0	25	2	125 / 500	F	594200025
PH bit	PH1	25	2	125 / 500	F	594200125
PH bit	PH3	25	2	125 / 500	F	594200325
PH bit	PH3	50	2	125 / 500	F	594210350
PH bit	PH4	50	2	125 / 500	F	594210450



PZ BIT 1/4

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



UNTIL SUPPLY
LAST

Type	Size (mm)	Length (mm)	Packing (pcs) / hanging card	Packing (pcs) / carton	Product category	Catalogue number
PZ bit	PZ0	25	2	125 / 500	F	594300025
PZ bit	PZ1	25	2	125 / 500	F	594300125
PZ bit	PZ3	25	2	125 / 500	F	594300325
PZ bit	PZ1	50	2	125 / 500	F	594310150
PZ bit	PZ3	50	2	125 / 500	F	594310350
PZ bit	PZ4	50	2	125 / 500	F	594310450



TORX BIT

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



UNTIL SUPPLY
LAST

Type	Size (mm)	Length (mm)	Packing (pcs) / hanging card	Packing (pcs) / carton	Product category	Catalogue number
TORX bit	T4	25	2	125 / 500	F	594400425
TORX bit	T5	25	2	125 / 500	F	594400525
TORX bit	T6	25	2	125 / 500	F	594400625
TORX bit	T7	25	2	125 / 500	F	594400725
TORX bit	T8	25	2	125 / 500	F	594400825
TORX bit	T9	25	2	125 / 500	F	594400925
TORX bit	T10	25	2	125 / 500	F	594401025
TORX bit	T15	25	2	125 / 500	F	594401525
TORX bit	T20	25	2	125 / 500	F	594402025
TORX bit	T25	25	2	125 / 500	F	594402525
TORX bit	T27	25	2	125 / 500	F	594402725
TORX bit	T30	25	2	125 / 500	F	594403025
TORX bit	T40	25	2	125 / 500	F	594404025





UNTIL SUPPLY
LAST

TORX BIT

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / hanging card	Packing (pcs) / carton	Product category	Catalogue number
TORX bit	T10	50	2	125 / 500	F	594411050
TORX bit	T15	50	2	125 / 500	F	594411550
TORX bit	T25	50	2	125 / 500	F	594412550
TORX bit	T27	50	2	125 / 500	F	594412750
TORX bit	T40	50	2	125 / 500	F	594414050



RACHET HANDLE

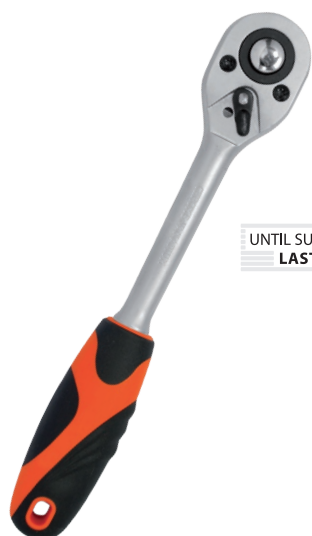
3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Ratchet handle	3/8"	1 / 6 / 36	F	595100038



UNTIL SUPPLY
LAST



HEXAGON SOCKET 1/4

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
1/4" socket	4mm	1 / 14 / 280	F	595300040
1/4" socket	4.5mm	1 / 14 / 280	F	595300045
1/4" socket	5mm	1 / 14 / 280	F	595300050
1/4" socket	5.5mm	1 / 14 / 280	F	595300055
1/4" socket	6mm	1 / 14 / 280	F	595300060
1/4" socket	7mm	1 / 14 / 280	F	595300070
1/4" socket	8mm	1 / 14 / 280	F	595300080
1/4" socket	9mm	1 / 14 / 280	F	595300090
1/4" socket	10mm	1 / 14 / 280	F	595300100
1/4" socket	11mm	1 / 14 / 280	F	595300110
1/4" socket	12mm	1 / 14 / 280	F	595300120
1/4" socket	13mm	1 / 14 / 280	F	595300130
1/4" socket	14mm	1 / 14 / 280	F	595300140



UNTIL SUPPLY
LAST



HEXAGON SOCKET 3/8

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
3/8" socket	6mm	1 / 14 / 280	F	595400006
3/8" socket	7mm	1 / 14 / 280	F	595400007
3/8" socket	8mm	1 / 14 / 280	F	595400008
3/8" socket	9mm	1 / 14 / 280	F	595400009
3/8" socket	10mm	1 / 14 / 280	F	595400010
3/8" socket	11mm	1 / 14 / 280	F	595400011
3/8" socket	12mm	1 / 14 / 280	F	595400012
3/8" socket	13mm	1 / 12 / 240	F	595400013
3/8" socket	14mm	1 / 12 / 240	F	595400014
3/8" socket	15mm	1 / 12 / 240	F	595400015
3/8" socket	16mm	1 / 12 / 240	F	595400016
3/8" socket	17mm	1 / 12 / 240	F	595400017
3/8" socket	18mm	1 / 10 / 200	F	595400018
3/8" socket	19mm	1 / 10 / 200	F	595400019
3/8" socket	20mm	1 / 10 / 200	F	595400020
3/8" socket	21mm	1 / 8 / 160	F	595400021



UNTIL SUPPLY
LAST

HEXAGON SOCKET 1/2

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY



Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
1/2" socket	10mm	1 / 10 / 200	F	595500010
1/2" socket	11mm	1 / 10 / 200	F	595500011
1/2" socket	12mm	1 / 10 / 200	F	595500012
1/2" socket	13mm	1 / 10 / 200	F	595500013
1/2" socket	14mm	1 / 10 / 200	F	595500014
1/2" socket	15mm	1 / 10 / 200	F	595500015
1/2" socket	16mm	1 / 10 / 200	F	595500016
1/2" socket	17mm	1 / 8 / 160	F	595500017
1/2" socket	18mm	1 / 8 / 160	F	595500018
1/2" socket	19mm	1 / 8 / 160	F	595500019
1/2" socket	20mm	1 / 8 / 160	F	595500020
1/2" socket	21mm	1 / 8 / 160	F	595500021
1/2" socket	22mm	1 / 8 / 160	F	595500022
1/2" socket	23mm	1 / 6 / 120	F	595500023
1/2" socket	24mm	1 / 6 / 120	F	595500024
1/2" socket	27mm	1 / 5 / 100	F	595500027
1/2" socket	30mm	1 / 4 / 80	F	595500030
1/2" socket	32mm	1 / 4 / 80	F	595500032



UNTIL SUPPLY
LAST



UNTIL SUPPLY
LAST

COMBINATION SPANNER

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Offset ring end	Packing (pcs) / carton	Product category	Catalogue number
Combination Spanner	9	6,5	15°	1 / 12 / 300	F	596200009
Combination Spanner	11	7,5	15°	1 / 12 / 300	F	596200011
Combination Spanner	15	9,5	15°	1 / 12 / 180	F	596200015
Combination Spanner	16	10,0	15°	1 / 12 / 180	F	596200016
Combination Spanner	18	11,0	15°	1 / 12 / 120	F	596200018
Combination Spanner	20	12,0	15°	1 / 6 / 120	F	596200020
Combination Spanner	21	12,3	15°	1 / 6 / 90	F	596200021
Combination Spanner	22	12,5	15°	1 / 6 / 90	F	596200022
Combination Spanner	23	12,8	15°	1 / 6 / 90	F	596200023
Combination Spanner	24	13,0	15°	1 / 6 / 60	F	596200024
Combination Spanner	27	14,5	15°	1 / 6 / 60	F	596200027



DOUBLE OPEN SPANNER

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Double Open Spanner	6x7	120	1 / 12 / 300	F	596300067
Double Open Spanner	8x9	140	1 / 12 / 300	F	596300089
Double Open Spanner	14x15	185	1 / 12 / 240	F	596301415
Double Open Spanner	16x17	200	1 / 12 / 180	F	596301617
Double Open Spanner	18x19	220	1 / 12 / 180	F	596301819
Double Open Spanner	20x22	235	1 / 6 / 120	F	596302022
Double Open Spanner	21x23	245	1 / 6 / 60	F	596302123
Double Open Spanner	25x28	270	1 / 6 / 48	F	596302528
Double Open Spanner	30x32	295	1 / 6 / 48	F	596303032



UNTIL SUPPLY
LAST

DOUBLE OFFSET RING SPANNER

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

Type	Size (mm)	Length (mm)	Offset ring end	Packing (pcs) / carton	Product category	Catalogue number
Double Offset Ring Spanner	6x7	165	75°	1 / 12 / 240	F	596400067
Double Offset Ring Spanner	8x9	180	75°	1 / 12 / 240	F	596400089
Double Offset Ring Spanner	14x15	235	75°	1 / 6 / 150	F	596401415
Double Offset Ring Spanner	16x17	250	75°	1 / 6 / 150	F	596401617
Double Offset Ring Spanner	18x19	265	75°	1 / 6 / 120	F	596401819
Double Offset Ring Spanner	20x22	285	75°	1 / 6 / 60	F	596402022
Double Offset Ring Spanner	21x23	305	75°	1 / 6 / 60	F	596402123
Double Offset Ring Spanner	24x27	325	75°	1 / 6 / 60	F	596402427
Double Offset Ring Spanner	25x28	340	75°	1 / 6 / 30	F	596402528
Double Offset Ring Spanner	30x32	375	75°	1 / 6 / 30	F	596403032



UNTIL SUPPLY
LAST



PLASTIC LEVEL

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Durable acrylic vials read plumb, level, 45°
Top read window for convenience
Rubber end caps for shock-resistant
Highly visible vials with magnetic base

Type	Length (mm)	Packing (pcs) / carton	Product category	Catalogue number
Level	228.6	6/36	C	598243



SAW

3+2
standard
+extended **5** YEAR TOTAL
WARRANTY

Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Saw	400	1 / 6 / 60	F	597200400



UNTIL SUPPLY
LAST



6PC PRECISION SCREWDRIVER SET

Slotted size: 1.4mm, 2.0mm, 2.4mm, 3.0mm

PH size: PH0, PH1

Carbon steel blade with black finish

With chrome plated handle

Type	Packing (pcs) / carton	Product category	Catalogue number
Screwdriver set	6/36	C	598094



15-IN-1 MULTI-PURPOSE PLIERS

3+2
standard
+extended
5 YEAR TOTAL
WARRANTY

Precision punched

Machined surface

Stainless steel components

Compact folding design

deal selection for general purpose use

Type	Packing (pcs) / carton	Product category	Catalogue number
Multi pliers	4/24	C	598210



ALLIGATORS CLIPS SETS

Type	Rated current	Colour	Length (mm)	Packing / Box (pcs)	Product category	Catalogue number
F 275	max 5A	red/ black	50	50	G	M500060
F 279	max 80A	red/ black	80	50	G	M500059
L 150	max 200A	red/ black	150	2	G	M411012





CUTTER KNIFE 9MM

Handle material: Plastic PP
Blade material: Steel
Blade size: 83x9x0.4mm;
Color: Yellow
Packaging: Blister card

Type	Packing (pcs) / carton	Product category	Catalogue number
Cutter knife	1/135/1080	C	597300009



CUTTER KNIFE 18MM

Handle material: Plastic PP
Blade material: Steel
Blade size: 100x18x0.5mm;
Color: Blue
Packaging: Blister card

Type	Packing (pcs) / carton	Product category	Catalogue number
E-7229 Cutter knife	1/50/400	C	597300021



CUTTER KNIFE 18MM

Handle material: Plastic PP+TPR
Blade material: SK5
Blade size: 100x18x0.5mm;
Color: Red
Packaging: Blister card

Type	Packing (pcs) / carton	Product category	Catalogue number
E-82087 Cutter knife	1/36/288	C	597300019





FOLDABLE KNIFE 18MM

Handle material: Plastic PP+TPR
 Blade material: SK5(1+5pcs)
 Blade size: 60x19x0.5mm;
 Color: Yellow
 Packaging: Blister card

Type	Packing (pcs) / carton	Product category	Catalogue number
E7002 Foldable knife	1/12/240	C	597300022



ALUMINIUM AUTO-LOCK KNIFE

Handle material: Aluminum Alloy
 Blade material: SK5
 Blade size: 60x19x0.5mm;
 Color: Silver
 Packaging: Blister card

Type	Packing (pcs) / carton	Product category	Catalogue number
E-522 Auto- lock knife	1/36/288	C	597300020



ALUMINUM FIXED BLADE UTILITY KNIFE

Razor-sharp tempered SK5 blade
 Aluminum alloy housing
 Fixed blade for more cutting power
 3PC blades included

Type	Packing (pcs) / carton	Product category	Catalogue number
Aluminium utility knife	6/36	C	598201





KNIFE SPARE BLADES

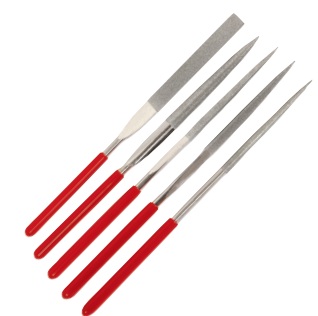
Type	Size (mm)	Packing (pcs) / carton	Product category	Catalogue number
Knife spare blades	9	10 / 40 / 600	C	597310009
Knife spare blades	18	1/20/400	C	597310018



HAMMER WITH HARDWOOD HANDLE

Drop forged carbon steel
Fully heat treated & polished head

Type	Packing (pcs) / carton	Product category	Catalogue number
Hammer 300gr	6/36	C	598230
Hammer 500gr	6/36	C	598231



5PC DIAMOND NEEDLE FILE SET

Fine diamond grit
Perfect for machinists, gunsmiths, jewelers and hobbyists
Size: 3x140mm, 150 grit
Dipped grip handle

Type	Packing (pcs) / carton	Product category	Catalogue number
Needle file	6/24	C	598232





3-IN-1 STAPLE GUN SET

3+2
standard
+extended

5 YEAR TOTAL
WARRANTY

1PC staple gun
500PC 8x1.2x11.3mm staples
500PC 12mm staples
500PC 14mm nails
1PC handy storage case

Type	Packing (pcs) / carton	Product category	Catalogue number
Staple gun	6	C	598246



MAGNETIC TAPE MEASURE E-240 SERIES

Type	Tape sizes (m/mm)	Packing (pcs) / carton	Product category	Catalogue number
E-240/319 Tape measure	3x19	1/10/200	C	598247
E-240/519 Tape measure	5x19	1/10/200	C	598248
E-240/525 Tape measure	5x25	1/10/100	C	598249



CHROME PLATING TAPE MEASURE

Type	Tape Length	Packing (pcs) / carton	Product category	Catalogue number
Tape measure	5m	4/24	C	598241





Metal

CUTTING DISC FOR METAL

Ø - Outer disc diameter (mm)
D1 - Inner disc diameter (mm)
D2 - Disc width (mm)

Ø (mm)	D1 (mm)	D2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
115	22.2	1.0	10/400	C	M516300
115	22.2	1.6	10/400	C	M516301
125	22.2	1.0	10/400	C	M516302
125	22.2	1.6	1/400	C	M516303
125	22.2	3.2	5/200	C	M516211
180	22.2	3.2	5/100	C	M516212
230	22.2	3.2	5/100	C	M516213



Metal

Inox

CUTTING DISC METAL A60T INOX

Ø - Outer disc diameter (mm)
D1 - Inner disc diameter (mm)
D2 - Disc width (mm)

Ø (mm)	D1 (mm)	D2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
115	22.2	1.0	25/400	C	M516304
125	22.2	1.0	25/400	C	M516305



Metal

GRINDING DISC

Ø - Outer disc diameter (mm)
D1 - Inner disc diameter (mm)
D2 - Disc width (mm)

Ø (mm)	D1 (mm)	D2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
115	22.2	6	25/200	C	M516219
125	22.2	6	25/100	C	M516220
180	22.2	6	25/100	C	M516307
230	22.2	6	25/50	C	M516308



**Metal****TWIST KNOT WIRE WHEEL BRUSH FOR ANGLE GRINDERS**

Ø - Outer disc diameter (mm)

D1 - Inner disc diameter (mm)

Ø (mm)	D1 (mm)	Packing/Box (pcs)	Product category	Catalogue number
100	22.2	1/100	C	M516050
150	22.2	1/40	C	M516068

**Stone****CUTTING DISC STONE**

Ø - Outer disc diameter (mm)

D1 - Inner disc diameter (mm)

D2 - Disc width (mm)



Ø (mm)	D1 (mm)	D2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
115	22.2	3.2	5/400	C	M516216
125	22.2	3.2	25/200	C	M516306
180	22.2	3.2	5/100	C	M516217
230	22.2	3.2	5/100	C	M516218

**Concrete Bricks Faience****DIAMOND CUTTING DISC WET**

Ø - Outer disc diameter (mm)

D1 - Inner disc diameter (mm)



Ø (mm)	D1 (mm)	D2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
115	22.2	7	10/100	C	M516309
125	22.2	7	10/100	C	M516310





Concrete Bricks Faience

DIAMOND CUTTING DISC TURBO

Ø - Outer disc diameter (mm); D1 - Inner disc diameter (mm); D2 - Disc width (mm)

Ø (mm)	D1 (mm)	D2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
115	22.2	7	10/100	C	M516311
125	22.2	7	10/100	C	M516312



Metal Wood Stone

FLAP DISC

Ø - Outer disc diameter (mm); D1 - Inner disc diameter (mm)

Ø (mm)	D1 (mm)	Grit	Packing/Box (pcs)	Product category	Catalogue number
125	22.2	A-60	50/100	C	M516169
125	22.2	A-80	50/100	C	M516313
125	22.2	A-120	50/100	C	M516171



Metal

TWIST KNOT WIRE CUP BRUSH FOR ANGLE GRINDERS

Ø - Outer disc diameter (mm)

Ø (mm)	Nut size	Packing/Box (pcs)	Product category	Catalogue number
100	M14x2	1/60	C	M516256



Metal

DRILL TWIST KNOT WIRE CUP BRUSH WITH SHANK

Ø - Outer disc diameter (mm); Ø S - Shank size (mm)

Ø (mm)	Ø S (mm)	Packing/Box (pcs)	Product category	Catalogue number
75	6	30/120	C	M516314



Wood

HOLE CUTTERS SET



Ø - Outer disc diameter (mm)
7 pcs SET

Ø (mm)	Packing/Box (pcs)	Product category	Catalogue number
26-63	10/60	C	M516013



Concrete

CORE CUTTERS FOR DRILL



Ø - Outer disc diameter (mm)

Ø (mm)	Packing/Box (pcs)	Product category	Catalogue number
65	5/20	C	M516148
85	4/20	C	M516315



ARBOR & PILOT DRILL SDS PLUS FOR CORE CUTTERS



Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
170	4/20	C	M516147



Wood

BRAD POINT DRILL FOR WOOD



Ø - Drill bit diameter (mm)
5 pcs SET

Ø (mm)	Packing/Box (pcs)	Product category	Catalogue number
4; 5; 6; 8; 10	5/100	C	M516370





Metal

DRILL BITS FOR METAL

Ø - Drill bit diameter (mm)
L1 - Total length (mm)
L1 - Working length (mm)
DIN 338
HSS 4241

Ø (mm)	L1 (mm)	L2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
1.0	34	12	2/150/300	C	M516316
1.5	40	18	2/150/300	C	M516317
2.0	49	24	2/150/300	C	M516318
2.5	57	30	2/150/300	C	M516319
3.0	61	33	2/150/300	C	M516320
3.2	65	36	2/150/300	C	M516321
3.5	70	39	2/150/300	C	M516322
4.0	75	43	2/150/300	C	M516323
4.2	75	43	1/150/300	C	M516324
4.5	80	47	1/150/300	C	M516325
5.0	86	52	1/150/300	C	M516326
6.0	93	57	1/150/300	C	M516327
6.5	101	63	1/90/180	C	M516328
7.0	109	69	1/90/180	C	M516329
8.0	117	75	1/90/180	C	M516330
10.0	133	87	1/60/120	C	M516331
12.0	151	101	1/10/50	C	M516332



Concrete

MASONRY DRILL BITS

Ø - Drill bit diameter (mm)
L1 - Total length (mm)
L1 - Working length (mm)
DIN 8039
U-type flute

Ø (mm)	L1 (mm)	L2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
3.0	60	30	150/300	C	M516340
4.0	75	40	150/300	C	M516341
5.0	85	50	150/300	C	M516342
6.0	100	60	150/300	C	M516343
8.0	120	80	90/180	C	M516344
10.0	150	90	60/120	C	M516345



**Concrete****CROSS HEAD DRILLS SDS-PLUS**

Ø - Drill bit diameter (mm)

L1- Total length (mm)

L1- Working length (mm)

DIN 8035

Ø (mm)	L1 (mm)	L2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
6.0	110	30	10/200	C	M516350
6.0	160	40	10/200	C	M516351
6.0	210	50	10/200	C	M516352
6.5	260	200	10/200	C	M516353
8.0	110	50	10/200	C	M516354
8.0	160	100	10/200	C	M516355
8.0	210	150	10/200	C	M516356
8.0	350	300	10/100	C	M516357
10.0	160	100	10/200	C	M516358
10.0	260	200	10/200	C	M516359
10.0	450	400	10/50	C	M516360
12.0	210	150	10/200	C	M516361
12.0	450	400	10/50	C	M516362

**SOLDERING GUN**
2+0
 standard
 +extended
2 YEAR TOTAL
 WARRANTY

With LED light

Power (W)	Temperature range	Packing/Box (pcs)	Product category	Catalogue number
100	600°C	1/24	C	M516375





TIN ABSORPTION PUMP

Packing/Box (pcs)	Product category	Catalogue number
1/150	C	M516380



SOLDER WIRE

Solder Alloy	External diameter (mm)	Melting temp.	Weight	Packing/Box (pcs)	Product category	Catalogue number
Sn-60%; PB-40%	1	180°C	200g	20/120	C	M516072



ROSIN

It serves to degrease the soldering parts and the soldering tip of the soldering iron | Facilitates the flow of solder | Increases efficiency of the soldering process

Weight (gr)	Packing/Box (pcs)	Product category	Catalogue number
50	1	G	M500632



HOT MELT GLUE GUN

2+0
standard
+extended **2** YEAR TOTAL
WARRANTY

Power (W)	Temperature range	Silicone pipe diameter	Heating time	Packing/Box (pcs)	Product category	Catalogue number
100	18-200°C	11mm	4-5min	6/24	C	M516385



GLUE STICKS SET FOR GLUE GUNS

10 pcs SET

Ø (mm)	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
11	200	10	C	M516386





KNITTED WORK GLOVES PLOVER

Seamless knitted gloves white polyester/cotton elastic cuff, palm and fingers with PVC dots.

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
PLOVER	white/blue	10/100	G	M081001



WORK GLOVES SPARROW

Gaude white polyester, nitrile dipped.

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
SPARROW	white/red	10/100	G	M081014



WORK GLOVES AUK

Seamless knit, nylon/cotton, white colour

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
AUK	white	10/100	G	M081015



COWSPLIT LEATHER GLOVES WITH LINING

Cow split leather gloves with lining, cotton back, reinforced at the palm area

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
GULL EVO	white/yellow	10/100	G	M081102



GLASSES WITH WIDE LENS UNIVET 520 VS160



Glasses with wide lens, compatible to prescription spectacle. With side vents. They can be sterilized. Entirely made of polycarbonate, without metal fragments. Suitable to a wide range of applications.

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
UNIVET 520	white	10/100	G	M081000



IMPACT RESISTANT GLASSES



Impact resistant glasses, especially designed for industrial work. PVC frame with polycarbonate lenses against acid splashes and dust, with indirect ventilation Adjustable elastic headband for extra comfort. Suitable for prolong use, without causing distortion or fatigue. Suitable for prolong use, without causing distortion or fatigue.

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
2203-00	white	10/100	G	M081091



VENTILATED HELMET, KANTON



Helmet, ventilated with screw. BODY MATERIAL: HDPE, with 6 air vents (High-density polythene) HEADBAND MATERIAL: textile MOUNTING HEADBAND: six points WEIGHT: 360 g

Model	Colour	Packing/Box (pcs)	Product category	Catalogue number
KANTON	blue	1	G	M081036





PLASTIC ORGANIZER WITH DIVIDERS

2+0
 standard
 +extended

2 YEAR TOTAL
 WARRANTY

Section	Colour	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
8	Red	165	140	35	1	G	M16654432
8	Black	303	180	50	1	G	M16654434
12	Red	265	155	40	1	G	M16654433



PLASTIC ORGANIZER WITH DIVIDERS

2+0
 standard
 +extended

2 YEAR TOTAL
 WARRANTY

Section	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
3x11	315	140	210	1	G	M16654400



PLASTIC TOOL BOX WITH ORGANIZER

2+0
 standard
 +extended

2 YEAR TOTAL
 WARRANTY

Model	Length (mm)	Width (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
13"	320	160	130	1	G	M16654420
16"	400	200	175	1	G	M16654421
19"	480	255	230	1	G	M16654422
22"	555	295	265	1	G	M16654423



BATTERIES



Reference IEC	Type	Serie	Voltage (V)	Diameter (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
LR03	AAA	High energy	1.5	10.5	44.5	1/4	G	M070125
LR03	AAA	Max tech	1.5	10.5	44.5	1/4	G	M070261
LR6	AA	High energy	1.5	14.5	50.5	1/4	G	M070117
LR6	AA	Max tech	1.5	14.5	50.5	1/4	G	M070257



BATTERIES



M070284



M070110



M070057

Reference IEC	Type	Serie	Voltage (V)	Diameter (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
LR1		Professional electronic	1.5	12	30.2	1/1	G	M070284
LR14	C	Long Life	1.5	26.2	50	1/2	G	M070087
LR20	D	Long Life	1.5	34.2	61.5	1/2	G	M070113
3R12	4.5V	Super Life	4.5		67	1/1	G	M070057
LR22	9V	Long Life	9		48.5	1/1	G	M070110



BATTERIES



M070236

Reference IEC	Type	Serie	Voltage (V)	Diameter (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
8LR932	A23 GA	Professional electronic	12	10.3	8.5	1/1	G	M070236
V27A	A27 GA	Professional electronic	12	7.7	28.2	1/1	G	M070132



BATTERIES



Reference IEC	Type	Serie	Voltage (V)	Diameter (mm)	Height (mm)	Packing/Box (pcs)	Product category	Catalogue number
DL2016	CR2016	Professional electronic	3	20	1.6	1/1	G	M070011
DL2025	CR2025	Professional electronic	3	20	2.5	1/1	G	M070220
DL2032	CR2032	Professional electronic	3	20	3.2	1/1	G	M070221
LR44	V 13 GA	Professional electronic	1.5	11.6	5.4	1/1	G	M070259





ALUMINIUM LIGHT BAR

1+0
standard
+extended
 1 YEAR TOTAL
WARRANTY
TECHNICAL DATA:

- LED 3Watt COB
- Material: Aluminium
- Size: 159x32x18mm

- Battery Type: 3xAAA
- Light Mode: On/Off
- Other: With Two Magnets & Velcro Strip

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-4116	Light Bar	Silver	1/100	C	100166



WORK LIGHT WITH ROTARY BASE

1+0
standard
+extended
 1 YEAR TOTAL
WARRANTY
TECHNICAL DATA:

- LED 3Watt COB
- Lumens: 200lm
- Material: Plastic
- Size: 130x68x39mm

- Battery Type: 3xAAA
- Light Mode: On/Off
- Other: With Two Strong Magnet on Swivel Holder | With 360° Rotary Dividual Pocket Clip and 360° Swivel Holder

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-5542	Work Light	Green	1/100	C	100169/G
E-5542	Work Light	Yellow	1/100	C	100169/Y



PIVOT WORK LIGHT WITH MAGNETIC BASE

1+0
standard
+extended
 1 YEAR TOTAL
WARRANTY
TECHNICAL DATA:

- LED 3Watt COB
- Lumens: 240lm
- Material: Rubber Coated
- Size: 87x55x95mm

- Battery Type: 3xAA
- Light Mode: On/Off
- Other: With 360° Rotary Pivot Base | With strong magnet on bottom

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-5503	Pivot Work Light	Black	1/50	C	100167





ALUMINIUM WORK LIGHT

1+0
standard
+extended
1 YEAR TOTAL
WARRANTY

TECHNICAL DATA:

- LED 3Watt COB
- Lumens: 200lm
- Material: Aluminium

- Size: 162x25x15mm
- Battery Type: 3xAAA
- Light Mode: On/Off
- Other: With Strong Magnet in Swivel Hook

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-5545	Work Light	Black	1/100	C	100168



ZOOM FLASHLIGHT

1+0
standard
+extended
1 YEAR TOTAL
WARRANTY

TECHNICAL DATA:

- LED 1Watt
- Material: Rubber Coated
- Size: 115x34mm

- Battery Type: 3xAAA
- Light Mode: On/Off
- Other: Handstrap; Telescopic (ZOOM)

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-6605	Flashlight	Black	1/100	C	100172



ZOOM FLASHLIGHT

1+0
standard
+extended
1 YEAR TOTAL
WARRANTY

TECHNICAL DATA:

- LED Type: CREE XPE
- Lumens: 200lm
- Material: Aluminium
- Size: 150x33mm

- Battery Type: 3xAAA
- Light Mode: High/Low/Strobe/Off
- Light Distance: Zoom in-250Meters / Zoom Out-100Meters
- Other: Handstrap

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-1171	Flashlight	Black	1/50	C	100173



1+0
 standard
 +extended
 1 YEAR TOTAL
 WARRANTY

HANDY SPOT FLASHLIGHT RECHARGEABLE



TECHNICAL DATA:

- 7LED
- Material: Plastic
- Size: 150x70x70mm

- Battery Type: Rechargeable battery
- Light Mode: On/Off
- Other: Direct Charge

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-6630	Flashlight	Black & Yellow	1/50	C	100174


1+0
 standard
 +extended
 1 YEAR TOTAL
 WARRANTY

MINI KEY LIGHT



TECHNICAL DATA:

- LED 1.5W COB
- Material: Plastic
- Size: 71x34x21mm

- Battery Type: 2xCR2032)
- Light Mode: High/Low/Flash/Off
- Other: Strong Back Magnet; Colourful Carabiner

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-5903	Flashlight	Blue	1/100	C	100176/B
E-5903	Flashlight	Black	1/100	C	100176/BL


1+0
 standard
 +extended
 1 YEAR TOTAL
 WARRANTY

BULB SHAPE PULL LIGHT



TECHNICAL DATA:

- LED 1W
- Material: Plastic

- Size: 55x55x160mm
- Battery Type: 3xAAA
- Light Mode: On/Off

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-6621	Pull Light	Blue	1/100	C	100175/B
E-6621	Pull Light	Black	1/100	C	100175/BL
E-6621	Pull Light	Pink	1/100	C	100175/P
E-6621	Pull Light	Red	1/100	C	100175/R



HEADLAMP

1+0
standard
+extended **1** YEAR TOTAL
WARRANTY



TECHNICAL DATA:

- LED 3W COB
- Lumens: 200lm

- Size: 60x42x34mm
- Battery Type: 3xAAA
- Light Mode: High/Low/Strobe/Off

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-3645	Headlamp	Black	1/100	C	100170



ZOOM HEADLAMP

1+0
standard
+extended **1** YEAR TOTAL
WARRANTY



TECHNICAL DATA:

- 1xXML T6 + 2xCREE XPE
- Lumens: 1200lm
- Size: 59x43mm

- Battery Type: 4xAA
- Light Mode: 1xT6 On/ 2 Sides XPE On/ All On/ All Strobe/ OFF

Model	Description	Colour	Packing/Box (pcs)	Product category	Catalogue number
E-3396	Zoom Headlamp	Black	1/50	C	100171



TWINFAST THREAD SCREWS FOR DRYWALLS



- For fixings of drywall panels of standard density
- Needle S point: it drills directly metals up to 0.8 mm thick.
- 60° tapping thread.
- Coverings: Phosphated. This covering enables the adherence of the filler putty to the head of the screw.

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Recess	Point	Thread	Packing/ Box (pcs)	Product category	Catalogue number
Plasterboard & metal	3.5	25	PH2	needle	twinfast	1000	G	M317172
Plasterboard & metal	3.5	35	PH2	needle	twinfast	1000	G	M317173
Plasterboard & metal	3.5	45	PH2	needle	twinfast	1000	G	M317174

Application: Fixing of plasterboards or isolation panels to metallic profiles of 0.8 mm maximum thickness.



COARSE THREAD SCREWS FOR DRYWALLS



- S needle point: it allows penetrating in soft materials and in metallic materials up to 0.8 mm thickness.
- Covering: phosphated
- Coarse thread: it allows a faster installation.

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Recess	Point	Thread	Packing/ Box (pcs)	Product category	Catalogue number
Plasterboard	3.5	25	PH2	needle	coarse	1000	G	M317259
Plasterboard	3.5	35	PH2	needle	coarse	1000	G	M317169
Plasterboard	3.5	45	PH2	needle	coarse	1000	G	M317170

Applications: with double pitch thread, for the proper fixing of plasterboards together or plasterboards to wood.



SELFDRILLING SCREWS FOR DRYWALLS



- Selfdrilling point and tapping thread: for use in metallic materials without pilot hole, up to 3 mm thick.
- Covering: phosphated

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Recess	Point	Thread	Packing/ Box (pcs)	Product category	Catalogue number
Plasterboard & metal	3.5	25	PH2	selfdrilling	tapping	1000	G	M317300
Plasterboard & metal	3.5	35	PH2	selfdrilling	tapping	1000	G	M317301
Plasterboard & metal	3.5	45	PH2	selfdrilling	tapping	1000	G	M317302

*Application: fixing of plaster boards or isolation panels to metallic profiles of 0.8 - 3.0 mm thickness."



SELF DRILLING SCREW WITH TRUSS WASHER HEAD



- Selfdrilling point and tapping thread: for use in metallic materials without pilot hole
- Covering: Zn

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Recess	Point	Packing/Box (pcs)	Product category	Catalogue number
Metal	4.2	13	PH2	selfdrilling	1000	G	M317134
Metal	4.2	16	PH2	selfdrilling	1000	G	M317135
Metal	4.2	19	PH2	selfdrilling	1000	G	M317231
Metal	4.2	25	PH2	selfdrilling	1000	G	M317303

Application: for metal



DRYWALL SCREW WITH WAFER HEAD AND TWINFAST THREAD



- Material: Carbon steel
- Covering: phosphated

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Recess	Point	Thread	Packing/Box (pcs)	Product category	Catalogue number
Metal	4.2	13	PH2	needle	twinfast	1000	G	M317230
Metal	4.2	16	PH2	needle	twinfast	1000	G	M317241
Metal	4.2	19	PH2	needle	twinfast	1000	G	M317313
Metal	4.2	25	PH2	needle	twinfast	1000	G	M317314

Application: For laminated and metal profiles



CONCRETE SCREW FOR DIRECT MOUNTING



- Material: Carbon steel
- Covering: Zn

Outer thread diameter (mm)	Length (mm)	Recess	Packing/Box (pcs)	Product category	Catalogue number
7.5	72	TX30	100	G	M317136
7.5	92	TX30	100	G	M317137
7.5	112	TX30	100	G	M317206
7.5	132	TX30	100	G	M317139

Application: Suitable for installation of PVC and wooden frames, door frames to concrete or solid brick



CHIPBOARD (WOOD) SCREW

- Fully threaded
- Covering: Zn

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Recess	Point	Packing/Box (pcs)	Product category	Catalogue number
Wood & Chipboard	3.5	16	PZ2	needle	1000	G	M317001
Wood & Chipboard	3.5	20	PZ2	needle	1000	G	M317003
Wood & Chipboard	3.5	25	PZ2	needle	1000	G	M317004
Wood & Chipboard	3.5	30	PZ2	needle	1000	G	M317005
Wood & Chipboard	3.5	35	PZ2	needle	1000	G	M317006
Wood & Chipboard	3.5	40	PZ2	needle	1000	G	M317007
Wood & Chipboard	4.0	20	PZ2	needle	1000	G	M317012
Wood & Chipboard	4.0	25	PZ2	needle	1000	G	M317013
Wood & Chipboard	4.0	30	PZ2	needle	1000	G	M317015
Wood & Chipboard	4.0	35	PZ2	needle	500	G	M317014
Wood & Chipboard	4.0	40	PZ2	needle	500	G	M317016
Wood & Chipboard	4.0	50	PZ2	needle	500	G	M317209
Wood & Chipboard	4.0	60	PZ2	needle	500	G	M317210
Wood & Chipboard	4.5	25	PZ2	needle	1000	G	M317304
Wood & Chipboard	4.5	30	PZ2	needle	1000	G	M317020
Wood & Chipboard	4.5	35	PZ2	needle	1000	G	M317021
Wood & Chipboard	4.5	40	PZ2	needle	500	G	M317305
Wood & Chipboard	4.5	50	PZ2	needle	500	G	M317022
Wood & Chipboard	4.5	60	PZ2	needle	500	G	M317023
Wood & Chipboard	5.0	30	PZ2	needle	1000	G	M317028
Wood & Chipboard	5.0	40	PZ2	needle	500	G	M317030
Wood & Chipboard	5.0	50	PZ2	needle	500	G	M317032
Wood & Chipboard	5.0	60	PZ2	needle	250	G	M317033
Wood & Chipboard	5.0	70	PZ2	needle	250	G	M317048
Wood & Chipboard	5.0	80	PZ2	needle	250	G	M317034
Wood & Chipboard	6.0	50	PZ3	needle	250	G	M317242
Wood & Chipboard	6.0	60	PZ3	needle	250	G	M317040
Wood & Chipboard	6.0	70	PZ3	needle	250	G	M317041
Wood & Chipboard	6.0	80	PZ3	needle	250	G	M317042





SELF DRILLING SCREW WITH HEXAGON HEAD AND EPDM WASHER

- Material: Carbon steel
- Covering: Zn

Material to be fixed	Outer thread diameter (mm)	Length (mm)	Point	Packing/Box (pcs)	Product category	Catalogue number
Metal	4.8	19	selfdrilling	1000	G	M317306
Metal	4.8	25	selfdrilling	500	G	M317243
Metal	4.8	32	selfdrilling	500	G	M317126
Metal	5.5	25	selfdrilling	500	G	M317127
Metal	5.5	32	selfdrilling	500	G	M317307
Metal	5.5	38	selfdrilling	500	G	M317308
Metal	5.5	50	selfdrilling	500	G	M317309
Metal	6.3	25	selfdrilling	500	G	M317130
Metal	6.3	32	selfdrilling	500	G	M317310
Metal	6.3	38	selfdrilling	500	G	M317131
Metal	6.3	50	selfdrilling	250	G	M317311
Metal	6.3	60	selfdrilling	250	G	M317312

Application: Sheet metal to steel construction



HEXAGON HEAD SCREWS FULLY THREADED

- Material: Carbon steel
- Covering: Zn

Thread	Length (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	16	5.6	500	G	M317064
M6	20	5.6	500	G	M317065
M6	25	5.6	500	G	M317066
M6	30	5.6	500	G	M317067
M8	20	5.6	200	G	M317073
M8	25	5.6	200	G	M317074
M8	30	5.6	200	G	M317075
M8	40	5.6	200	G	M317076
M10	30	5.6	200	G	M317080
M10	40	5.6	100	G	M317081
M10	50	5.6	100	G	M317082





CARRIAGE BOLT

- Material: Carbon steel
- Covering: Zn

Thread	Length (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	20	5.6	500	G	M317315
M6	30	5.6	500	G	M317316
M6	40	5.6	200	G	M317317
M6	50	5.6	200	G	M317318
M6	60	5.6	200	G	M317319
M6	70	5.6	200	G	M317320
M6	80	5.6	200	G	M317321
M8	30	5.6	200	G	M317322
M8	40	5.6	200	G	M317323
M8	50	5.6	200	G	M317324
M8	60	5.6	200	G	M317325
M8	70	5.6	200	G	M317326
M8	80	5.6	200	G	M317327



HEXAGON NUT

- Material: Carbon steel
- Covering: Zn

Thread	Packing/Box (pcs)	Product category	Catalogue number
M6	1000	G	M317152
M8	1000	G	M317153
M10	1000	G	M317154



LOCK NUT

- Material: Carbon steel
- Covering: Zn

Thread	Packing/Box (pcs)	Product category	Catalogue number
M6	1000	G	M317145
M8	500	G	M317146
M10	500	G	M317147



FLAT WASHER



- Material: Carbon steel
- Covering: Zn

Thread	Diameter 1 (mm)	Diameter 2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
M6	6.4	12	1000	G	M517076
M8	8.4	16	1000	G	M317216
M10	10.5	20	1000	G	M317217



LARGE FLAT WASHER



- Material: Carbon steel
- Covering: Zn

Thread	Diameter 1 (mm)	Diameter 2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
M6	6.4	18	2500	G	M317236
M8	8.4	24	500	G	M517203
M10	10.5	30	250	G	M317328



SPRING-LOCK WASHER

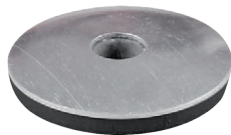


- Material: Carbon steel
- Covering: Zn

Thread	Diameter 1 (mm)	Diameter 2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
M6	6.1	11.8	1000	G	M317162
M8	8.1	14.8	1000	G	M317163
M10	10.2	18.1	1000	G	M317164



EPDM WASHER



- Material: Carbon steel
- Covering: Zn

For screw with diameter (mm)	Diameter 1 (mm)	Diameter 2 (mm)	Packing/Box (pcs)	Product category	Catalogue number
4.8	5.3	16	500	G	M317329
4.8	5.3	19	500	G	M317330
5.5	5.8	16	500	G	M317331
5.5	5.8	19	500	G	M317332





DROP IN ANCHOR

- Material: Galvanized steel
- Covering: Zn

Thread	Length (mm)	Drill diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
M6	25	8	100	G	M517233
M8	30	10	100	G	M517234
M10	40	12	50	G	M517235

Application: For fixing in concrete and hard materials



SLEEVE ANCHOR

- Material: Galvanized steel
- Covering: Zn

Thread	Length (mm)	Drill diameter (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	45	8	6.8	100	G	M517207
M6	60	8	6.8	100	G	M517208
M8	60	10	6.8	100	G	M517209
M8	80	10	6.8	100	G	M517210
M10	70	12	6.8	50	G	M517211
M10	100	12	6.8	25	G	M517212

Application: For fixing in concrete and solid materials



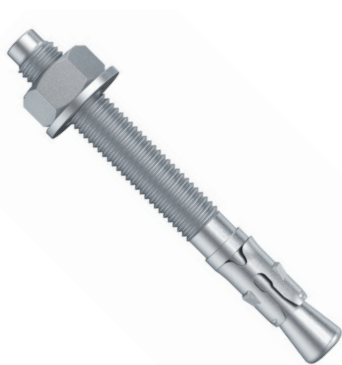
HEX NUT ANCHOR

- Material: Galvanized steel
- Covering: Zn

Thread	Length (mm)	Drill diameter (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	45	8	6.8	100	G	M517213
M8	60	10	6.8	100	G	M517214
M8	80	10	6.8	50	G	M517215
M10	70	12	6.8	50	G	M517216
M10	100	12	6.8	25	G	M517217

Application: For fixing in concrete and solid materials





THROUGH BOLT ANCHOR

- Material: Carbon steel
- Covering: Zn

Thread	Length (mm)	Drill diameter (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M8	60	10	6.8	100	G	M517360
M8	80	10	6.8	70	G	M517361
M10	100	12	6.8	50	G	M517362
M10	120	12	6.8	45	G	M517228
M10	160	12	6.8	25	G	M517363
M12	100	14	6.8	35	G	M517364
M12	120	14	6.8	30	G	M517365
M12	140	14	6.8	50	G	M517232

Application: Non-cracked concrete and hard materials. Attaching structural steel, facade, hand rails, racks, elevators, etc.



EYE ANCHOR BOLT

- Material: Galvanized steel
- Covering: Zn

Thread	Length (mm)	Drill diameter (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	45	8	6.8	100	G	M517218
M8	60	10	6.8	50	G	M517219
M10	70	12	6.8	25	G	M517220

Application: For fixing in concrete and solid materials



HOOK ANCHOR BOLT

- Material: Galvanized steel
- Covering: Zn

Thread	Length (mm)	Drill diameter (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	45	8	6.8	100	G	M517221
M8	60	10	6.8	50	G	M517222
M10	70	12	6.8	25	G	M517223

Application: For fixing in concrete and solid materials




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FISCHER ULTRACUT FBS II US

APPLICATIONS

- Pipeline routes
- Suspension for individual pipes
- Suspended mounting rails
- Prestressed concrete hollow core ceilings
- Cable trays
- Ventilation ducts
- Perforated tapes

BUILDING MATERIALS

- Concrete C20/25 to C50/60, cracked and non-cracked
- Prestressed hollow concrete ceilings C30/37 to C50/60 for the multiple use of non-load bearing systems
- ETA- approval

Model	Drill hole diameter d0 (mm)	Min. drill hole depth for through fixings h2 (mm)	Screw length ls (mm)	Packing/Box (pcs)	Product category	Catalogue number
FBS II 6 x 40/5 US	6	50	40	100	G	MF500460
FBS II 6 x 60/5 US	6	70	60	100	G	MF500461
FBS II 8 x 80 30/15 US TX	8	90	10x80	50	G	MF500462



FISCHER ULTRACUT WITH INTERNAL THREAD

APPLICATIONS

- Pipeline routes
- Suspension for individual pipes
- Suspended mounting rails
- Prestressed concrete hollow core ceilings
- Ventilation ducts

BUILDING MATERIALS

- Concrete C20/25 to C50/60, cracked and non-cracked
- Prestressed hollow concrete ceilings C30/37 to C50/60 for the multiple use of non-load bearing systems
- ETA- approval

Model	Drill hole diameter d0 (mm)	Min. drill hole depth for through fixings h2 (mm)	Screw length ls (mm)	Packing/Box (pcs)	Product category	Catalogue number
FBS II 6 x 35 M8/M10 I	6	45	35	100	G	MF500463
FBS II 6 x 55 M8/M10 I	6	65	55	100	G	MF500464


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UNIVERSAL NYLON WALL PLUGS

- Material: Nylon PA6

- Halogen free

Diameter (mm)	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
6	30	200	G	M517065
6	50	100	G	M517298
8	40	200	G	M517066
8	60	100	G	M517067
10	50	100	G	M517064
10	70	50	G	M517062

Application: Suitable for general light duty fittings



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FISCHER EXPANSION PLUG WITH RIM


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APPLICATIONS

- Lighting, Motion detectors
- Skirting
- Letter boxes
- Trellis

BUILDING MATERIALS

- Concrete
- Vertically perforated brick

- Hollow blocks made from lightweight concrete
- Cavity floor slabs made from bricks and concrete
- Perforated sand-lime brick
- Solid sand-lime brick
- Natural stone with dense structure
- Aerated concrete
- Solid panel made from gypsum
- Solid brick made from lightweight concrete

Model	Anchor length l (mm)	Drill hole diameter d0 (mm)	Min. drill hole depth h1 (mm)	Wood and chipboard screws ds (mm)	Packing/Box (pcs)	Product category	Catalogue number
SX 6 x 30	30	6	40	4-5	100	G	MF500467
SX 6 x 50	50	6	50	4-5	100	G	MF500468
SX 8 x 40	40	8	50	5x60	50	G	MF500469
SX 8 x 65	65	8	75	4.5-6	50	G	MF500470
SX 10 x 50	50	10	70	6-8	50	G	MF500471
SX 10 x 80	80	10	95	6-8	25	G	MF500472
SX 12 x 60	60	12	80	8-10	25	G	MF500473
SX 14 x 70	70	14	90	10-12	25	G	MF500474



FISCHER FRAME FIXING


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APPLICATIONS

- Facade, ceiling and roof substructures made of wood and metal
- TV consoles
- Kitchen hanging cabinets
- Wardrobes
- Squared timbers
- Windows
- Gates and doors
- Beams

BUILDING MATERIALS

- Vertically perforated brick
- Aerated concrete
- Hollow blocks made from lightweight concrete
- Perforated sand-lime brick
- Thermal insulation blocks
- Solid block made from lightweight and normal weight concrete
- Solid brick
- Solid sand-lime brick
- Concrete ≥C12/15
- Natural stone with dense structure
- Solid panel made from gypsum

Model	Anchor length l (mm)	Drill hole diameter d0 (mm)	Min. drill hole depth for through fixing h2 (mm)	Screws diameter ds (mm)	Min.screw length ls (mm)	Packing/Box (pcs)	Product category	Catalogue number
SXRL 8 x 60	60	8	70	5.5-6	65	100	G	MF500475
SXRL 8 x 80	80	8	90	5.5-6	85	100	G	MF500476
SXRL 8 x 100	100	8	110	5.5-6	105	100	G	MF500477
SXRL 8 x 120	120	8	130	5.5-6	125	100	G	MF500478





FISCHER DUOPOWER

APPLICATIONS

- Skirting
- Cable ducts
- Pictures and Decorations
- Soap dishes, Toilet paper holder
- Shower curtain rails
- Letter boxes
- Lighting, Motion detectors
- Signs, House numbers

BUILDING MATERIALS

- Concrete
- Solid brick and solid sand-lime brick

- Aerated concrete
- Vertically perforated brick
- Perforated sand-lime brick
- Plasterboard
- Gypsum plasterboard and gypsum fibreboards
- Hollow blocks made from lightweight concrete
- Cavity floor slabs made from bricks and concrete or similar
- Natural stone
- Chipboard
- Solid panel made from gypsum
- Solid brick made from lightweight concrete

Model	Anchor length l (mm)	Drill hole diameter d0 (mm)	Min. drill hole depth h1 (mm)	Wood and chipboard screws ds (mm)	Packing/Box (pcs)	Product category	Catalogue number
DUOPOWER 5 x 25	25	5	35	3-4	100	G	MF500479
DUOPOWER 6 x 30	30	6	40	4-5	100	G	MF500480
DUOPOWER 6 x 50	50	6	60	4-5	100	G	MF500481
DUOPOWER 8 x 40	40	8	50	4.5-6	100	G	MF500482
DUOPOWER 8 x 65	65	8	75	4.5-6	50	G	MF500483
DUOPOWER 10 x 50	50	10	60	6-8	50	G	MF500484
DUOPOWER 10 x 80	80	10	90	6-8	25	G	MF500485
DUOPOWER 12 x 60	60	12	70	8-10	25	G	MF500486
DUOPOWER 14 x 70	70	14	80	10-12	20	G	MF500487





FISCHER DUOTEC

APPLICATIONS

- Kitchen hanging cabinets
- Living room cabinets
- Shelves
- Wardrobes
- Handrails
- Pictures
- Mirrors
- Lamps
- Heavy hanging baskets

BUILDING MATERIALS

- Gypsum plasterboard
- Gypsum fibreboard
- Wooden panels, such as OSB boards, chipboard, MDF sheets
- Steel plates
- Plastic boards
- Hollow blocks made from concrete

Model	Anchor length l (mm)	Drill hole diameter d0 (mm)	Min. drill hole depth h1 (mm)	Wood and chipboard screws ds (mm)	Packing/Box (pcs)	Product category	Catalogue number
DUOTEC 10	50	10	12-55	4.5-5	50	G	MF500488



PLASTERBOARD PLUGS

- Material: polyethylene

Drill diameter (mm)	Wall thickness (mm)	Screw size (mm)	Packing/Box (pcs)	Product category	Catalogue number
10	10	4.3x40	25	G	M517273
10	17	4.3x50	25	G	M517274



WALL PLUG FOR PLASTERBOARD

Type	Color	Bore diameter (mm)	a (mm)	b (mm)	Packing (pcs)	Product category	Catalogue number
wall plug for plasterboard	grey	6-7	30	19	25	G	500443




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FISCHER PLASTERBOARD METAL PLUGS GKM

APPLICATIONS

- Pictures
- Lighting
- Electrical installations
- Fitting accessories

BUILDING MATERIALS

- Gypsum fibreboard
- Gypsum plasterboard

Model	Anchor length l (mm)	Min. thickness to first supporting layer t (mm)	Screw ds x ls (mm)	Packing/Box (pcs)	Product category	Catalogue number
GKM	31	35	4-5	100	G	MF500443



FISCHER INSULATION FIXING

APPLICATIONS

- Facade construction (ETICS)
- Insulating construction
- Electric construction
- Refrigerated and climate construction

BUILDING MATERIALS

- Non-plastered, pressure-resistant insulating boards
- Plastered, pressure-resistant insulating boards

Model	Anchor length l (mm)	Min. bolt penetration (mm)	Max. bolt penetration screw (mm)	Wood and chipboard screws ds (mm)	Packing/Box (pcs)	Product category	Catalogue number
FID 50	50	50	40	4-5	50	G	MF500455
FID 90	90	90	80	6	25	G	MF500456


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FISCHER METAL CAVITY FIXING HM WITH METRIC SCREW

APPLICATIONS

- Pictures
- Lighting
- Light shelves
- Towel rails
- Mirror cabinets
- Curtain rails
- Sub-structures

BUILDING MATERIALS

- Gypsum plasterboard and gypsum fibreboards
- Cavity floor slabs
- Light building boards made of wood wool
- Chipboard
- Plywood boards

Model	Anchor length l (mm)	Drill hole diameter d0 (mm)	Panel thickness dp (mm)	Min. drill hole depth h1 (mm)	Packing/Box (pcs)	Product category	Catalogue number
HM 4x32 S	32	8	3-13	40	50	G	MF500457
HM 6x52 S	52	12	7-21	58	50	G	MF500458


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FRAME FIXINGS PLUGS WITH SCREWS

- Material: PLUG-Nylon PA6; SCREW- Zink-plated steel
- Halogen free

Plug diameter (mm)	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
8	80	100	G	M317340
8	100	100	G	M317341
8	120	50	G	M317342
10	80	50	G	M317343
10	100	50	G	M317344
10	120	50	G	M317345
10	140	50	G	M317346

Application: Suitable for heavy ribbing ensures a tight hold in aerated blocks



NYLON HAMMERFIX

- Material: PLUG-Nylon PA6; SCREW- Zink-plated steel
- Halogen free

Plug diameter (mm)	Length (mm)	Packing/Box (pcs)	Product category	Catalogue number
6	40	200	G	M517180
6	50	200	G	M517281
6	60	200	G	M517282
6	80	200	G	M517283
8	60	100	G	M517074
8	80	100	G	M517284
8	100	100	G	M517285
8	120	100	G	M517286

Application: Suitable for fixing skirting, stud battens to wall and long runs of shelf support



FISCHER ANGLE SCREW SET

- SET: 2 pcs

Model	Plug size (mm)	Screw size (mm)	Packing/Box (pcs)	Product category	Catalogue number
WDL 14L/95	14	8.8/95	2/50	G	MF500465
WDL 14L/120	14	8.8/120	2/50	G	MF500466



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RIGHT ANGLE SCREW SET

- Material: PLUG-Nylon PA6; SCREW- Zink-plated steel
- SET: 2 pcs

Plug size (mm)	Screw size (mm)	Packing/Box (pcs)	Product category	Catalogue number
12x60	10x75	1	G	M517156

Application: Suitable for heavy ribbing ensures a tight hold in aerated blocks



HOOK SCREW WITH PLUG

- Material: PLUG-Nylon PA6; SCREW- Zink-plated steel

Plug size (mm)	Screw size (mm)	Packing/Box (pcs)	Product category	Catalogue number
6x30	4x35	100	G	M517289
8x40	5x42	100	G	M517318



FISCHER SPRING TOGGLE

APPLICATIONS

- Pictures
- Lighting

BUILDING MATERIALS

- Gypsum plasterboard and gypsum fibreboards
- Cavity floor slabs made from bricks and concrete
- Chipboard
- Plywood

Model	Anchor length l (mm)	Drill hole diameter d0 (mm)	Panel thickness dp (mm)	Thread Ø x length (mm)	Packing/Box (pcs)	Product category	Catalogue number
KDH 4	95	14	35	M4x70	25	G	MF500459



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THREADED HANGING ROD

- Material: Carbon steel
- Covering: Zn

Thread	Length (mm)	Grade	Packing/Box (pcs)	Product category	Catalogue number
M6	1000	4.8	100	G	M517079
M8	1000	4.8	50	G	M517080
M10	1000	4.8	40	G	M517078

Application: Suitable for fixing skirting, stud battens to wall and long runs of shelf support



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PERFORATED STEEL STRAP WITH PE PLASTIC JACKETING

APPLICATIONS

For securing, supporting and strapping of cable, trunking and ducting

Use for joist strutting, window frame and sill fixing, fencing repairs and construction, hanging ductwork

Model	Width (mm)	Thickness (mm)	Hole diameter (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
5055 L PE I 14	13	3	5.2	10	1	G	M318155



PERFORATED STEEL STRAP IN UNCOLING BOX

APPLICATIONS

For securing, supporting and strapping of cable, trunking and ducting

Use for joist strutting, window frame and sill fixing, fencing repairs and construction, hanging ductwork

Model	Width (mm)	Thickness (mm)	Hole diameter (mm)	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
5055 LI12 FS	12	1	5.2	10	1	G	M318154





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FISCHER FIS AB 300 T

APPLICATIONS

- High-performance hybrid mortar for high loads in almost all building materials.
- Fixing pressure-free fastening enables small edge and axis distances
- Injection cartridges can be processed without special extrusion devices
- incl. 2 static mixers.
- Injection cartridges that are not fully squeezed out can be reused by changing the static mixer.
- When fixing in solid building materials, the drill hole must be cleaned thoroughly.
- The use of a hollow drill makes conventional drilling cleaning unnecessary.

Model	Processing time	Curing time	Packing/Box (pcs)	Product category	Catalogue number
FIS AB 300 T	approx. 5 min at 20 °C	approx. 60 min at 20 °C	1	G	MF500489



FISCHER INJECTION ANCHOR SLEEVE PLASTIC

APPLICATIONS

- Anchorings in perforated brick masonry with injection mortars

BUILDING MATERIALS

- Vertically perforated brick
- Hollow blocks made from lightweight concrete
- Hollow blocks made from concrete

- Perforated sand-lime brick
- Solid sand-lime brick
- Solid brick
- Hollow pumice slabs
- Slabs made of hollow brick and other perforated brick
- Solid pumice and other solid building materials
- ETA-approval

Model	Drill hole diameter d0 (mm)	Min. drill hole depth h1 (mm)	Effect. anchorage depth hef (mm)	Fill quantity per sleeve (scale unit)	Packing/Box (pcs)	Product category	Catalogue number
FIS H 12X50 K	12	60	50	5	50	G	MF500490
FIS H 12X85 K	12	95	85	10	50	G	MF500491
FIS H 16X130 K	16	140	110	15	20	G	MF500492
FIS H 20X85 K	20	95	85	15	20	G	MF500493



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FISCHER INTUMESCENT ACOUSTIC MASTIC FIAM 310 ML

FISCHER FiAM is a one part water based acrylic emulsion that can provide up to 5 hours fire resistance when used in construction joints and services in both vertical and horizontal applications. When exposed to fire, it reacts to form a highly insulative char that slows down heat transfer, and provides a barrier to fire seal. Formulated to be halogen and solvent free the FiAM exhibits excellent slump characteristics and has been designed to maintain the sound reduction index of a structure.

TOP FEATURES:

- Up to 5 hours fire resistance.
- Movement capability $\pm 25\%$.
- Halogen and solvent free.
- Low VOC.
- Water based.

- Linear joints: flexible and rigid construction elements
- Joints between FCPS coated panel system

BUILDING MATERIALS:

- Flexible wall constructions
- Rigid floor and wall constructions
- Masonry
- Concrete
- Timber
- Steel
- FCPS System

APPLICATIONS:

- Metallic pipes: 6" (159 mm)
- Cable trays: 18" x 2" (450 x 50 mm)
- Cable bunches: 3" (80 mm)

Model	Packing/Box (pcs)	Product category	Catalogue number
FIAM310	1/25	G	MF500494



FISCHER INTUMESCENT GRAPHITE MASTIC FIGM 310 ML

FISCHER Intumescent Graphite Mastic FiGM is a one part water based flexible acrylic emulsion containing a high pressure intumescent graphite which is used to seal service penetrations in both vertical and horizontal applications. Tested to both BS 476 & BS EN1366-3 / 4 the fischer FiGM is also ETA approved and CE Marked for a wide range of applications such as, non metallic pipes, metallic and insulated pipes, MLC pipes, cables and cable bunches and can also used in combination with the fischer FCPS Coated Panel System.

TOP FEATURES:

- Low VOC.
- Halogen and solvent free.
- Excellent slump characteristics.
- Excellent acoustic properties.

- Insulated service: 6" (159 mm)
- Construction joints: 1" (25 mm)
- Mixed services

BUILDING MATERIALS:

- Concrete
- Masonry
- Steel
- Timber

APPLICATIONS:

- Metallic pipes: 6" (159 mm)
- Non-metallic pipes: 5" (125 mm)
- Cable bunches: 1" (21 mm)

Model	Packing/Box (pcs)	Product category	Catalogue number
FiGM310	1/25	G	MF500495





PENOSIL GENERAL SILICONE, GOLD SERIES

TOP FEATURES:

- Good adhesive properties.
- Excellent processing and smoothing properties.
- Suitable for slightly alkaline, acidic and metal surfaces.
- Does not cause colour changes on marble or other natural stone surfaces.
- Does not cause corrosion on metal.
- After curing very good temperature resistance (between -60 °C and +200 °C).
- Does not lose volume during the curing process.
- Permanent elasticity.
- Mould, UV, moisture and weather resistant
- Cartridge: 310ml

APPLICATIONS:

- Indoor and outdoor applications.
- Sanitary applications.
- Installation and sealing of windows and doors.
- Sealing of ventilation systems.
- Not suitable for aquariums.

Type	Colour	Packing/Box (pcs)	Product category	Catalogue number
General silicone, 310ml	Transparent	1/12	G	M033128



PENOSIL UNIVERSAL SILICONE, STANDARD SERIES

TOP FEATURES:

- Insulates and seals.
- Non-sagging, does not spread in the joint.
- Excellent processing and smoothing properties.
- Touch-dries quickly.
- Adheres well to wood, glass, ceramic tiles, many plastics, and most paints.
- Elastic.
- UV and weather proof.
- Cartridge: 280ml

APPLICATIONS:

- Insulation and sealing of connections in indoor and outdoor works.
- General construction and repair works.
- Moist and dry rooms.
- All finishing, insulation, glassing works.
- Insulation of window and door frames and light box displays.

Type	Colour	Packing/Box (pcs)	Product category	Catalogue number
Universal silicone, 280ml	Transparent	1/12	G	M033129
Universal silicone, 280ml	White	1/12	G	M033130





PENOSIL SANITARY SILICONE, STANDARD SERIES

TOP FEATURES:

- Excellent processing and smoothing properties.
- Contains fungicides.
- Mould, UV, moisture and weather resistant.
- Touch-dries quickly.
- Non-sagging, does not spread in the joint.
- Adheres well to glass, glazed surfaces, ceramic tiles, many plastics, metals, and most paints.
- Elastic.
- Long storage time.
- Cartridge: 280ml

APPLICATIONS:

- Insulation and sealing of connections during indoor works.
- Insulation and sealing of washbasin, bath, shower, swimming pool connections.
- Insulation of water supply, drainage and PVC-pipes.
- Glazing works.

Type	Colour	Packing/Box (pcs)	Product category	Catalogue number
Sanitary silicone, 280ml	Transparent	1/12	G	M033131
Sanitary silicone, 280ml	White	1/12	G	M033132



PENOSIL BITUM SEALANT, PREMIUM SERIES

TOP FEATURES:

- Touch-dries quickly.
- Immediately rain and ice resistant.
- Suitable on bituminous materials, alkali and metals.
- Usable on damp surfaces.
- Melting temperature over 100 °C.
- Will not become brittle in cold.
- Can also be used in vertical joints.
- Dissolved acid, alkali, emission and weather resistant.
- High tensile strength
- Cartridge: 310ml

APPLICATIONS:

- Insulation of roof and chimney joints.
- Insulation of joints between bituminous plates or rolls.
- Repairing small leakages and open cracks on flat roofs.
- Patching up joint leakages between metal sheets.

Type	Colour	Packing/Box (pcs)	Product category	Catalogue number
Bitum sealant, 310ml	Black	1/12	G	M033133





PENOSIL ACRYLIC SEALANT, STANDARD SERIES

TOP FEATURES:

- Comfortable use.
- Low odour level.
- Forms a plastic connection.
- Non-sagging, does not spread in the joint.
- Paintable.
- Good adherence on most building materials.
- Moisture resistant 5 hours after application.
- High UV-level.
- Cartridge: 280ml

APPLICATIONS:

- Filling of wall cracks and joints.
- Filling the joints between window frames and walls.
- Filling of joints between plasterboards and filling of screw holes.
- Correction of surface defects before painting.

Type	Colour	Packing/Box (pcs)	Product category	Catalogue number
Acrylic sealant, 280ml	White	1/12	G	M033134



PENOSIL FOAM, STANDARD SERIES

TOP FEATURES:

- Good filling properties.
- Good foam for interior and exterior works under normal conditions.
- Good adherence on various building materials.
- Usable with the delivered straw applicator.
- Easy to use.
- The new and narrower straw ensures better foam structure and higher output.
- The new trigger is suitable for temporary air-tight sealing of the straw during work pauses.

APPLICATIONS:

- Filling of holes and gaps, insulation of joints
- Installation and insulation of construction structures
- Insulation and fixation of pipes
- Thermo and sound insulation

Type	Packing/Box (pcs)	Product category	Catalogue number
Foam, 750ml	1/12	G	M033135
Foam, 300ml + gloves	1/12	G	M033136
Gun foam, 750ml	1/12	G	M033137





PENOSIL FOAM CLEANER, PREMIUM SERIES

TOP FEATURES:

- Efficiently cleans uncured construction foam from foam gun, clothes, adjacent surfaces.
- Suitable for immediate cleaning of a foam gun from inside after use.

APPLICATIONS:

- Cleaning of foam gun after use both inside and outside.
- Cleaning of clothes and tools from uncured construction foam.
- Cleaning of window frames, window sills, doors, jambs, etc. From uncured construction foam during work.

Type	Packing/Box (pcs)	Product category	Catalogue number
Foam cleaner, 500ml	1/12	G	M033138



PENOSIL FOAM GUN 306

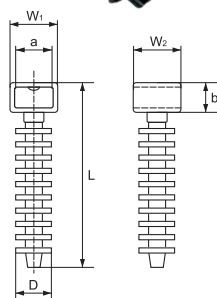
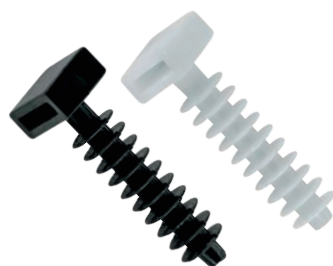
APPLICATIONS:

- The budget version of the gun known brand PENOSIL for use with professional foam.

Type	Packing/Box (pcs)	Product category	Catalogue number
Foam gun 306 economical	1	G	M033139



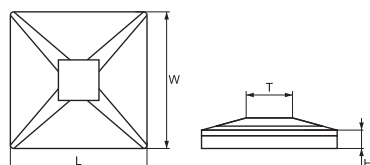
CABLE TIE HOLDER



Type	colour	Bore diameter (mm)	a (mm)	b (mm)	D (mm)	W1 (mm)	W2 (mm)	L (mm)	Packing (pcs)	Product category	Catalogue number
MT-8	black	φ8	9,7	6,3	9,9	12,7	12,6	43	100	C	500046
MT-8	white	φ8	9,7	6,3	9,9	12,7	12,6	43	100	C	500047



CABLE TIE MOUNTS-ADHESIVE

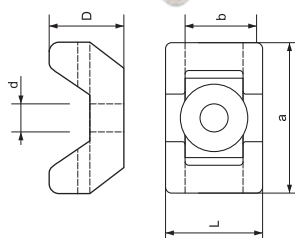


Type	colour	Dimensions (mm)				Packing (pcs.)	Product category	Catalogue number
		L	W	H	T			
MT-25	white	25	25	7,5	6,2	100	C	500041
MT-25	black	25	25	7,5	6,2	100	C	500042
MT-30	white	30	30	8,7	6,4	100	C	500043
MT-30	black	30	30	8,7	6,4	100	C	500039



CABLE TIE BASES FIXED WITH SCREWS

2+0 standard +extended
2 YEAR TOTAL WARRANTY



Type	Color	a (mm)	b (mm)	L (mm)	d (mm)	D (mm)	Packing (pcs)	Product category	Catalogue number
CTH-2C	white	22	16,5	9	5,8	9,5	100	C	500048
CTH-2C	black	22	16,5	9	5,8	9,5	100	C	500038



CABLE TIES - WHITE

Type	Length (mm)	Colour	Width (mm)	Packing (pcs)	Packing / Box (pcs)	Product category	Catalogue number
Cable ties	100	white	2.5	100	10 / 800	C	500100
Cable ties	150	white	2.5	100	10 / 500	C	500152
Cable ties	160	white	2.5	100	10 / 500	C	500162
Cable ties	200	white	2.5	100	10 / 400	C	500202
Cable ties	250	white	3.5	100	10 / 250	C	500253
Cable ties	280	white	3.5	100	10 / 200	C	500283
Cable ties	300	white	3.5	100	10 / 200	C	500303
Cable ties	300	white	4.8	100	10 / 120	C	500304
Cable ties	370	white	3.5	100	10 / 120	C	500373
Cable ties	380	white	4.8	100	10 / 100	C	500384
Cable ties	450	white	4.8	100	10 / 70	C	500454
Cable ties	500	white	7.9	100	5 / 40	C	500507



CABLE TIES - BLACK

Type	Length (mm)	Colour	Width (mm)	Packing (pcs)	Packing / Box (pcs)	Product category	Catalogue number
Cable ties	150	black	2.5	100	10 / 500	C	500151
Cable ties	160	black	2.5	100	10 / 500	C	500161
Cable ties	250	black	3.5	100	10 / 250	C	500251
Cable ties	280	black	3.5	100	10 / 200	C	500281
Cable ties	300	black	3.5	100	10 / 200	C	500301
Cable ties	500	black	7.9	100	40	C	500501



CABLE HOLDER WITH TIE

Type	Color	a (mm)	b (mm)	c (mm)	d (mm)	Packing (pcs)	Product category	Catalogue number
cable holder with tie	black	27	14	140	0,5	20	C	500444



WALL PLUG WITH CABLE TIE

Type	Color	Bore diameter (mm)	Tie Length (mm)	Packing (pcs)	Product category	Catalogue number
wall plug with cable tie	black	Ø6	95	50	C	500427
wall plug with cable tie	black	Ø8	95	50	C	500425





WIRE GRIP BAND FOR FLAT CABLE

Type	Color	Bore diameter (mm)	width of the head	Packing (pcs)	Product category	Catalogue number
wire grip band for flat cable 1	white	6-7	18	50	C	500432
wire grip band for flat cable 2	white	6-7	12	50	C	500434
wire grip band for flat cable 3	white	6-7	10	50	C	500436

Wire grip band 1 is Suitable for flat cables with section- 2x1.0; 2x1.5mm²

Wire grip band 2 is Suitable for flat cables with section- 2x2.5; 3x1.0

Wire grip band 3 is Suitable for flat cables with section- 2x4; 2x6; 3x1.5; 3x2.5mm²



WIRE GRIP BAND FOR ROUND CABLE

Type	Color	Bore diameter (mm)	width of the head	Packing (pcs)	Product category	Catalogue number
wire grip band for round cable 4	white	6-7	6	50	C	500438
wire grip band for round cable 5	white	6-7	8	50	C	500440
wire grip band for round cable 6	white	6-7	10	50	C	500439
wire grip band for round cable 7	white	6-7	14	50	C	500441
wire grip band for round cable 8	white	8-9	20	50	C	500442

Wire grip band 4 is Suitable for round cables with section- 2x1.0; 2x1.5; 3x1.0; 3x2.5mm²; RG6

Wire grip band 5 is Suitable for round cables with section- 2x0.5; 2x0.75; UTP; FTP

Wire grip band 6 is Suitable for round cables with section- 2x2.5; 3x1.5; 4x1

Wire grip band 7 is Suitable for round cables with section- 3x6; 4x4; 5x2.5

Wire grip band 8 is Suitable for round cables with diameter D20mm



CABLE FIXING CLIPS



Support insulators are used in control and distribution cabinets mounting when bars isolation is required. Provides reliable insulation of live parts.

TECHNICAL SPECIFICATION:

- Rated voltage: 1000V
- Insulating voltage: 5000 V
- Ambient temperature : -40 to +65°C

Type	Diameter Ø (mm)	Packing (pcs)	Packing / Box (pcs)	Product category	Catalogue number
CHR-4	4	100	500	C	500004
CHR-5	5	100	500	C	500005
CHR-6	6	100	300	C	500006
CHR-7	7	100	300	C	500007
CHR-8	8	100	250	C	500008
CHR-9	9	100	200	C	500009
CHR-10	10	100	200	C	500010
CHR-12	12	100	100	C	500012
CHR-14	14	100	50	C	500014
CHR-16	16	100	50	C	500016



ELMARK AF SERIES EASY MOUNTING

Axial fans, for exhaust ventilation

AREAS OF APPLICATION

Kitchens, Showers, Bathrooms, Utility spaces

OPTIONS:

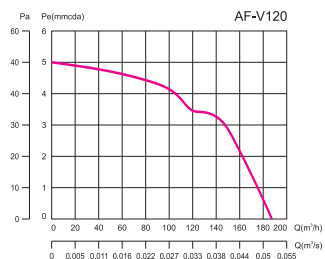
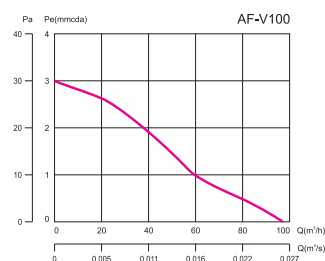
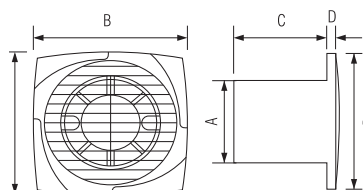
- V-Valve: Back flow preventing. Fan is equipped with a valve
- VT- Timer + Valve: Adjustable operating time from 3 to 15 minutes. Fan is equipped with a valve.
- VH- Higo-Timer + Valve: Humidistat detects humidity starting from 40% to 90%, includes adjustable timer from 3 minutes to 15 minutes. Fan is equipped with a valve.
- Compatible with 100 and 120 mm PVC or flexible air ducts

MOTOR:

- Equipped with thermal cut out protection
- Low power consumption
- High materials quality and high efficiency
- Ambient temperature max 130°C
- IP-X4
- Insulation class B

DESIGN:

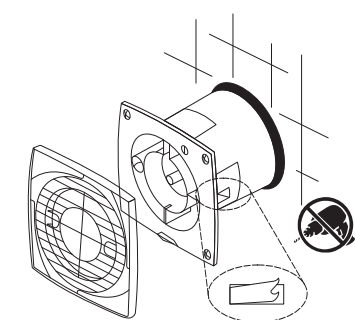
- Easy mounting system
- Very slim front panel
- Plastic housing and impeller
- Modern design and aesthetic look



Overall dimensions (mm)

Model	ØA	B	C	D
AF-V100	98	140	98	10
AF-V120	118	170	100	13

Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
AF-V100 with valve	100	220-240	15	2500	98	41	12	D	500120
AF-VT100 with valve+timer	100	220-240	15	2500	98	41	12	D	500122
AF-VH100 with valve+hygro-timer	100	220-240	15	2500	98	41	12	D	500124
AF-V120 with valve	120	220-240	20	2450	190	43	12	D	500121
AF-VT120 with valve+timer	120	220-240	20	2450	190	43	12	D	500123
AF-VH120 with valve+hygro-timer	120	220-240	20	2450	190	43	12	D	500125



ELMARK ALS SILENT SERIES

Axial fans, for exhaust ventilation

AREAS OF APPLICATION

Kitchens, Showers, Bathrooms, Utility spaces

OPTIONS:

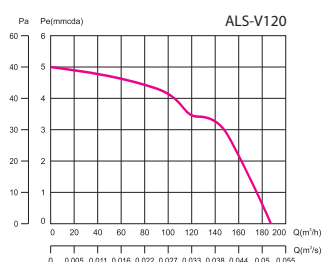
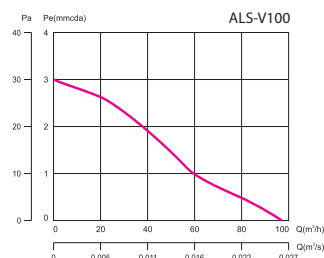
- V-Valve: Back flow preventing. Fan is equipped with a valve
- Compatible with 100 and 120 mm PVC or flexible air ducts

MOTOR:

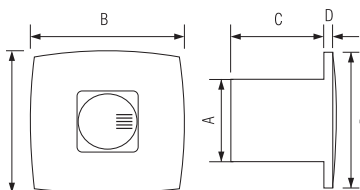
- Equipped with thermal cut out protection
- Low power consumption
- High materials quality and high efficiency
- IP-X4
- Insulation class B

DESIGN:

- Easy mounting system
- Very slim front panel
- Plastic housing and impeller
- Modern design and aesthetic look



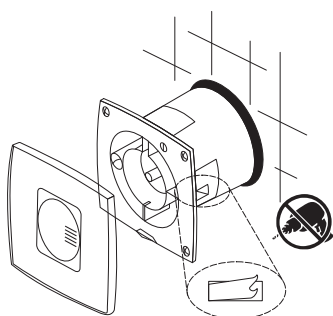
SILENT SERIES

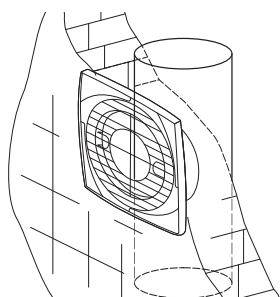
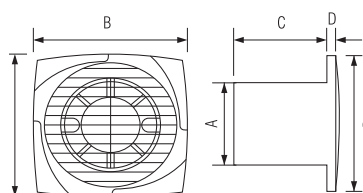


Overall dimensions (mm)

Model	ØA	B	C	D
ALS-V100	98	140	98	10
ALS-V120	118	170	100	13

Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
ALS-V100 with valve WHITE	100	220-240	15	2500	98	37	12	D	500140
ALS-V100 with valve SILVER	100	220-240	15	2500	98	37	12	D	500141
ALS-V120 with valve WHITE	120	220-240	20	2450	190	39	12	D	500142
ALS-V120 with valve SILVER	120	220-240	20	2450	190	39	12	D	500143





ELMARK AS SERIES

Axial fans, for exhaust ventilation

AREAS OF APPLICATION:

Kitchens, Showers, Bathrooms, Utility spaces

OPTIONS:

- V-Valve: Back flow preventing. Fan is equipped with a valve
- Compatible with 100 mm PVC or flexible air ducts

MOTOR:

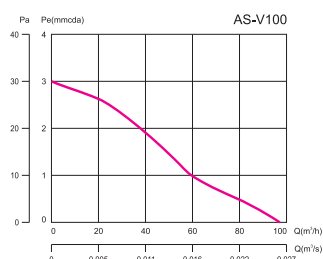
- Equipped with thermal cut out protection
- Low power consumption
- High materials quality and high efficiency
- IP-X4
- Insulation class B

DESIGN:

- Very slim front panel
- Plastic housing and impeller
- Modern design and aesthetic look

Overall dimensions (mm)

Model	ØA	B	C	D
AS-V100	98	140	75	10



Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing	Product category	Catalogue number
AS-V100 with valve	100	220-240	15	2500	98	41	12	D	500119



ELMARK APB10

AREAS OF APPLICATION

Kitchens, Showers, Bathrooms, Utility spaces

OPTIONS:

- Back flow preventing- fan is equipped with a valve
- Equipped with PVC ring for stable fixing of the fan towards the mounted surface - hollow walls, suspended ceilings, furniture flat surfaces, glassings and etc.
- Fan comes with a power cable supply
- Compatible with 110 mm PVC or flexible air ducts

MOTOR:

- Low power consumption
- High materials quality and high efficiency
- IP-X4
- Insulation class B

DESIGN:

- Plastic housing and impeller
- Modern design and aesthetic look

Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
APB10- 110V with valve	110	220-240	15	2500	100	41	30	F	500020



UNTIL SUPPLY
LAST

ELMARK AN SERIES

Axial fans, for exhaust ventilation.

AREAS OF APPLICATION

Kitchens, Showers, Bathrooms, Utility spaces

OPTIONS:

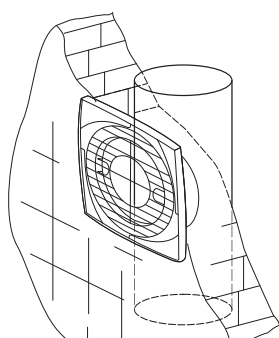
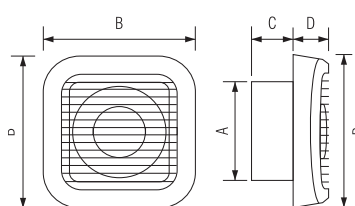
- Back flow preventing- fan is equipped with a valve
- Compatible with 100 and 120 mm PVC or flexible air ducts

MOTOR:

- Equipped with thermal cut out protection
- Low power consumption
- High materials quality and high efficiency
- IP-X4
- Insulation class B

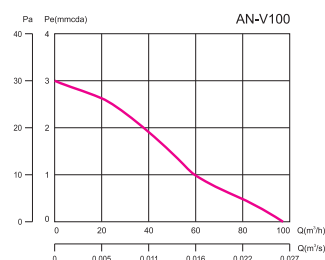
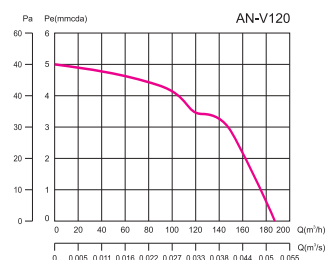
DESIGN:

- Short back tube
- Plastic housing and impeller
- Modern design and aesthetic look



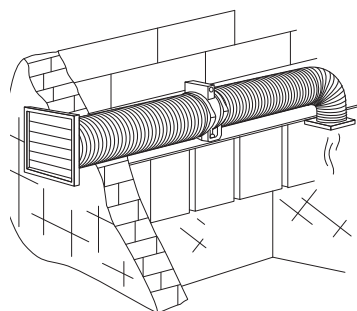
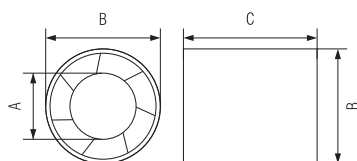
Overall dimensions (mm)

Model	ØA	B	C	D
AN-V100	98	153	45	37
AN-V120	118	180	50	37



Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
AN-V100 with valve	100	220-240	15	2500	98	41	9	D	500115
AN-V120 with valve	120	220-240	20	2450	190	43	12	D	500116





ELMARK AC SERIES

Axial inline fans, for exhaust and supply ventilation.

AREAS OF APPLICATION:

Kitchens, Showers, Bathrooms, Utility spaces, Supply ventilation

OPTIONS:

- Compatible with 100 and 120 mm PVC or flexible air ducts
- Possibility to mounting in in the ventilation systems

MOTOR:

- Equipped with thermal cut out protection
- Low power consumption
- High materials quality and high efficiency
- Do not use in rooms where the temperature is above 40°C
- IP-X4
- Insulation class B

Overall dimensions (mm)

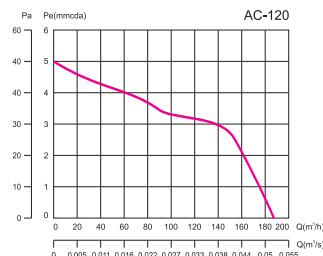
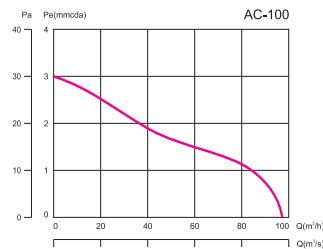
Model	ØA	ØB	C
AC-100	60	97	92
AC-120	65	118	96

Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/Box (pcs)	Product category	Catalogue number
AC-100	100	220-240	15	2500	98	41	12	D	500117
AC-120	120	220-240	20	2450	190	43	12	D	500118



DESIGN:

- Plastic housing and impeller
- Modern design and aesthetic look
- Designed for ventilation where you want to stop spreading humidity and unpleasant smells.



RETRO DESK FAN

AREAS OF APPLICATION:

Domestic - ideal for any rooms or office

TOP FEATURES:

- 2 speed settings- gives gentle and quiet air flow
- Aluminium blades for optimizing airflow volume

Model	Size (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Packing/Box (pcs)	Product category	Catalogue number
RDF2	290x130x330	220-240	28	1250	1200	1/6	D	500147



INDUSTRIAL FANS

3+0
 standard
 +extended **3** YEAR TOTAL
 WARRANTY

For a continuous or periodical ventilation of medium large agricultural, industrial buildings, park lots, warehouses and other places where it is needed great volumes of air to be moved as well as other non-explosive gases, not containing glue substances

ELMARK PAS SERIES

3+0
 standard
 +extended **3** YEAR TOTAL
 WARRANTY

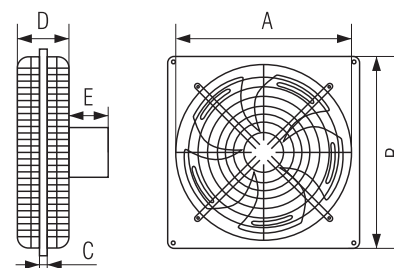

Industrial fans, for exhaust ventilation

MOUNTING:

on a window, wall, roof, suspending ceiling, inside walls.

Overall dimensions (mm)

Model	ØA	B	C	D	E
PAS- 200	220	257	3	70	53
PAS- 250	270	313	8	70	60
PAS- 300	320	350	10	86	80



Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
PAS- 200	200	220-240	36	1300	410	51	1	D	500126
PAS- 250	250	220-240	60	1300	800	53	1	D	500127
PAS- 300	300	220-240	110	1300	1400	58	1	D	500128



ELMARK IAS SERIES

3+0
 standard
 +extended **3** YEAR TOTAL
 WARRANTY

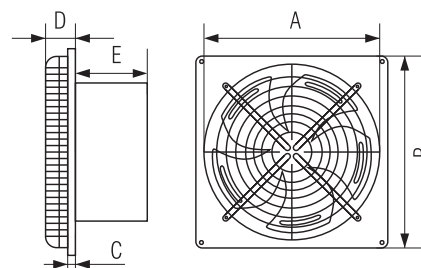

Industrial wall fans, for exhaust ventilation

MOUNTING:

on the wall.

Overall dimensions (mm)

Model	ØA	B	C	D	E
IAS- 200	220	264	11	18	127
IAS- 250	270	314	11	18	147
IAS- 300	320	364	11	18	155



Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
IAS- 200	200	220-240	36	1300	410	53	1	D	500129
IAS- 250	250	220-240	60	1300	800	56	1	D	500130
IAS- 300	300	220-240	110	1300	1400	60	1	D	500131



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 45 days.



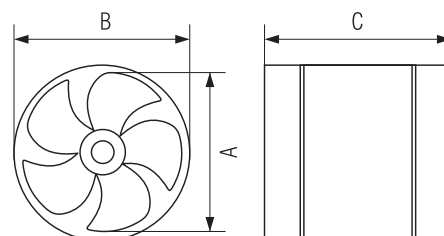
ELMARK TAS SERIES

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

Industrial inline fans, for exhaust ventilation

MOUNTING:

on a walls, ceilings, suspending ceilings.
Possibility to mounting in in the ventilation systems



Overall dimensions (mm)

Model	ØA	B	C	D	E
TAS- 200	220	264	11	18	127
TAS- 250	270	314	11	18	147
TAS- 300	320	364	11	18	155

Model	Diameter (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Sound pressure level db(A)	Packing/ Box (pcs)	Product category	Catalogue number
TAS- 200	200	220-240	36	1300	410	55	1	D	500132
TAS- 250	250	220-240	60	1300	800	57	1	D	500133
TAS- 300	300	220-240	110	1300	1400	62	1	D	500134



ALUMINIUM EXHAUST GRILLS

Material	Colour	Dimensions (mm)	Packing/Box (pcs)	Product category	Catalogue number
Aluminium	grey	200/200	8	D	500136
Aluminium	grey	250/250	4	D	500137
Aluminium	grey	300/300	4	D	500138
Aluminium	grey	350/350	5	D	500139





ULTRA-QUIET 3 IN 1 INDUSTRIAL FAN

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

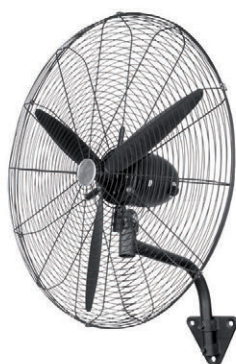
AREAS OF APPLICATION:

Home or work use as standing fan, floor fan or wall mount fan

TOP FEATURES:

- Low noise
- 3 speed settings
- 90° oscillating for great air flow
- Aluminium blades for optimizing airflow volume

Model	Size (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Packing/Box (pcs)	Product category	Catalogue number
UQIF3	500x500x1350	220-240	65	1250	2800	1	D	500144



HIGH POWER INDUSTRIAL WALL FAN

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

AREAS OF APPLICATION:

Residential, commercial, or industrial - ideal for gyms, workshop, offices, restaurant, warehouses and etc.

TOP FEATURES:

- 3 speed settings
- 90° oscillating for great air flow
- Aluminium blades for optimizing airflow volume

Model	Size (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Packing/Box (pcs)	Product category	Catalogue number
HPIWF3	700x41x750	220-240	180	1000	8800	1	D	500145



HIGH POWER INDUSTRIAL STANDING FAN

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

AREAS OF APPLICATION:

Residential, commercial, or industrial- ideal for gyms, workshop, offices, restaurant, warehouses and etc.

TOP FEATURES:

- 3 speed settings
- 90° oscillating for great air flow
- Aluminium blades for optimizing airflow volume

Model	Size (mm)	Voltage (V)	Power (W)	r.p.m.	Maximum air capacity (m³/h)	Packing/Box (pcs)	Product category	Catalogue number
HPISF3	700x490x1650	220-240	180	1000	8800	1	D	500146





AIR CONDUIT ALUMINUM

Material: Aluminium 99,5%. For ventilaton and clima systems

Diameter (mm)	Full length (m)	Thickness (mm)	Packing/Box (pcs)	Product category	Catalogue number
100	1,5m	0,1	66	D	500201
100	3m	0,1	42	D	500101
120	1,5m	0,1	45	D	500203
120	3m	0,1	30	D	500103



AIR CONDUIT TEXOFLEX

The tube is completed from multilayer aluminum, laminated with polyester, and forced with reinforcement additionally. The material is light and flexible, which helps for its easy use in round or oval connections in the aspiration and ventilation systems. Toxic gases are not being insulated in case of a fire. The product is certified in B1 category - fireproof material.

Diameter (mm)	Full length (m)	Thickness (mm)	Packing/Box (pcs)	Product category	Catalogue number
100	1,5m	0,1	12	D	500204
120	1,5m	0,1	12	D	500205
100	3m	0,1	12	D	500104
120	3m	0,1	12	D	500105



AIR CONDUIT PLASTIC

Connection diameter (mm)	Length (m)	Material	Packing/Box (pcs)	Product category	Catalogue number
100	1	Plastic	1	G	M522023



AIR CONDUIT PLASTIC

Width (mm)	Height (mm)	Length (m)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	1	Plastic	1	G	M522039



FLAT DUCT BRACKET



Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	Plastic	1	G	M522032



FLAT DUCT CONNECTOR



Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	Plastic	1	G	M522029



FLAT DUCT CONNECTOR WITH DAMPER



Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	Plastic	1	G	M522030



PVC WALL CONNECTOR



Section of PVC duct	Material	Packing/Box (pcs)	Product category	Catalogue number
110x55	Plastic	1	G	M522033



HORIZONTAL 90° BEND FOR FLAT DUCTS



Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	Plastic	1	G	M522015





VERTICAL 90° BEND FOR FLAT DUCTS

Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	Plastic	1	G	M522016



T-JOINT FOR FLAT DUCTS

Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	Plastic	1	G	M522020



T-JOINT FOR FLAT & ROUND DUCTS

Width (mm)	Height (mm)	Connection diameter of round duct (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	100	Plastic	1	G	M522017



END GRILLE FOR FLAT DUCTS

Width (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	60	Plastic	1	G	M522019



90° CONNECTING BEND FOR FLAT & ROUND DUCTS

Width (mm)	Height (mm)	Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	100	Plastic	1	G	M522018





ROUND TO FLAT CONNECTOR

Width (mm)	Height (mm)	Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
110	55	100	Plastic	1	G	M522014



CONNECTOR WITH BACKDRAFT DAMPER AND WALL PLATE FOR ROUND DUCTS

Length (mm)	Width (mm)	Height (mm)	Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
150	62	134	100	Plastic	1	G	M522115



90° CONNECTING BEND FOR ROUND DUCTS

Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
100	Plastic	1	G	M522013



T-JOINT FOR ROUND DUCTS

Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
100	Plastic	1	G	M522012



CONNECTOR WITH BACKDRAFT DAMPER FOR ROUND DUCTS

Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
100	Plastic	1	G	M522010





UNIVERSAL REDUCTOR PVC Ø100- Ø150

Packing/Box (pcs)	Product category	Catalogue number
12	D	500109



FRONT MASK WITH SHUTTER ADJUSTABLE

Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
100 / 120	20	D	500108



VENTILATION GRILL PVC

For fan with Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
100	30	D	500111
125	30	D	500112



RING

For fan with Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
100	100	D	500106
120	100	D	500107



VENTILATION ANEMOSTAT PVC

For fan with Diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
100	10	D	500113
125	10	D	500114



AIR CONDUIT METAL CLAMPS



Connection diameter (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
90-110	Metal	1	G	M522036
110-130	Metal	1	G	M522089



METAL FAN GRILLS



Connection diameter (mm)	Width (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
125	125	Metal	1	G	M522049T
150	150	Metal	1	G	M522050T
200	200	Metal	1	G	M522139



FAN GRILLS WITH BACKDRAFT DAMPER



Length (mm)	Width (mm)	Material	Connection diameter (mm)	Packing/Box (pcs)	Product category	Catalogue number
154	154	ABS	100	1	G	M522034
186	186	ABS	125	1	G	M522078



REVISION OPENING PVC



Length (mm)	Height (mm)	Material	Packing/Box (pcs)	Product category	Catalogue number
150	150	Plastic	1	G	M522001T
150	200	Plastic	1	G	M522002T
200	200	Plastic	1	G	M522003T
200	250	Plastic	1	G	M522004T
200	300	Plastic	1	G	M522005T
200	400	Plastic	1	G	M522006T
250	300	Plastic	1	G	M522007T
300	300	Plastic	1	G	M522008T
300	400	Plastic	1	G	M522009T





ELECTRIC WATER HEATERS

TANK WATER HEATERS, BILIGHT VERTICAL SERIES



The appliances is intended to supply hot water to household sites equipped with a piping system working at pressure below 6 bar (0,6 Mpa). Abundant selection of vertical and horizontal models that easily fits in narrow and limited spaces. A distinctive feature of all BiLight electric water heaters is the two-colour indication, which visualises the two operating modes: red light for Heating Mode and blue light for Ready-to-use Mode.

FEATURES:

- Copper heating element
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water. The nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area
- On/Off switch
- Anti-freeze function
- Eco position of the thermoregulator for cost efficient and prolonged operation
- No thermal bridge
- Stainless steel pipe
- Plasma welding
- Energy class C

MARKETS:

Water heaters with rated power 3000W and M030426 are available for BG market.
2000W: Available for RO; RS; CR & SI markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV 504420 B11 TSR	2000	50	vertical	440	595	467	G	C	M030426
GCV 80 44 30 B11 TSR	3000	82	vertical	440	845	467	G	C	M030114
GCV 100 44 30 B11 TSR	3000	100	vertical	440	985	467	G	C	M030402
GCV 804420 B11 TSR	2000	82	vertical	440	845	467	G	C	M030415
GCV 1004420 B11 TSR	2000	100	vertical	440	985	467	G	C	M030416
GCV 1204430 B11 TSRC	3000	120	vertical	440	1150	467	G	C	M030440
GCV 1504430 B11 TSRC	3000	142	vertical	440	1315	467	G	C	M030441
GCV 1204420 B11 TSRC	2000	120	vertical	440	1150	467	G	C	M030442
GCV 1504420 B11 TSRC	2000	142	vertical	440	1315	467	G	C	M030443



TANK WATER HEATERS, BILIGHT SLIM SERIES



TESY
It's impressive

The appliances is intended to supply hot water to household sites equipped with a piping system working at pressure below 6 bar (0,6 Mpa). Abundant selection of vertical and horizontal models that easily fits in narrow and limited spaces. A distinctive feature of all BiLight electric water heaters is the two-colour indication, which visualises the two operating modes: red light for Heating Mode and blue light for Ready-to-use Mode.

FEATURES:

- Slim diameter of only 38 cm
- Thick insulation of 34 mm
- Copper heating element
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water. The nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area
- On/Off switch
- Anti-freeze function
- Eco position of the thermoregulator for cost efficient and prolonged operation
- No thermal bridge
- Stainless steel pipe
- Plasma welding

MARKETS:

50L: Available for BG; RO; RS; CR & SI markets.
80L: Available for BG market.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV 50 38 20 B11 TSR	2000	50	vertical	386	803	412	G	C	M030167
GCV 80 38 30 B11 TSR	3000	80	vertical	386	1205	412	G	C	M030300



TANK WATER HEATERS, BILIGHT SERIES WITH HEAT EXCHANGER



TESI
It's impressive

The electric water heaters of the BiLight range with inbuilt heat exchanger /serpentine/ are a product solution for utilization of alternative sources of heat energy such as solar thermal collectors, gas-burning and solid fuel boilers.

FEATURES:

- Inbuilt heat exchanger (serpentine)
- Insutech - an in-house TESI technology for highly efficient insulation and extremely low heat losses
- Copper heating element
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water. The nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area
- On/Off switch
- Anti-freeze function
- Eco position of the thermoregulator for cost efficient and prolonged operation
- No thermal bridge
- Stainless steel pipe
- Plasma welding
- Energy class C

MARKETS:

2000W: Available for RO; RS; CR & SI markets.
3000W: Available for BG market.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV6S 804430 B11 TSRP	3000	79	right serpentine	440	845	467	G	C	M030435
GCV6L 804430 B11 TSRP	3000	79	left serpentine	440	845	467	G	C	M030436
GCVS 804420 B11 TSR	2000	79	right serpentine	440	845	467	G	C	M030437
GCVL 804420 B11 TSR	2000	79	left serpentine	440	845	467	G	C	M030438



TANK WATER HEATERS, BILIGHT HORIZONTAL SERIES



The appliances is intended to supply hot water to household sites equipped with a piping system working at pressure below 6 bar (0,6 Mpa). Abundant selection of vertical and horizontal models that easily fits in narrow and limited spaces. A distinctive feature of all BiLight electric water heaters is the two-colour indication, which visualises the two operating modes: red light for Heating Mode and blue light for Ready-to-use Mode.



TESI
It's impressive

FEATURES:

- Copper heating element
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water. The nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area
- On/Off switch
- Anti-freeze function
- Eco position of the thermoregulator for cost efficient and prolonged operation
- No thermal bridge
- Stainless steel pipe
- Plasma welding

MARKETS:

3000W/ 80L: Available for BG market.
2000W/50L: Available for BG; RO; RS; CR & SI markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCH 503520 B12 TSR	2000	50	horizontal right	803	353	380	G	C	M030427
GCHL 503520 B12 TSR	2000	50	horizontal left	803	353	380	G	C	M030428
GCH 80 44 30 B12 TSR	3000	82	horizontal right	855	440	467	G	C	M030139
GCHL 80 44 30 B12 TSR	3000	82	horizontal left	855	440	467	G	C	M030131



TANK WATER HEATERS, BILIGHT HORIZONTAL FLOOR SERIES



Specially designed for floor assembly, the electric water heaters of the Bilight Floor series were developed to meet special architectural requirements.



TESY
It's impressive

FEATURES:

- Horizontal assembly on the floor
- Copper heating element
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water. The nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area
- On/Off switch
- Anti-freeze function
- Eco position of the thermoregulator for cost efficient and prolonged operation
- No thermal bridge
- Stainless steel pipe
- Plasma welding

MARKETS:

Available for EL markets

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCHF 604440 B12 R	4000	50	horizontal floor	440	675	467	G	C	M030411
GCHF 804440 B12 R	4000	82	horizontal floor	440	885	467	G	C	M030412
GCHF 1004440 B12 R	4000	100	horizontal floor	440	955	467	G	C	M030413



TANK WATER HEATERS, ANTICALC SERIES



TESY
It's impressive

The water heaters in the Anticalc series have been developed for long-term and reliable operation in households supplied with hard, highly mineralised and/or chemically aggressive water. The enlarged area of the dual heating element, housed in an enamelled steel enclosures with a smooth surface, substantially slows down and limits the process of limescale deposit. The appliances in the family work noiselessly and are easy to service, as they do not require preliminary draining of the water tank.

FEATURES:

- Dual dry heating element
- Protection against limescale
- Noiseless operation
- Easy maintenance
- Two power settings
- External regulator
- Cost efficient operation
- Precise capillary thermostat
- Extended product life
- Energy class C

MARKETS:

Water heaters with catalogue numbers M030406; M030407; M030408 are available only for BG market. Water heaters with catalogue numbers M030417; M030418; M030419 are available for RS, RO, CR & SI markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV 803824D B14 TSR	2400	80	vertical	386	1220	412	G	C	M030406
GCV 804424D B14 TSR	2400	82	vertical	440	858	468	G	C	M030407
GCV 1004424D B14 TSR	2400	100	vertical	440	998	468	G	C	M030408
GCV 803824D B14 TBR	2400	80	vertical	386	1220	412	G	C	M030417
GCV 804424D B14 TBR	2400	82	vertical	440	858	468	G	C	M030418
GCV 1004424D B14 TBR	2400	100	vertical	440	998	468	G	C	M030419



TANK WATER HEATERS, BELLISLIMO SERIES



TESY
It's impressive

Bellislimo is a fusion of intelligent high-tech advantages and an exclusive Italian design rendering flat and slim silhouette, attaining a space-saving compact size, which ensures easy installation according to various needs. Bellislimo is reversible and appears both as a horizontal and a vertical piece of art for everyone's taste and space. It raises the bar as it implements next-generation technology and delivers ultimate comfort by combining user-friendly electronic panel and all distinctive TESI advanced innovations. The ECO Smart mode grants an optimum operation with a low energy consumption, achieving the highest possible Energy Class B in its range.

FEATURES:

- Work-on-demand mode: Bellislimo calculates the time required for your water to heat up just in time.
- Energy class B: The highest energy class in its category.
- Reversible: Can be installed vertically or horizontally.
- Eco smart mode: Self-learning and self management
- Double tank: Two water tanks with separate copper heating elements.
- Quick first shower
- Vacation mode: to reduce water heater's and energy consumption activity.
- Boost function
- Reverse counter: Counts down until the water heater reaches the desired temperature.
- Copper heating element
- Energy class B

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCR 502722 E31 EC	2200	40	vertical/horizontal	490	704	280	G	B	M030425
GCR 80 27 22 E31 EC	2200	65	vertical/horizontal	490	1057	280	G	B	M030409
GCR 100 27 22 E31 EC	2200	80	vertical/horizontal	490	1287	280	G	B	M030410



TANK WATER HEATERS, BELLISLIMO CLOUD



Bellislimo Cloud is the latest addition to the TESI Cloud family of products connectable to the Internet. It features intuitive programming and monitoring by means of the TESI Cloud app for iOS and Android.

FEATURES:

- Energy class B: The highest energy class in its category.
- Reversible: Can be installed vertically or horizontally.
- Eco smart mode: Self-learning and self management
- Quick first shower
- Vacation mode: to reduce water heater's and energy consumption activity.
- Reverse counter: Counts down until the water heater reaches the desired temperature.
- Copper dry heating element

CONTROL VIA INTERNET:

- Easy installation and connection of the water heater to the TESI Cloud app
- Real-time monitoring and control of the water heater anytime, anywhere
- Energy consumption monitoring through the energy calculator

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCR 502722 E31 ECW	2200	40	vertical/horizontal	490	709	280	G	B	M030424

**TESY**

It's impressive

TANK WATER HEATER, MODECO CERAMIC



TESY
It's impressive

"Next-generation electric water heaters, combining modern design and eco-friendly smart technology. The 32 mm highly efficient PU insulation guarantees low thermal losses, meeting the highest requirements of the European markets. Equipped with a ceramic heating element, providing reliable protection against aggressive water."

FEATURES:

- Ceramic heating element
- Limescale protection
- Noiless operation
- Quick first shower
- Easy maintenance without draining
- Two power settings
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water. The nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area
- No thermal bridge
- Stainless steel pipe
- Plasma welding
- Energy class B: The highest energy class in its category.

MARKETS:

Available for BG; RO; RS & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV 50 47 16D C21 TS2R	800/1600	50	vertical	470	590	496	G	B	M030429
GCV 80 47 24D C21 TS2R	1200/2400	82	vertical	470	845	496	G	B	M030302





TANK WATER HEATER, MODECO CLOUD



TESY
It's impressive

"Next-generation electric water heaters, combining modern design and eco-friendly smart technology. The 32 mm highly efficient PU insulation guarantees low thermal losses, meeting the highest requirements of the European markets. Providing the comfort to monitor and control your EWH via Internet anytime, anywhere"

FEATURES:

- Control via internet: Easy installation and connection of the water heater to the TESI Cloud app. Real-time monitoring and control of the water heater anytime, anywhere. Energy consumption monitoring through the energy calculator.
- Self-learning ECO SMART MODE for additional comfort and lower thermal losses.
- Touch-control panel and LCD display with crystal clear visualisation.
- Ceramic heating element
- Limescale protection
- Noiless operation
- Quick first shower
- Easy maintenance
- Two power settings
- BiLight indication: red light for heating mode and blue light for ready to use mode
- Piston effect: ensuring up to 15% more hot water.

nozzle slows down the mixing of the incoming cold water and the water already heated in the appliance through leveling the pressures in the mixing area

- No thermal bridge
- Stainless steel pipe
- Plasma welding
- Vacation mode
- Boost function
- Energy class B: The highest energy class in its category.

MARKETS:

Available for BG; RO; RS; & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV 80 47 24D C21 ECW	1200/2400	82	vertical	470	845	496	G	B	M030307



TANK WATER HEATER, ELPROM

Water heater that offers you good work and quality at an affordable price. The Elprom series has a powerful heater for fast water heating, an external temperature regulator, an external moisture-insulated electric switch and a light indicator indicating the operating mode.

MARKETS:

Available for BG market.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCV 804420 D03 TSR	2000	80	vertical	440	790	468	G	C	M030434



TANK WATER HEATERS, SIMPATECO SERIES



TESY
It's impressive

The appliances is intended to supply hot water to household sites equipped with a piping system working at pressure below 6 bar (0,6 Mpa)

FEATURES:

- Copper heating element
- Light indication: red light for heating mode and blue light for ready to use mode
- Eco position of the thermoregulator for cost efficient and prolonged operation
- Stainless steel pipe
- Energy class C

MARKETS:

Available only for BG market.

SUPPORT:

Warranty and service support is possible only in BULGARIA

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
CTV 503820 B11 TSR	2000	50	vertical	386	803	386	G	C	M030403
CTV 803830 B11 TSR	3000	80	vertical	386	1205	412	G	C	M030404
CTV 804430 B11 TSR	3000	82	vertical	440	845	467	G	C	M030405



INSTANTANEOUS WATER HEATERS, INSTALINE SERIES



TESY
It's impressive

The appliance is an electric domestic water heater with instantaneous effect (constant flow heater). It is used for supplying hot water in domestic and office environment - kitchens, bathrooms, supporting office premises, etc.

FEATURES:

- Elegant design and compact size
- Ultra fast reaching of the desired temperature
- In-built stabilization of the water temperature
- Overheating protection
- Light indicator
- 360°easy installation
- Energy class A

MARKETS:

Available for: BG; RO; RS; CR, SI & EL markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered.

Model	Rated power (W)	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
IWH 35 X02 KI	3500	130	200	76	G	M030400
IWH 50 X02 KI	5000	130	200	76	G	M030401
IWH 70 X02 BA H	7000	130	200	76	G	M030439



TANK WATER HEATERS, COMPACT FLAT SERIES



TESY
It's impressive

Low-volume and compact in size. The water heaters of the Compact series are suitable for installation at small and narrow spaces close to the point of use of hot household water. Depending on the room interior and the existing utilities, such appliances can be installed under or above the flow regulating mixing tap. The developed low-volume electric water heaters have storage capacity of 6 litres.

FEATURES:

- Water tank with glass-ceramic coating and anode protector
- Highly efficient heat insulation
- Convenient thermoregulator
- Flat shape
- Saves space
- Above and under the sink installation
- Range 6 l

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCA 0615 M01 RC	1500	5.3	above sinks	265	365	160	G	A	M030105
GCU 0615 M01 RC	1500	5.3	under sinks	265	365	160	G	B	M030088



TANK WATER HEATERS, COMPACT SERIES



TESY
It's impressive

The water heaters of the Compact family are suitable for installation in small and narrow spaces close to the point of use of hot water. Depending on the room interior and the existing utilities, such appliances can be installed under or above a sink or mixing tap.

The flat base of the 10 l and 15 l models for under-the-point-of-use installation allows direct on-floor or in-cupboard placement, which avoids wall drilling.

FEATURES:

- Elegant compact design
- Saves space
- Convenient push-push thermoregulator for smooth water temperature setting
- Red light indication for heating mode
- Blue light indication for ready-to-use mode
- Above and under the sink installation
- Energy class B
- Energy class A (Cat. Number M030102)

MARKETS:

2000W: Available for BG market;
1500W: Available for RO; RS, CR, SI & EL market.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Volume (L)	Mounting type	Width (mm)	Height (mm)	Depth (mm)	Product category	Energy class	Catalogue number
GCA 1020 L52 RC	2000	10	above sinks	377	399	247	G	A	M030102
GCA 15 20 L52 RC	2000	15	above sinks	377	399	304	G	A	M030019
GCU 1020 L52 RC	2000	10	under sinks	377	399	247	G	B	M030134
GCU 15 20 L52 RC	2000	15	under sinks	377	399	304	G	B	M030104
GCA 1015 L52 RC	1500	10	above sinks	377	399	247	G	A	M030420
GCA 1515 L52 RC	1500	15	above sinks	377	399	304	G	A	M030421
GCU 1015 L52 RC	1500	10	under sinks	377	399	247	G	B	M030422
GCU 1515 L52 RC	1500	15	under sinks	377	399	304	G	B	M030423



A modern bathroom interior featuring a white, curved bathtub on a black platform. A white wall-mounted heater is visible on the left wall. The ceiling has a skylight and a grid of recessed lighting. A purple bath mat is on the floor.

HEATING APPLIANCES

OIL-FILLED RADIATORS, CB SERIES



TESY
It's impressive

Oil-filled radiators are considered to be one of the most efficient household electric heating appliances

FEATURES:

- The radiator's heating surface is enlarged up to 40%
- Three power settings
- Convection and radiant heating effect
- Light indicator
- Adjustable thermoregulator
- Anti-frost protection
- Overheating protection
- Tip-over protection
- Fast heating and Silent operation
- Heating element protected from pet's fur, which

increases its lifecycle.

- Convenient cable reel
- Built-in 500 W fan heater (for models E01 V)

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Num. of fins	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
CB 2009 E01 R	800/1200/2000	9	16-24m ²	290	650	430	G	M048100
CB 2512 E01 V	1000/1500/3000	12	24-32m ²	290	650	550	G	M048101



FLOOR-STANDING ELECTRIC PANEL CONVECTORS WITH MECHANICAL TERMOREGULATOR, HEATECO SERIES



TESY
It's impressive

Electric panel convectors ensure faster room heating and lower electricity costs.

FEATURES:

- Optimal convection
- Adjustable thermoregulator
- Bathroom usage option- IP 24 protection
- Anti-frost protection
- Tip-over protection
- Overheating protection
- Switch with protection cap
- Robust metal construction
- Floor standing

- Casters not included: Four pices set. Cat number: M048109

MARKETS:

Available for BG; RO; RS; CR & SI Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
CN 03 200 MIS F + legs	2000	16-24m ²	90	450	830	G	M048102
CN 03 300 MIS F + legs	3000	24-32m ²	90	450	1180	G	M048103



WALL MOUNTED ELECTRIC PANEL CONVECTORS WITH ELECTRONIC TERMOREGULATOR, HEATECO SERIES



Electric panel convectors ensure faster room heating and lower electricity costs.

FEATURES:

- Optimal convection - up to 25% faster room heating
- Precise thermoregulator with an accuracy of 0.1° C
- Electronic thermoregulator 10-30° C
- Thermostat calibration to achieve the desired comfort: temperature correction $\pm 4^{\circ}\text{C}$
- Weekly programmer 24/7 with 30-minute step
- Adaptive start with On/Off option - provides optimal comfort and saves energy
- Bathroom installation option: IP 24
- Delayed start function- 96 hours
- Anti-frost protection, fixed on 5° C, with On/Off option
- Keyboard lock
- Overheating protection
- LED display indicating desired and actual room

temperature

- Robust metal construction

ACCESSORIES:

- Are available separately: allow you to use your product as a floor-standing convector.
- Legs: Two pices set. Cat number: M048108
- Casters: Four pices set. Cat number: M048109

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
CN 03 200 EIS W	2000	16-24m ²	90	450	830	G	M048104
CN 03 250 EIS W	2500	20-28m ²	90	450	1000	G	M048105
CN 03 300 EIS W	3000	24-32m ²	90	450	1180	G	M048057



FLOOR-STANDING ELECTRIC PANEL CONVECTORS, CN 214 ZF



Floor-standing fan heater with resistive wire

FEATURES:

- Three power settings: 800 W/1200 W/2000 W
- Adjustable thermoregulator
- Light indicator
- Heating element - resistive wire
- Anti-frost protection
- Overheating protection
- Power cord: 1.7 m

- Noise level: 45.4 dB(A)
- Floor standing

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
CN 214 ZF	800/1200/2000	16-24m ²	180	430	600	G	M048065



FLOOR-STANDING FAN HEATER HL 213 V



Floor-standing fan heater with resistive wire

FEATURES:

- Two power settings: 1000 W/2000 W
- Classic design
- Compact and lightweight
- Adjustable thermoregulator
- Light indicator
- Summer ventilation
- Heating element - resistive wire
- Anti-frost protection
- Overheating protection
- Power cord: 1.5 m

- Noise level: 45.9 dB(A)
- Floor standing

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
HL 213 V	1000/2000	13-16m ²	120	227	245	G	M048069



FLOOR-STANDING FAN HEATER HL 830 V PTC



Floor-standing fan heater with PTC heating element



TESI
It's impressive

FEATURES:

- Three power settings: 1000 W/2000 W/3000 W
- Metal safety grid
- Adjustable thermoregulator
- Summer ventilation
- Heating element - PTC
- Overheating protection
- Noise level: 54.9 dB (A)
- Floor standing

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
HL 830 V PTC	1000/2000/3000	24-32m ²	253	238	238	G	M048110



BATHROOM HEATER, HL 246 VB W



Wall-mounted panel heater.



TESI
It's impressive

FEATURES:

- Two power settings: 1000 W/2000 W
- LCD display
- Soft-touch key control
- Electronic thermoregulator: 10-35°C
- Weekly programmer 24/7
- Open window/door function
- Wall-mounted, designed for bathroom usage
- Anti-frost protection
- Overheating protection
- Heating element - resistive wire
- IP24
- Noise level: 51.6 dB(A)

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
HL 246 VB W	1000/2000	14-18m ²	385	165	380	G	M048111



BATHROOM HEATER, HL 243 VB W



Wall-mounted panel heater.

FEATURES:

- Two power settings: 1000 W/2000 W
- Rotatable towel rack
- Electronic thermoregulator: 5-35° C
- Weekly programmer 24/7
- Six fixed programs: 5 factory pre-set programs and 1 custom program
- Timer function to switch off
- LCD display and soft-touch key control
- Open window/door function
- Wall-mounted, designed for bathroom usage
- Anti-frost protection

- Overheating protection
- Heating element - resistive wire
- IP24
- Noise level: 50.3 dB(A)

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered



TESI
It's impressive

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
HL 243 VB W	1000/2000	14-18m ²	340	130	400	G	M048068



BATHROOM QUARTZ HEATER, QH 04 120



Wall-mounted glass panel heater

FEATURES:

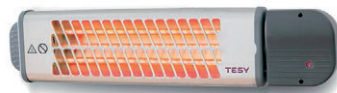
- Two power settings: 600 W/1200 W
- Two quartz heating elements
- Pull-cord switch with power setting display
- 45° C tilt option for adjustment of the heat distribution angle
- Wall-mounted, designed for bathroom usage
- IP24

MARKETS:

Available for BG; RO; RS; CR; SI & EL Markets.

SUPPORT:

Warranty and service support is possible only in the countries where the products are offered



TESI
It's impressive

Model	Rated power (W)	Heating area	Width (mm)	Height (mm)	Depth (mm)	Product category	Catalogue number
QH 04 120	600/1200	8-10m ²	570	105	120	G	M048095





SMART HOME CONTROL



IP20

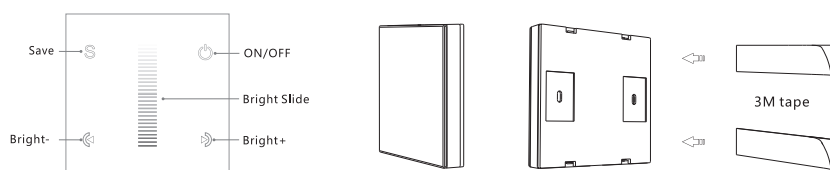
ONE CHANNEL RECHARGEABLE
LED PANEL REMOTE3+0
standard
+extended
3 YEAR TOTAL
WARRANTY**FUNCTION:**

- To control single color LED lamp
- Removeable and stick easily
- With on/off state and touch operation indication
- Can remote control multiple controllers or lamps
- High precision touch chip with high sensitive & high stability touch control

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Standby time: 6 months
- Built-in rechargeable Li-Battery
- Working temperature: -30°C~55°C
- Product size: L86×W86×H13.5mm

Full info for the products, instructions, can be found at www.elmarkholding.eu



Output signal Li-battery capacity Working current Standby current Packing/Box (pcs) Product category Catalogue number

RF(2.4G) 200mAh <20mA < 30μA 1/200 F **99TOUCHUSB1**

UNTIL SUPPLY
LAST

IP20

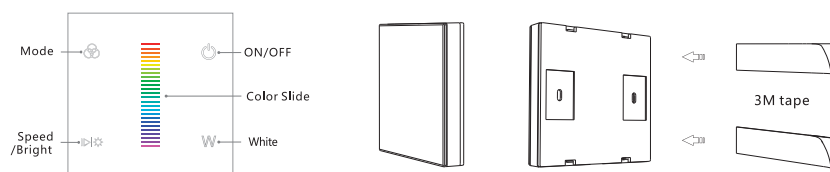
FOUR CHANNEL RECHARGEABLE
LED PANEL REMOTE3+0
standard
+extended
3 YEAR TOTAL
WARRANTY**FUNCTION:**

- To control LED one-four colors
- Removeable and stick easily
- With on/off state and touch operation indication
- Can remote control multiple controllers or lamps
- High precision touch chip with high sensitive & high stability touch control

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Standby time: 6 months
- Built-in rechargeable Li-Battery
- Working temperature: -30°C~55°C
- Product size: L86×W86×H13.5mm

Full info for the products, instructions, can be found at www.elmarkholding.eu



Output signal Li-battery capacity Working current Standby current Packing/Box (pcs) Product category Catalogue number

RF(2.4G) 200mAh <20mA < 30μA 1/200 F **99TOUCHUSB4**

UNTIL SUPPLY
LAST

IP20

ONE CHANNEL FOUR ZONES REMOTE

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY



FUNCTION:

- To control single color LED lamp
- Removeable and stick easily
- With on/off state and touch operation indication
- Can remote control multiple controllers or lamps
- High precision touch chip with high sensitive & high stability touch control

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Standby time: 6 months
- Built-in rechargeable Li-Battery
- Working temperature: -30°C~55°C
- Product size: L86xW86xH13.5mm

Full info for the products, instructions, can be found at www.elmarkholding.eu



- Power — Turn on/off all zone light.
- Brightness slide.
- 1 2 3 — Short press recall scene. Long press 2s to save the current state into 1/2/3.
- 1 2 3 4 — Short press turn on zone light and select zone simultaneously, long press 2s turn off zone light. 4 zone control separately or synchronously, each zone could control multiple receivers.

Output signal	Battery capacity	Working current	Standby current	Packing/Box (pcs)	Product category	Catalogue number
RF(2.4G)	2xAAA	<20mA	< 20µA	1/200	D	99TOUCHB1



IP20

FOUR CHANNEL FOUR ZONES REMOTE

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY



FUNCTION:

- To control one-four colours
- Removeable and stick easily
- With on/off state and touch operation indication
- Can remote control multiple controllers or lamps
- High precision touch chip with high sensitive & high stability touch control

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Standby time: 6 months
- Built-in rechargeable Li-Battery
- Working temperature: -30°C~55°C
- Product size: L86xW86xH13.5mm

Full info for the products, instructions, can be found at www.elmarkholding.eu



- Power — Turn on/off all zone light.
- Color slide.
- M — Short press play 10 builtin mode, long press run mode-cycle.
- Adjust dynamic mode speed or static color brightness, 10 levels.
- W — Short press turn on/off W channel, long press adjust W channel brightness.
- 1 2 3 4 — Short press turn on zone light and select zone simultaneously, long press 2s turn off zone light. 4 zone control separately or synchronously, each zone could control multiple receivers.

Output signal	Battery capacity	Working current	Standby current	Packing/Box (pcs)	Product category	Catalogue number
RF(2.4G)	2xAAA	<20mA	< 20µA	1/200	D	99TOUCHB4





IP20



TOUCH AC TRIAC RF DIMMER

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

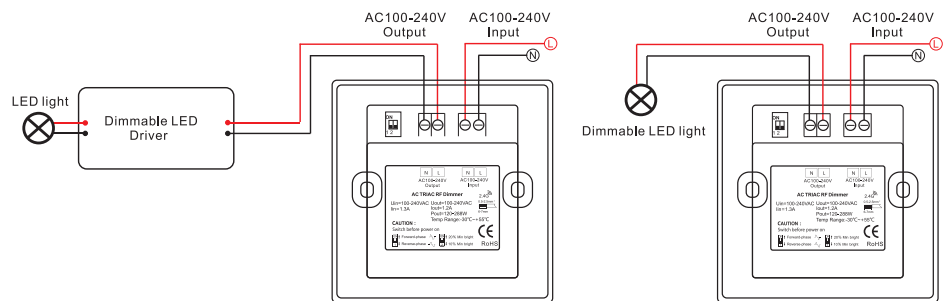
- Control is done by installed IOS or Android application
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights
- Ultra sensitive high strength glass touch panel with touch brightness slide in the middle and backlighting
- Triac and Mosfet dimmable
- Work with direct connected dimmable light
- Great compatibility with a variety of dimming remoter
- Leading edge dimming or trailing edge dimming set by dip switch
- Minimum brightness set by dip switch
- Change brightness, support push, long push operation

TECHNICAL DATA:

- Adopt 2.4GHz wireless technology
- Wireless control (remote distance): 30m
- Input voltage: 100-240VAC
- Output voltage: 100-240VAC
- Working temperature: -30°C~55°C
- Product size: L86xW86xH50mm

Download Skydance Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu



Input voltage	Output voltage	Output current	Output power	Packing/Box (pcs)	Product category	Catalogue number
100- 240VAC	100- 240VAC	1Channel x 1.2A	100- 240VAC-288W	1/200	D	99TOUCH1



IP20



RF AC TRIAC ROTARY DIMMER

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Control is done by installed IOS or Android application
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights
- Ultra sensitive high strength glass touch panel with touch brightness slide in the middle and backlighting
- Triac and Mosfet dimmable
- Work with direct connected dimmable light
- Great compatibility with a variety of dimming remoter
- Leading edge dimming or trailing edge dimming set by dip switch
- Minimum brightness set by dip switch
- Rotate knob to change brightness, support push, long push operation

TECHNICAL DATA:

- Adopt 2.4GHz wireless technology
- Wireless control (remote distance): 30m
- Input voltage: 100-240VAC
- Output voltage: 100-240VAC
- Working temperature: -30°C~55°C
- Product size: L86xW86xH50mm

Download Skydance Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Input voltage	Output voltage	Output current	Output power	Packing/Box (pcs)	Product category	Catalogue number
100- 240VAC	100- 240VAC	1Channel x 1.2A	100- 240VAC-288W	1/200	D	99DIMMERR



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

IP20



SINGLE ZONE RF REMOTE CONTROLLER

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- Match with single color dimming receiver- 99RECEIVER1
- Operate with LED indicator light
- Can match one or more receiver

TECHNICAL DATA:

- Working volatage: 3VDC
- Wireless control (remote distance): 30m

- Standby time: 6 months
- CR2032 button battery power supply
- Product size: L107xW58.5xH9mm

Full info for the products, instructions, can be found at www.elmarkholding.eu

Output signal	Working voltage	Working current	Standby current	Packing/Box (pcs)	Product category	Catalogue number
RF(2.4GHz)	3VDC(CR2032)	<20mA	<10µA	1/150	D	99REMOTE1



IP20



SINGLE ZONE RF RGBW REMOTE CONTROLLER

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- Match with one channel and four channel dimming receivers- 99RECEIVER1 and 99RECEIVER4
- Suitable to single color, dual color, RGB, RGBW or RGB+CCT LED controller
- Operate with LED indicator light
- Can match one or more receiver

TECHNICAL DATA:

- Working volatage: 3VDC
- Wireless control (remote distance): 30m
- Standby time: 6 months
- Battery: 2 x AAA
- Product size: L107xW58.5xH9mm

Full info for the products, instructions, can be found at www.elmarkholding.eu

Output signal	Working voltage	Working current	Standby current	Packing/Box (pcs)	Product category	Catalogue number
RF(2.4GHz)	3VDC(CR2032)	<20mA	<10µA	1/150	D	99RGBREMOTE1



IP20



FOUR ZONE RF RGBW REMOTE CONTROLLER

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- Match with one channel and four channel dimming receivers- 99RECEIVER1 and 99RECEIVER4
- Four way control
- Suitable to single color, dual color, RGB, RGBW or RGB+CCT LED controller
- Operate with LED indicator light
- Can match one or more receiver

TECHNICAL DATA:

- Working volatage: 3VDC
- Wireless control (remote distance): 30m
- Standby time: 6 months
- Battery: 2 x AAA
- Product size: L122xW53xH17.5mm

Full info for the products, instructions, can be found at www.elmarkholding.eu

Output signal	Working voltage	Working current	Standby current	Packing/Box (pcs)	Product category	Catalogue number
RF(2.4GHz)	3VDC(CR2032)	<20mA	<10µA	1/150	D	99RGBREMOTE4



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



IP20



FOUR CHANNEL CONSTANT VOLTAGE RECEIVER

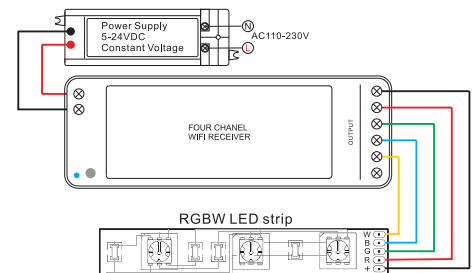
3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Four channel 2.4GHz RF wireless LED lighting dimming receiver
- Work as ON/OFF switch and RGBW controller with RGBW remoter
- Can also be used for RGB, RGBW, 2 x dual colour, 4 x single color LED strips
- Full compatibility with a variety of single color, dual color and RGB/RGBW remotes
- Through jump, strobe, gradual change style, fine adjust color, realize thousands of powerful editing effect
- 32 change mode optional
- Changing mode or loop mode can be stored to 8 scenes, or timing run
- Control is done by remote control, dimmer switch and/or installed IOS or Android application
- For more power control it can be equipped with amplifier

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Dimming range: 0-100%
- Product size: L97xW33xH18mm



Input voltage	Output current	Output power (12V)	Output power (24V)	Packing/Box (pcs)	Product category	Catalogue number
12-24 VDC	4Channel 4 x 3A	0 - 144W	0 - 288W	1/100	D	99RGBWF4



IP20



WIFI RELAY CONTROLLER

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Convert WiFi to RF signal
- It used to carry 1-16 constant voltage receiver with different channel number
- WiFi-Relay controller control up to 16 zones lamp with any light type
- Can not control lamp directly

Download Skydance Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

TECHNICAL DATA:

- Input voltage: 5-24VDC
- Wireless control (remote distance): 30m
- Product size: D72xH18mm



Input voltage	Output current	Output power (12V)	Output power (24V)	Packing/Box (pcs)	Product category	Catalogue number
5-24 VDC	-	-	-	1/100	D	99RWIFI



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



IP20



ONE CHANNEL LED DIMMING RECEIVER

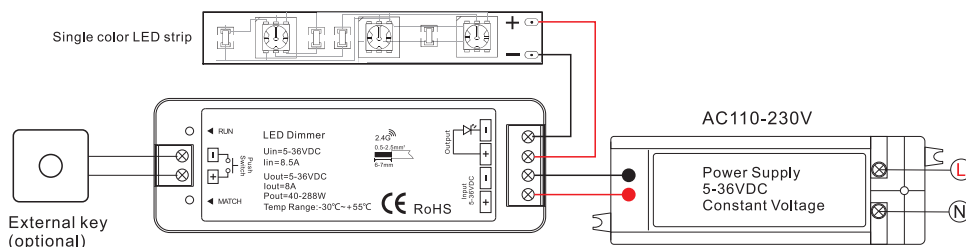
3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- One channel 2.4GHz RF wireless LED lighting dimming receiver
- Work as ON/OFF switch and dimming
- Control is done by remote control, dimmer switch and/or installed IOS or Android application
- For more power control it can be equipped with amplifier

TECHNICAL DATA:

- Input voltage: 5-36VDC
- Output power: 5VDC: 0-40W; 12VDC: 0-96W; 24VDC: 0-192W; 36VDC: 0-288W
- Dimming range: 0-100%
- Product size: L97xW33xH18mm



Input voltage	Output current	Packing/Box (pcs)	Product category	Catalogue number
5-36 VDC	1Channel x 8A	1/150	D	99RECEIVER1



IP20



FOUR CHANNEL LED DIMMING RECEIVER

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

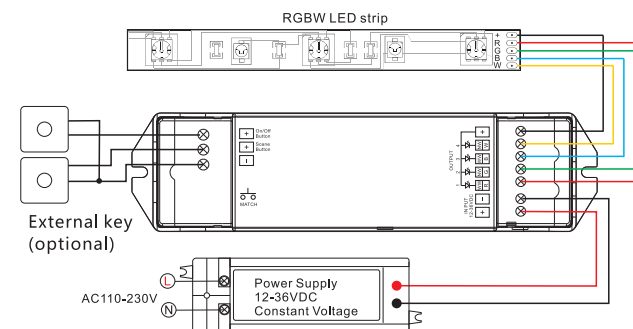
FUNCTION:

- Four channel 2.4GHz RF wireless LED lighting dimming receiver
- Control is done by remote control, dimmer switch and/or installed IOS or Android application
- Work as ON/OFF switch and RGBW controller with RGBW remoter, create colorful static or dynamic effect
- Can also be used for RGB, RGBW, 2 x dual colour, 4 x single color LED strips
- Full compatibility with a variety of single color, dual color and RGB/RGBW remoters

- When control RGB/RGBW lamp, built in 30 change mode optional
- For more power control it can be equipped with amplifier

TECHNICAL DATA:

- Input voltage: 12-36VDC
- Output power: 12VDC: 0-240W; 24VDC: 0-480W; 36VDC: 0-720W
- Dimming range: 0-100%
- Product size: L97xW33xH18mm



Input voltage	Output current	Packing/Box (pcs)	Product category	Catalogue number
12-36VDC	4Channel 4 x 5A	1/150	D	99RECEIVER4



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

IP20

ONE CHANNEL POWER REPEATER

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

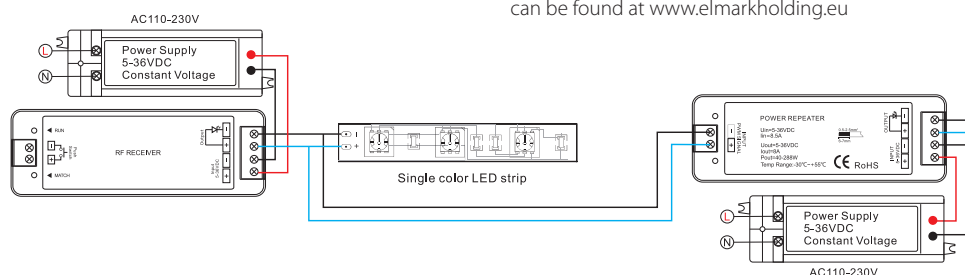
FUNCTION:

- It's used along with 99RECEIVER1, in case we want to increase the output power, for the control of several light sources
- It can be used unlimited number of amplifiers, connected in parallel or
- successively without reflecting the sincronization of the control itself

TECHNICAL DATA:

- Input voltage: 5-36VDC
- Output power: 5VDC: 40W; 12V: 96W; 24V: 192W; 36V: 288W
- Output current: 1x8A
- Product size: L97xW33xH18mm

Full info for the products, instructions, can be found at www.elmarkholding.eu



Input voltage	Output current	Packing/Box (pcs)	Product category	Catalogue number
5-36 VDC	1Channel x 8A	1/200	D	99REPEATER1



IP20

FOUR CHANNEL POWER REPEATER

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

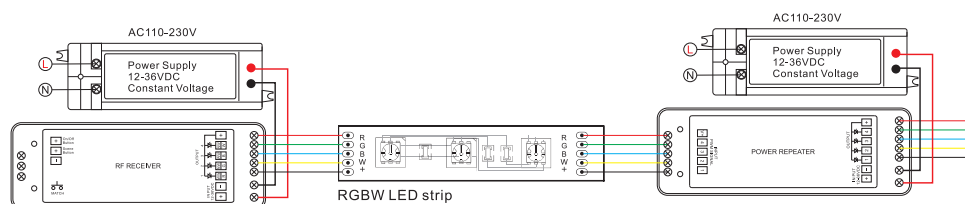
FUNCTION:

- It's used along with 99RECEIVER4, in case we want to increase the output power, for the control of several light sources
- It can be used unlimited number of amplifiers, connected in parallel or
- successively without reflecting the sincronization of the control itself

TECHNICAL DATA:

- Input voltage: 12-36VDC
- Output power: 12V: 240W; 24V: 480W; 36V: 720W
- Output current: 1x8A
- Product size: L175xW45xH27mm

Full info for the products, instructions, can be found at www.elmarkholding.eu



Input voltage	Output current	Packing/Box (pcs)	Product category	Catalogue number
12-36VDC	4Channel 4 x 5A	1/200	D	99REPEATER4





AC TRIAC RF DIMMER

3+0 standard +extended
3 YEAR TOTAL WARRANTY

FUNCTION:

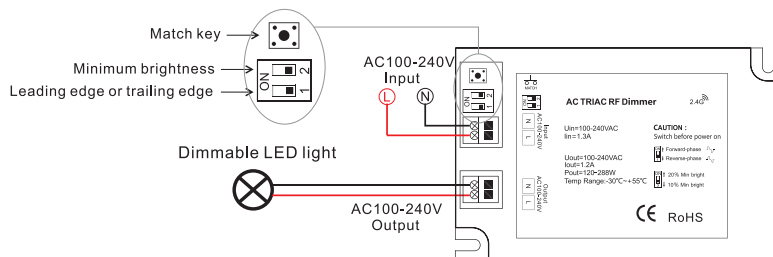
- AC phase cut RF dimmer
- Control is done by installed IOS or Android application
- Control is done by remote control
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights
- Triac and Mosfet dimmable
- Leading edge dimming or trailing edge dimming set by dip switch

by dip switch

- Minimum brightness set by dip switch

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Output voltage: 100-240VAC
- Output power: 240VAC: 288W
- Product size: L103xW67xH30mm



Input voltage	Output current	Packing/Box (pcs)	Product category	Catalogue number
100- 240VAC	1Channel x 1.2A	1/300	D	99DIMMERT1



AC TRIAC RF DIMMER SWITCH

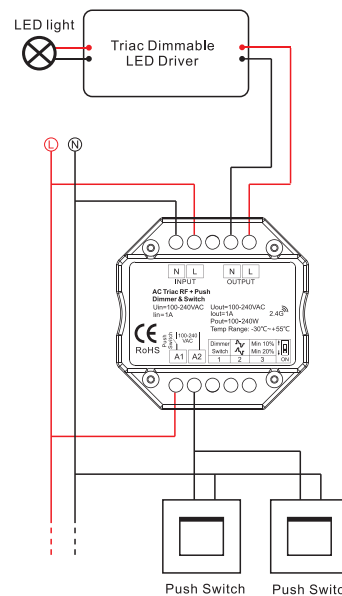
3+0 standard +extended
3 YEAR TOTAL WARRANTY

FUNCTION:

- AC phase cut RF dimmer switch
- Control is done by installed IOS or Android application
- Control is done by remote control. Can accept up to 10 remote control
- Suitable to use with dimmer switch. Great compatibility with a variety of dimming remote
- Suitable to mounting in standard panel bottom box
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights
- Triac and Mosfet dimmable
- Leading edge dimming or trailing edge dimming set by dip switch
- Minimum brightness set by dip switch

TECHNICAL DATA:

- Wireless control (remote distance): 30m
- Input voltage: 100-240VAC
- Output voltage: 100-240VAC
- Output power: 240VAC: 240W
- Product size: L52xW25xH26mm



Input voltage	Output current	Packing/Box (pcs)	Product category	Catalogue number
100- 240VAC	1Channel x 1A	1/200	D	99DIMMERMT





IP20



ONE CHANNEL SMART WIFI GLASS TOUCH PANEL

3+0 standard +extended
3 YEAR TOTAL WARRANTY

FUNCTION:

- Touch ON/OFF
- Real-time turn ON/OFF lighting from anywhere
- Control is done from anywhere with IOS or Android mobile application
- Time setting function- turn ON/OFF at specified time after setting
- Through jump, strobe, gradual change style, fine adjust color, realize thousands of powerful editing effect
- Turn ON/OFF a gang of devices with one tap
- Control can be shared to another mobile phones
- Control electrical devices over Wi-Fi
- Supports max 8 enabled timing tasks
- EU standard
- Possibility to voice control with AMAZON ALEXA, Google Home(Stay tuned)
- Works with GOOGLE NEST

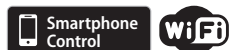
TECHNICAL DATA:

- Input voltage: 90-250VAC
- Output power: 400W
- Output current: 2A
- Frequency: 2.4Ghz
- Working temperature: 0°C-40°C (32°F-104°F).
- Humidity: 5%-90%RH, Non-condensing

Download EWeLink Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Input voltage	Output current	Output power	Colour	Packing/Box (pcs)	Product category	Catalogue number
90-250V AC	2A	400 W	white	1/1000	D	195020



IP20



195021

195022

WIFI SMART PLUG-IN SOCKET GERMAN/UK TYPE

3+0 standard +extended
3 YEAR TOTAL WARRANTY

FUNCTION:

- Turn ON/OFF electrical devices from anywhere
- Real time control status
- Control is done from anywhere with IOS or Android mobile application
- Time setting function- turn ON/OFF at specified time after setting
- Turn ON/OFF a gang of devices with one tap
- Control can be shared to another mobile phones
- Control electrical devices over Wi-Fi
- Supports max 8 enabled timing tasks
- German / UK standard
- Possibility to voice control with AMAZON ALEXA, Google Home(Stay tuned)
- Works with GOOGLE NEST
- Security mechanism: WEP/WPA-PSK/WPA2-PSK/WPA/WPA2/WAPI/WPS2

TECHNICAL DATA:

- Input voltage: 90-250VAC
- Output power: 2000W
- Output current: 10A
- Frequency: 2.4Ghz
- Working temperature: 0°C-40°C (32°F-104°F).
- Humidity: 5%-90%RH, Non-condensing

Download EWeLink Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Socket Type	Input voltage	Output current	Output power	Packing/Box (pcs)	Product category	Catalogue number
German	90-250V AC	10A	2000 W	1/900	D	195021
UK	90-250V AC	10A	2000 W	1/200	D	195022





IP20



WIFI SMART PLUG-IN SOCKET GERMAN TYPE

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- Turn ON/OFF electrical devices from anywhere
- Real time control status
- Control is done from anywhere with IOS or Android mobile application
- Time setting function- turn ON/OFF at specified time after setting
- Turn ON/OFF a gang of devices with one tap
- Control electrical devices over Wi-Fi
- Possibility to voice control with AMAZON ALEXA, Google assistant

TECHNICAL DATA:

Input voltage: 100-240VAC
Output power: 3500W
Output current: 10A
Frequency: 2.4Ghz
Working temperature: -10°C-50°C
Size (LxWxH)mm: 108x56x72

Download "Tuya smart" Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Socket Type	Input voltage	Output current	Output power	Packing/Box (pcs)	Product category	Catalogue number
German	100-240V AC	16A	3500 W	1/100	D	195023



IP20



195001

ONE AND TWO CHANNEL SMART SWITCH

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- One and Two channel wireless ON/OFF switch
- Real-time ON/OFF devices status provided to application from anywhere
- Control is done from anywhere with IOS or Android mobile application
- Time setting function- turn ON/OFF at specified time after setting
- Control can be shared to another mobile phones
- Control electrical devices over Wi-Fi
- Supports max 8 enabled timing tasks
- Possibility to voice control with AMAZON ALEXA, Google Home (Stay tuned)
- Works with GOOGLE NEST

TECHNICAL DATA:

- Input voltage: 90-250VAC
- Output power: 2000W per channel
- Output current: 10A per channel
- Frequency: 2.4Ghz
- Working temperature: 0°C-40°C (32°F-104°F).
- Humidity: 5%-90%RH, Non-condensing
- Product size: L88xW38xH23mm

Download EWeLink Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Input voltage	Output current	Output power	Colour	Packing/Box (pcs)	Product category	Catalogue number
90-250V AC	10A	2200 W	white	1/800	D	195001
90-250V AC	2x10A	2x2200 W	white	1/ 800	D	195004



195004



IP20



WIRELESS SMART SWITCH WITH POWER CONSUMPTION MEASUREMENT

3+0
standard
+extended **3** YEAR TOTAL WARRANTY

FUNCTION:

- Real-time ON/OFF control and monitoring status from energy usage in a period via App (KWH calculator)
- Check energy usage daily and monthly via App
- Control is done from anywhere with IOS or Android mobile application
- This device works perfectly with electric fan, air conditioner, humidifier, smart fish tank, watering system, etc.
- Time setting function- turn ON/OFF at specified time after setting
- Control can be shared to another mobile phones
- Control electrical devices over Wi-Fi
- Supports max 8 enabled timing tasks
- Possibility to voice control with AMAZON ALEXA, Google Home (Stay tuned)
- Works with GOOGLE NEST

TECHNICAL DATA:

Input voltage: 90-250VAC
Output power: 3500W
Output current: 16A
Frequency: 2.4Ghz
Working temperature: 0°C-40°C (32°F-104°F).
Humidity: 5%-90%RH, Non-condensing
Product size: L114xW52xH32mm

Download EWeLink Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Input voltage	Output current	Output power	Colour	Packing/Box (pcs)	Product category	Catalogue number
90-250V AC	16A	3500 W	white	1/800	D	195003



IP20



195002



195030



195031

TEMPERATURE AND HUMIDITY MONITORING WIFI WIRELESS SWITCH

3+0
standard
+extended **3** YEAR TOTAL WARRANTY

FUNCTION:

- Real-time ON/OFF control and monitoring status from temperature and humidity with sensor
- Can turn switch ON/OFF electrical devices without monted
- sensor
- This device works perfectly with electric fan, air conditioner, humidifier, smart fish tank, watering system, etc
- Control is done from anywhere with IOS or Android mobile application
- Time setting function- turn ON/OFF at specified time after setting
- Control can be shared- temperature and humidity to another mobile phones
- Supports max 8 enabled timing tasks
- Possibility to voice control with AMAZON ALEXA, Google Home(Stay tuned)
- Works with GOOGLE NEST

Google Home(Stay tuned)
• Works with GOOGLE NEST

TECHNICAL DATA:

• Input voltage: 90-250VAC
• Output power: 3500W
• Output current: 16A
• Frequency: 2.4Ghz
• Working temperature: 0°C-40°C (32°F-104°F).
• Humidity: 5%-90%RH, Non-condensing
• Product size: L114xW52xH32mm

SENSORS:

- 195030 - High-precision temperature & humidity sensor, -40°C/+80°C, 0~99.9% RH
- 195031 - Waterproof temperature sensor, IP68, -55°C/+125°C

Input voltage	Output current	Output power	Colour	Packing/Box (pcs)	Product category	Catalogue number
90-250V AC	16A	3500 W	white	1/800	D	195002



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



IP20



195006

SMART WIFI FOUR CHANNEL SWITCH

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- Real-time ON/OFF switching electrical devices from anywhere
- This device is good for industrial control
- Three modes to work- Switch among interlock/self-locking/inching modes
- Possibility to turn on devices for 0,25-4 s
- Control each channel separately
- Control is done from anywhere with IOS or Android mobile application
- Time setting function- turn ON/OFF at specified time after setting
- Control can be shared to another mobile phones
- Control electrical devices over Wi-Fi
- Supports max 8 enabled timing tasks
- Possibility to voice control with AMAZON ALEXA, Google Home(Stay tuned)
- Works with GOOGLE NEST

TECHNICAL DATA:

- Input voltage: 90-250VAC & 5-24VDC
- Output power: 4x2200W
- Output current: 4x10A
- Frequency: 2.4Ghz
- Working temperature: 0°C-40°C (32°F-104°F).
- Humidity: 5%-90%RH, Non-condensing
- Product size: L145xW90
- Mounting: DIN rail

Download EWeLink Application from Android market or Apple store.

Full info for the products, instructions, can be found at www.elmarkholding.eu

Input voltage	Output current	Output power	Packing/Box (pcs)	Product category	Catalogue number
90-250V AC / 5-24V DC	4x10A	4x2200 W	1/ 350	D	195006



IP20

REMOTE CONTROL SWITCHES

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

DESCRIPTION:

The remote devices for lighting control work through sending a frequent signal from the key to the receiver, which commands the connected to it lighting bodies. The installation of the key can be done in a standard round bracket as the advantage of this product is that there is no additional requirement for wiring from it towards the receiver. Thanks to this the product is widely used in premises with build in installations where there is no ability for adding the additional cable layouts and expenses for their building are reserved. The connection between the key and the receiver is through a frequent signal in the range -315Mhz – 433.92 Mhz.

TECHNICAL DATA:

- Battery: 12V 23A
- Input voltage: 220- 230 VAC
- Cordless control of lighting fixtures
- Frequency: 315Mhz-433.92 Mhz

Description	Operating distance in open air (m)	Output power (per way) ESL/ LED lamp	Incandescent lamp	Packing/Box (pcs)	Product category	Catalogue number
One way output power	50	200W	600W	1/60	D	99101





Description	Operating distance in open air (m)	Output power (per way) ESL/ LED lamp	Incandescent lamp	Packing/Box (pcs)	Product category	Catalogue number
Two ways output power	50	200W	600W	1/60	D	99102



Description	Operating distance in open air (m)	Output power (per way) ESL/ LED lamp	Incandescent lamp	Packing/Box (pcs)	Product category	Catalogue number
Three way output power	50	200W	600W	1/60	D	99103



Description	Operating distance in open air (m)	Output power (per way) ESL/ LED lamp	Incandescent lamp	Packing/Box (pcs)	Product category	Catalogue number
Two ways output power- 2xE27	50	150W	400W	1/60	D	99104



IP20



4 CHANNEL DIGITAL VIDEO RECORDERS

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

TECHNICAL DATA:

- Compression format: H.265
- Video system: NTSC/PAL
- Operation system: Linux- embedded
- Analog video-input/output: 4CH inputs / VGA and HDMI output
- IP Video Input: 2ch (only IP up to 6ch)
- Composite video input: up to 6ch (Analog video + IP video)
- Audio input/output: 1CH input /1CH output(RCA)
- Display resolution: Analog :1080N/720P/960H, IP:1080P/720P
- Display feature: single/Quad/S.E.Q.
- Record resolution: Analog :1080N/720P/960H, IP:1080P/720P
- Maximum input bandwidth: 8Mbps~16Mbps (default is 8Mbps, decrease one Analog channel can increase 4Mbps)
- Maximum output bandwidth: 16Mbps
- Maximum decode performance: 1080N:140fps
- Recording mode: Continuous/Manual/Motion detect
- Network type: Lan, DHCP, and DDNS
- HDD interface: 1SATA HDD, up to 6TB
- Multiplex operation: live display, record, playback, backup and network
- USB: 2xUSB(for mouse and backup/upgrade)
- PTZ control: yes (RS485)
- Mobile surveillance: Support Mobile Phones based on iPhone and Android operation system
- VGA/HDMI: 1024*768,1280*1024,1440*900,1920*1080
- Power supply: DC 12V/2A
- Dimension(WxDxH): 300x227x53mm
- Working temperature: -10°C~+55°C
- Working humidity: 10%~90%

Model	Channel	Input voltage	Packing/Box (pcs)	Product category	Catalogue number
EL-4004	4	12V DC	1	D	195060



IP20



8 CHANNEL DIGITAL VIDEO RECORDERS

3+0
standard
+extended

3 YEAR TOTAL
WARRANTY

TECHNICAL DATA:

- Compression format: H.265
- Video system: NTSC/PAL
- Operation system: Linux- embedded
- Analog video-input/output: 8CH inputs / VGA and HDMI output
- IP Video Input: 4ch (only IP up to 12ch)
- Composite video input: up to 12ch (Analog video + IP video)
- Audio input/output: 1CH input /1CH output(RCA)
- Display resolution: Analog :1080N/720P/960H, IP:1080P/720P
- Display feature: 1/4/6/8/9/10/13/14S.E.Q.
- Record resolution: Analog :1080N/720P/960H, IP:1080P/720P
- Maximum input bandwidth: 16Mbps~32Mbps (default is 8Mbps, decrease one Analog channel can increase 4Mbps)
- Maximum output bandwidth: 32Mbps
- Maximum decode performance: 1080N:120fps
- Recording mode: Continuous/Manual/Motion detect
- Network type: Lan, DHCP, and DDNS
- HDD interface: 1SATA HDD, up to 6TB
- Multiplex operation: live display, record, playback, backup and network
- USB: 2xUSB(for mouse and backup/upgrade)
- PTZ control: yes (RS485)
- Mobile surveillance: Support Mobile Phones based on iPhone and Android operation system
- VGA/HDMI: 1024*768,1280*1024,1440*900,1920*1080
- Power supply: DC 12V/2A
- Dimension(WxDxH): 300x227x53mm
- Working temperature: -10°C~+55°C
- Working humidity: 10%~90%

Model	Channel	Input voltage	Packing/Box (pcs)	Product category	Catalogue number
EL-4008	8	12V DC	1	D	195061



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.

IP66



HD 2MP BULLET CAMERA IP66

3+0 standard
+extended **3** YEAR TOTAL WARRANTY

CAMERA TECHNICAL DATA:

- IR Distance: up to 20m
- Image Sensor: 1/2.9" progressive CMOS
- Signal system: PAL/NTSC
- Frame Rate: AHD/TVI/CVI: P/25fps N/30fps/ CVBS: 960H
- Resolution: 2MP 1920(H)×1080(V)
- Lens: 3.6mm
- Day & Night: IR cut filter: 850nm
- Synchronization: internal
- Dwdr: support
- Communication: Up the coax, protocol

MENU:

- AGC: yes
- Day/Night Mode: EXT/auto/color/black and white)
- White balance: auto/manual
- BLC: yes
- S/N ratio: 40dB
- OSD: support

INTERFACE:

- Video Output: 1-channel BNC video output
- Swaitch Button: AHD/TVI/CVI/CVBS

Model	Input voltage	Packing/Box (pcs)	Product category	Catalogue number
EL-2232	12V DC	1	D	195054



IP66



HD 2MP DOME CAMERA IP66

3+0 standard
+extended **3** YEAR TOTAL WARRANTY

CAMERA TECHNICAL DATA:

- IR Distance: up to 15m
- Image Sensor: 1/2.9" progressive CMOS
- Signal system: PAL/NTSC
- Frame Rate: AHD/TVI/CVI: P/25fps N/30fps/ CVBS: 960H
- Resolution: 2MP 1920(H)×1080(V)
- Lens: 3.6mm
- Day & Night: IR cut filter: 850nm
- Synchronization: internal
- Dwdr: support
- Communication: Up the coax, protocol

MENU:

- AGC: yes
- Day/Night Mode: EXT/auto/color/black and white)
- White balance: auto/manual
- BLC: yes
- S/N ratio: 40dB
- OSD: support

INTERFACE:

- Video Output: 1-channel BNC video output
- Swaitch Button: AHD/TVI/CVI/CVBS

Model	Input voltage	Packing/Box (pcs)	Product category	Catalogue number
EL-328	12V DC	1	D	195055



DVR AND CAMERA ACCESSORIES - CABLE SPLITTERS



1 to 4 or 1 to 8 power splitter power cable (power splitter connection)
Plug and play ready only for camera with DC power
For adapting power supply 12V2A

Description	Power source type	Packing/Box (pcs)	Product category	Catalogue number
1-4 cable splitter	DC	1	D	195062
1-8 cable splitter	DC	1	D	195063



DVR AND CAMERA ACCESSORIES- POWER ADAPTOR



High quality supply for DVR cameras with over current protection, over voltage protection, overload protection and short-circuit protection

Description	Input Voltage	Output Voltage	Current	Packing/Box (pcs)	Product category	Catalogue number
Power adaptor	100-240V AC	12V DC	2A	1	D	195065



DVR AND CAMERA ACCESSORIES- BNC CABLE



BNC video and power security camera cable. Suitable just for camera with DC power and supply DC power for security cameras
Plug and play connectors on both ends
It is used for CCTV cameras, DVRs, audio video systems. Compatible with all CCTV surveillance DVR camera system

Description	Length (m)	Packing/Box (pcs)	Product category	Catalogue number
BNC cable	18.29	1	D	195064





IP66



4 CHANNEL WI-FI NETWORK VIDEO RECORDERS + 4 CAMERA, SET

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

NVR TECHNICAL DATA::

- Compression format: H.265+
- Operation system: Linux- embedded
- Video-input: 4*1080P
- Audio compression: G.711A
- Display resolution: Max 1080P
- Record resolution: Analog : 1080P
- Access bandwidth: 24Mbps
- Forwarding bandwidth: 24Mbps
- Maximum decode performance: 4x1080P
- Recording mode: Manual>Alarm>Dynamic Detection>Timing
- Network interface: 1*RJ45 10M/100M Adaptive Ethernet port+4ch WIFI
- HDD interface: 1SATA, up to 8TB for each disk- not included
- Record storage: live display, record, playback, backup and network
- USB: 2xUSB
- Mobile surveillance: Support Mobile Phones based on iPhone and Android operation system

CAMERA TECHNICAL DATA:

- IR Distance: 20-30m
- Sensor: progressive scan
- Low illumination: Color: 0.1 Lux; B/W: 0.01 Lux
- Effective pixel: HD 1080P
- Video compression: H.265+
- Lens: HD 3.6mm
- Day & Night: IR cut filter with auto switch
- Power supply: DC12V 1A
- Consumption: max 6W
- IP66

Model	Channel	Camera Included	Packing/Box (pcs)	Product category	Catalogue number
EL-4004N	4	4	1	D	195069



IP20



WI-FI CEILING SMART CAMERA

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Control is done from anywhere with IOS or Android mobil application
- Different view settings
- Support TF recording & Cloud storage
- Two-way voice communication
- Motion detection voice alarm & save alarm video
- Detailed alarm sector setting
- Sending images
- Night vision

TECHNICAL DATA:

- Input voltage: 100-240VAC
- Output voltage: 5V
- Cover range: 50m
- View angle: 360°
- Effective pixel: HD 1080P

Download V380 pro Application from Android market or Apple store.

• Full info for the products, instructions, can be found at www.elmarkholding.eu

Type	Pixels	Cover range	Packing/Box (pcs)	Product category	Catalogue number
ceiling camera 200	1080	50m ²	1	D	195052





IP20



WI-FI SMART CAMERA

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

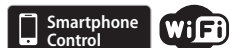
FUNCTION:

- Control is done from anywhere with IOS or Android mobil application
- Support TF recording & Cloud storage
- Two-way voice communication
- Motion detection alarm
- Detailed alarm sector setting
- Sending images. Night vision

TECHNICAL DATA:

- Input voltage: 100-240VAC
- Output voltage: 5V, 1A
- Speaker: 8Ω 1W
- Field of view: H.86° (355°)/V.64°(90°)
- Resolution: 1280x720(1.0MP)
- Wireless Frequency: 2.4GHz~2.4835 GHz

Type	Resolution	Packing/Box (pcs)	Product category	Catalogue number
EL-2019Y	1280x720(1.0MP)	1	D	195067



IP20



WI-FI SMART CAMERA

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Control is done from anywhere with IOS or Android mobil application
- Support TF recording & Cloud storage
- Two-way voice communication
- Motion detection alarm
- High quality videos and Night vision
- Sending images

TECHNICAL DATA:

- Input voltage: 100-240VAC
- Output voltage: 5V, 2A
- Speaker: 8Ω 1W
- Field of view: H.86° (355°)/V.64°(90°)
- Resolution: 1920x1080(2.0MP)
- Wireless Frequency: 2.4GHz~2.4835 GHz

Type	Resolution	Packing/Box (pcs)	Product category	Catalogue number
EL-2017G	1920x1080(2.0MP)	1	D	195068



IP66



WI-FI OUTDOOR SMART CAMERA IP66

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Control is done from anywhere with IOS or Android mobile application
- Support TF recording & Cloud storage
- Two-way voice communication
- Motion detection alarm
- High quality videos and Night vision
- Sending images

TECHNICAL DATA:

- Input voltage: 100-240VAC
- Output voltage: 5V, 1A
- Speaker: Built-in 18 euro 1W speaker
- Field of view: H.86° (355°)/V.64°(90°)
- Resolution: 1920x1080 (2MP)
- Wireless Frequency: 2.4GHz~2.4835 GHz

Model	Resolution	Packing/Box (pcs)	Product category	Catalogue number
EL-2019Q	1920x1080 (2MP)	1	D	195070





IP20



WIFI IP CAMERA WITH ALARM SYSTEM - KIT

3+0
standard
+extended
3 YEAR TOTAL
WARRANTY

FUNCTION:

- Magnetic Sensor: Under arm mode, when the door or window installed with magnetic sensor is opened, the magnetic sensor will send alarm signal to the main unit, the main unit will take video and send message to the smartphone.
- IR Sensor: When someone is detected by the infrared sensor, it will send alarm signal to the main unit. Under arm mode, the main unit will take video and send message to the smartphone.
- SOS Panic Button: When someone press the SOS panic button, it will send SOS signal to the main unit. Under arm mode, the main unit will send alarm signal and video to the users smartphone. Suitable for the care of children, the elderly and disabled people.
- Main Unit: IP camera with built-in Wi-Fi module. Receive wireless alarm signal from other security sensors. Under arm mode, after received signal, the main unit will take video and send message to the smartphone.
- Arm and disarm on smartphone
- View IP camera protected area from anywhere anytime.
- In arm mode IP camera will take video and send message when intruder enters the front door and

trigger the IR sensor, or break open the door/window contact, or panic button was pressed

- Night Vision: Supported by IP Camera
- Intercom: Two-way voice communication

TECHNICAL DATA:

- Working Distance: 100m (open area)
- IP Sensor Angle: Adjustable from 90° to 110°
- IP Camera Lens: HD 1080P

Model	Description	Product category	Catalogue number
EL-WFAK1	WIFI IP camera with sensors and panic button- KIT	D	195091





IP20



WIFI INFRARED ALARM SENSOR

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY
FUNCTION:

IR Sensor: When someone is detected by the infrared sensor, it will send alarm signal to the smartphone via APP.

TECHNICAL DATA:

- Working Distance: 30m (open area)
- IP Sensor Angle: 110°max 7m

Model	Description	Product category	Catalogue number
EL-AK3	WIFI IP Infrared alarm sensor	D	195090



IP20



RECHARGEABLE WIFI SMART VIDEO DOOR BELL WITH DOOR CHIME

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY
FUNCTION:

- Intercom: Two-way voice communication and local intercom with 3 mobile users
- Monitoring: See and speak to visitors via the APP from anywhere
- Recording: TF card for storing the video recorder. Photo taking

OUTDOOR UNITS TECHNICAL DATA:

- Camera angle: 136°
- Battery: Li- 4000mA
- Night Vision: Supported
- Distance: 1-3m for night vision

Model	Description	Product category	Catalogue number
EL-RWF1DP1DC	Rechargeable WIFI video doorbell switch with door chime	D	195074





IP20

7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS



FUNCTION:

- Monitoring: See and speak to visitors via the APP from anywhere
- Unlock door: when someone presses the button on the outdoor unit, the smartphone and the indoor unit will ring together. The local remote video intercom will be pushed to your smartphone APP, you can also unlock the door strike remotely by APP, or unlock by the door monitor unit. The door strike needs extra power supply.
- Recording: User can take photos or record video via APP
- Intercom: Two-way voice communication

INDOOR MONITORS TECHNICAL DATA:

- Connecting wire: 4- core
- Ring tone: 16 melody
- Working Voltage: 12VDC
- Resolution: 800x400
- Working Current: ≤ 1100mA
- Talking time: 120s±10%
- Monitoring time: 40s±10%

OUTDOOR UNITS TECHNICAL DATA:

- Working Voltage: 12VDC
- Working Current: ≤ 500mA
- IP Rating: IP44
- Body material: Metal: anti-oxidation and anti-vandal outdoor unit
- Night Vision: Supported

7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS, SINGLE WAY- ONE BUTTON ONE MONITOR



Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-WF1DP	Single way smart intercom system	1	12VDC	7 inch	D	195071



7 INCH ADDITIONAL MONITOR FOR SINGLE WAY DOORBELL SYSTEM

Additional monitor is suitable only for single way intercom system. When a guest or visitor presses the doorbell button on the camera unit, the homeowner can use a few monitors to see who is requesting entry, speak with the caller, take a photo and unlock the door.



Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-1BM	Additional monitor for EL-WF1DP		12VDC	7 inch	D	195077



7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS, DOUBLE WAY- ONE UNIT WITH TWO BUTTON AND TWO MONITORS



Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-WF2DP	Double way smart intercom system	2	12VDC	7 inch	D	195072





7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS, SINGLE WAY- ONE BUTTON AND TWO MONITORS

Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-WF1DP+1	Single way intercom with 2 monitors	2	12VDC	7 inch	D	195080



7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS, SINGLE WAY- ONE BUTTON AND THREE MONITORS

Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-WF1DP+2	Single way intercom with 3 monitors	3	12VDC	7 inch	D	195076



7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS, SINGLE WAY- ONE BUTTON AND FOUR MONITORS

Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-WF1DP+3	Single way intercom with 4 monitors	4	12VDC	7 inch	D	195078



7 INCH WIFI SMART VIDEO INTERCOM DOORBELL SYSTEMS, SINGLE WAY- ONE BUTTON AND FIVE MONITORS

Model	Description	Monitors QTY	Voltage	Screen	Product category	Catalogue number
EL-WF1DP+4	Single way intercom with 5 monitors	5	12VDC	7 inch	D	195079



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



IP20



WIFI SMART VIDEO DOOR BELL WITH TWO DOOR CHIMES

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Intercom: Two-way voice communication
- Monitoring: See and speak to visitors via the APP from anywhere
- Security: Built-in motion sensor. Once detected the human body, it can send an photo to the owner's e mail box, and send an alarm signal to the smartphone!

OUTDOOR UNITS TECHNICAL DATA:

- Camera: Reinforced CMOS
- Working Voltage: 12VDC
- Working Current: ≤ 500mA
- IP Rating: IP55
- Body material: Metal: anti-oxidation and anti-vandal outdoor unit
- Night Vision: Supported

Model	Description	Voltage	Product category	Catalogue number
EL-WF2DP2DC	WIFI video doorbell switch with 2 extra door chimes	12VDC D		195073



DOORPHONE KIT

3+0
standard
+extended **3** YEAR TOTAL
WARRANTY

FUNCTION:

- Intercom: Two-way voice communication
- Unlock door strike

OUTDOOR UNITS TECHNICAL DATA:

- Working Voltage: 12VDC
- Working Current: ≤ 500mA
- IP Rating: IP44
- Body Material: Metal: anti-oxidation and anti-vandal outdoor unit
- Night Vision: Supported
- Two-wire connection

Model	Description	Product category	Catalogue number
EL-1DP1IU	Doorphone kit	D	195075





5020



5016



5019



WIRELESS DOORBELLS WITH LED FLASH LIGHT

Catalogue number	Product category	QTY Transmitter/Receiver	Voltage (V)	Sound level db(A)	Volume levels	Music	Distance (m)	Packing/Box (pcs)
5020	D	One/One	220	65-85	Low/Middle/High	36 melodies	80	1/60
5016	D	One/One	220	65-85	Low/Middle/High	36 melodies	80	1/60
5019	D	One/One	220	65-85	Low/Middle/High	36 melodies	80	1/60

Transmitter battery: 12V A23

The item is without a coded frequency! Within a montage at a distance less than 80 meters and of two or more analogue doorbells, their work can be influenced by or disturbances to happen.

*In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.*



5015



5018



WIRELESS DOORBELLS WITH LED FLASH LIGHT

Catalogue number	Product category	QTY Transmitter/Receiver	Voltage (V)	Sound level db(A)	Volume levels	Music	Distance (m)	Packing/Box (pcs)
5015	D	One/Two	220	65-85	Low/Middle/High	36 melodies	80	1/60
5018	D	One/Two	220	65-85	Low/Middle/High	36 melodies	80	1/60

Transmitter battery: 12V A23

The item is without a coded frequency! Within a montage at a distance less than 80 meters and of two or more analogue doorbells, their work can be influenced by or disturbances to happen.



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



5023/1
5024



5023/2



WIRELESS DOORBELLS WITH LED FLASH LIGHT

Catalogue number	Product category	QTY Transmitter/ Reciever	Transmitter Voltage (V)	Receiver Voltage (V)	Sound level db(A)	Volume levels	Music	Distance (m)	Packing/Box (pcs)
5023/1	D	One/One	12V 23A Battery	DC 3x1.5V AAA Battery	70-85	Low/Middle/High	36 melodies	80	1/60
5023/2	D	One/Two	12V 23A Battery	DC 3x1.5V AAA Battery	70-85	Low/Middle/High	36 melodies	80	1/60
5024	D	One/One	12V 23A Battery	220V AC	70-85	Low/Middle/High	36 melodies	80	1/60

The item is without a coded frequency! Within a montage at a distance less than 80 meters and of two or more analogue doorbells, their work can be influenced by or disturbances to happen.



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



5025BL



5025WH



DIGITAL WIRELESS DOORBELLS WITH LED FLASH LIGHT

Catalogue number	Product category	QTY Transmitter/ Receiver	Transmitter Voltage (V)	Receiver Voltage (V)	Sound level db(A)	Volume levels	Music	Distance (m)	Packing/Box (pcs)
5025BL	D	One/One	12V 23A Battery	DC 2x1.5V AA Battery	70-85	Low/Middle/High	32 melodies	120	1/60
5025WH	D	One/One	12V 23A Battery	DC 2x1.5V AA Battery	70-85	Low/Middle/High	32 melodies	120	1/60



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



5021



5022



INFRARED INDUCTION DOORBELLS

Catalogue number	Product category	Description	Voltage (V)	Sound level db(A)	Detection angle	Sensor detection distance (m)	Music	Packing/Box (pcs)
5021	D	Doorbell with sensor	4,5V DC	85	100°	up to 7	36 melodies	1/60
5022	D	Doorbell & sensor	4,5V DC	85	100°	up to 7	36 melodies	1/60

5021 - This is an electric appliance with inserted motion sensor. It is used for advisement for guests, visitors or customers. When there is a motion, it starts / there is a sound which advises that there is a visitor/customer/ in the premises. Working area - up to 7 meters

5022 - This is a complex product that combines two appliances. It is used for advisor for guests, visitors or customers. The sensor is installed to the place that we would like to know there is a motion/ visitor; this usually is the shop entrance, offices, warehouses and etc. The bell can be installed at a distance up to 130 m from the sensor which we will receive the signal for motion /visitor.

Working frequency: 315MHz/433.92 MHz



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



5012
5220



5001



BELL / BELL TRANSFORMER

Catalogue number	Product category	Type	In (V)	Un (V)	Consumption (VA)	Sound level db(A)	Packing/Box (pcs)
5012	D	Bell	230	8-12	3.6	70	1 / 12 / 240
5220	D	Bell	230	230	5	70	1 / 12 / 240
5001	D	Bell transformer	230	8/12/24	8	-	1 / 80

Mounting: on DIN-rail |



In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



SWITCHES AND SOCKETS



White/White



Champagne metallic/White



Orange/White



Yellow/White



Red/White



Green/White



Blue/White



Orange metallic/White



Bordo metallic/
White



Grey/White



2 gangs Champagne metallic/White



3 gangs Red/White



4 gangs Bordo metallic/White



5 gangs Grey/White



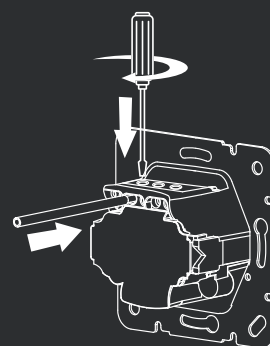
IP20

FUNCTIONAL PART PLUS PANEL "CITY" SERIES

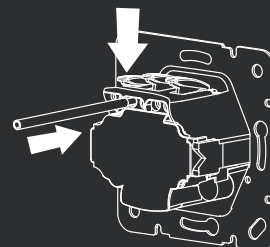
Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/ Box (pcs)
190011	C	1 button 1 way switch	White	10	10/100
190011L	C	1 button 1 way switch with light	White	10	10/100
190021	C	1 button 2 way switch	White	10	10/100
190021L	C	1 button 2 way switch with light	White	10	10/100
190031	C	1 button cross switch	White	10	10/100
190041	C	2 buttons 1 way switch	White	10	10/100
190051	C	2 buttons 2 way switch	White	10	10/100
190064	C	3 buttons 1 way switch	White	10	10/100
190191	C	Dimmer switch LED 3-300W	White	-	10/60
190181	C	Door bell switch	White	-	10/100
190183	C	Push light button	White	-	10/100
190211S	C	German screw type socket	White	16	10/100
190211F	C	French screw type socket	White	16	10/100
190211D	C	German screw type socket IP44	White	16	10/100
190371S	C	German screw type socket (double)	White	16	10/60
190060	C	1 Gang cable outlet without cable terminal	White	16	10/100
190062	C	German screw type socket 2xUSB port	White	16	10/60
190043	C	Key card power switch *	White	10	10/60
190045	C	1-2 mode curtain control switch	White	10	10/60
190066	C	Interlock shutter switch	White	10	10/100

*is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



screw type socket



screwless type socket

**IP20****FUNCTIONAL PART PLUS PANEL "CITY" SERIES**

Catalogue number	Product Type category	Type	Colour	Rated current In (A)	Packing/ Box (pcs)
190261	C	Phone socket RJ11	White	-	10/100
190281	C	Computer socket RJ45 CAT5E	White	-	10/100
190034	C	Computer socket RJ45 CAT6	White	-	10/100
190731	C	Phone socket RJ11 + computer socket RJ45	White	-	10/100
190711	C	Computer socket RJ45 - double	White	-	10/100
190251	C	TV socket	White	-	10/100
190033	C	TV+FM+SAT	White	-	10/100
190791	C	1 button double pole switch	White	20	10/100
190721	C	Audio socket- double	White	10	10/100
190751	C	USB socket- double	White	2	10/100
190747	C	HDMI socket	White		10/100
190771	C	Motion sensor 200W	White		10/100
190171	C	Doorbell switch with light name card	White	10	10/100
190741	C	1 Gang blank Plate	White		10/100
190090	C	Silicone cover IP44	White	-	100
190091	C	1 Gang Surface mounting box	White	-	126
190092	C	2 Gang Surface mounting box	White	-	66

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



190012
190022
190032



190012L



190042
190052



190192



190182



190184



190212s



190372s



190212D



190212F



190044



190065



190069

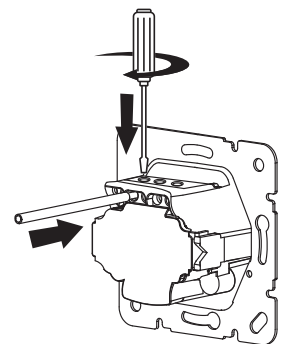


190067

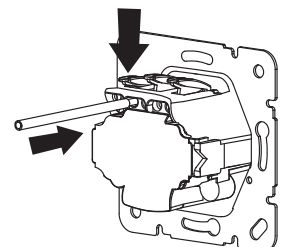
IP20

FUNCTIONAL PART PLUS PANEL "CITY" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
190012	C	1 button 1 way switch	Champagne metallic	10	10/100
190012L	C	1 button 1 way switch with light	Champagne metallic	10	10/100
190022	C	1 button 2 way switch	Champagne metallic	10	10/100
190022L	C	1 button 2 way switch with light	Champagne metallic	10	10/100
190032	C	1 button cross switch	Champagne metallic	10	10/100
190069	C	1 button double pole switch	Champagne metallic	20	10/100
190042	C	2 buttons 1 way switch	Champagne metallic	10	10/100
190052	C	2 buttons 2 way switch	Champagne metallic	10	10/100
190065	C	3 buttons 1 way switch	Champagne metallic	10	10/100
190192	C	Dimmer switch LED 3-300W	Champagne metallic	-	10/60
190182	C	Door bell switch	Champagne metallic	-	10/100
190184	C	Push light button	Champagne metallic	-	10/100
190212S	C	German screw type socket	Champagne metallic	16	10/100
190212F	C	French screw type socket	Champagne metallic	16	10/100
190372S	C	German screw type socket (double)	Champagne metallic	16	10/60
190212D	C	German screw type socket IP44	Champagne metallic	16	10/100
190044	C	Key card power switch *	Champagne metallic	10	10/60
190046	C	Curtain control switch	Champagne metallic	10	10/60
190067	C	Interlock shutter switch	Champagne metallic	10	10/100



screw type socket



screwless type socket

* is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



190262

190282
190035190732
190712

190252



190034F



190722



190742



190752



190772



190782



190792



190748



190172



IP20

FUNCTIONAL PART PLUS PANEL "CITY" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
190262	C	Phone socket RJ11	Champagne metallic	-	10/100
190282	C	Computer socket RJ45 CAT5E	Champagne metallic	-	10/100
190035	C	Computer socket RJ45 CAT6	Champagne metallic	-	10/100
190732	C	Phone socket RJ11 + computer socket RJ45	Champagne metallic	-	10/100
190712	C	Computer socket RJ45 - double	Champagne metallic	-	10/100
190252	C	TV socket	Champagne metallic	-	10/100
190034F	C	TV+FM+SAT	Champagne metallic	-	10/100
190722	C	1 button 1 way switch	Champagne metallic	20	10/100
190742	C	Audio socket- double	Champagne metallic	10	10/100
190752	C	USB socket- double	Champagne metallic	2	10/100
190772	C	HDMI socket	Champagne metallic		10/100
190782	C	Motion sensor 200W	Champagne metallic		10/100
190792	F	Thermostat*	Champagne metallic	16	10/100
190748	C	Doorbell switch with light name card	Champagne metallic	10	10/100
190172	C	1 Gang blank Plate	Champagne metallic		10/100

*Until Supply Last

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



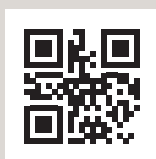
1 gang



2 gangs



3 gangs



1 GANG PANEL "CITY" SERIES

Catalogue number	Product category	Type	Colour
190441	C	1 gang	White
190442	C	1 gang	Champagne metallic
190443	C	1 gang	Orange
190444	C	1 gang	Yellow
190445	C	1 gang	Green
190446	C	1 gang	Red
190447	C	1 gang	Blue
190448	C	1 gang	Orange metallic
190449	C	1 gang	Bordo metallic
190450	C	1 gang	Grey

2 gangs PANELS "CITY" SERIES

Catalogue number	Product category	Type	Colour
190551	C	2 gangs	White
190552	C	2 gangs	Champagne metallic
190553	C	2 gangs	Orange
190554	C	2 gangs	Yellow
190555	C	2 gangs	Green
190556	C	2 gangs	Red
190557	C	2 gangs	Blue
190558	C	2 gangs	Orange metallic
190559	C	2 gangs	Bordo metallic
190560	C	2 gangs	Grey

3 gangs PANELS "CITY" SERIES

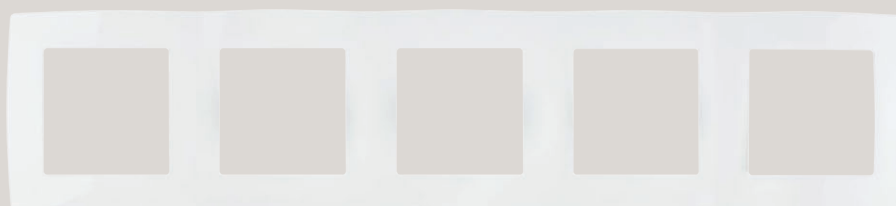
Catalogue number	Product category	Type	Colour
190661	C	3 gangs	White
190662	C	3 gangs	Champagne metallic
190663	C	3 gangs	Orange
190664	C	3 gangs	Yellow
190665	C	3 gangs	Green
190666	C	3 gangs	Red
190667	C	3 gangs	Blue
190668	C	3 gangs	Orange metallic
190669	C	3 gangs	Bordo metallic
190670	C	3 gangs	Grey

Packing/Box (pcs): 1 gang 1/200 | 2 gangs 1/100 | 3 gangs 1/150

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



4 gangs



5 gangs



4 gangs PANELS "CITY" SERIES

Catalogue number	Product category	Type	Colour
190361	C	4 gangs	White
190362	C	4 gangs	Champagne metallic
190363	C	4 gangs	Orange
190364	C	4 gangs	Yellow
190365	C	4 gangs	Green
190366	C	4 gangs	Red
190367	C	4 gangs	Blue
190368	C	4 gangs	Orange metallic
190369	C	4 gangs	Bordo metallic
190370	C	4 gangs	Grey

5 gangs PANELS "CITY" SERIES

Catalogue number	Product category	Type	Colour
190601	C	5 gangs	White
190602	C	5 gangs	Champagne metallic
190603	C	5 gangs	Orange
190604	C	5 gangs	Yellow
190605	C	5 gangs	Green
190606	C	5 gangs	Red
190607	C	5 gangs	Blue
190608	C	5 gangs	Orange metallic
190609	C	5 gangs	Bordo metallic
190610	C	5 gangs	Grey

Packing/Box (pcs): 4 gangs 1/100 | 5 gangs 1/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



LECCE





White/White



Blue/White



Silver grey/White



Golden/White



Graphite mat/White



Graphite/White



Champagne/White



Green/White



Onix/White



Cherry-tree/White



sound dimmer



boiler switch with neon*



LED dimmer 200VA, 3 mod



1 button 1 way switch with light



1 button 1 way / 2 way / cross switch / push light



1 button 2 pole switch 16A



curtain Switch



dimmer 250W



door bell switch



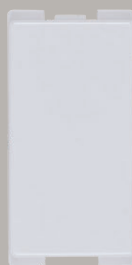
IP20

FUNCTIONAL PART "LECCE" SERIES

Catalogue number	Product category	Type	Colour	Size	Rated current In (A)	Packing/Box (pcs)
26016	C	sound dimmer	White	2 mod		1/120
26053	C	LED dimmer 200VA	White	3 mod	-	
26024	C	boiler switch with neon*	White	3 mod	45	1/60
26001	C	1 button 1 way switch	White	1 mod	16	1/300
26003	C	1 button 2 way switch	White	1 mod	16	1/300
26026	C	1 button 2 pole switch	White	1 mod	16	
26004	C	1 button cross switch	White	1 mod	10	1/240
26002	C	1 button 1 way switch with light	White	1 mod	16	1/300
26006	C	curtain Switch	White	1 mod	6	1/240
26055	C	dimmer 250W	White	1 mod	-	1/120
26005	C	door bell switch	White	1 mod	10	1/300
26027	C	push light button	White	1 mod	10	

* the product comes without decorative tripple panel

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



blank cover



computer socket



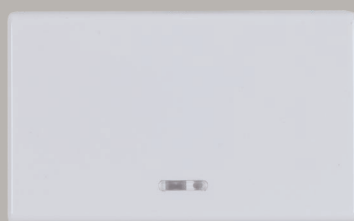
phone socket



TV socket



Satellite socket



button without functional part



key power switch

IP20

FUNCTIONAL PART "LECCE" SERIES



Catalogue number	Product category	Type	Colour	Size	Rated current In (A)	Packing/Box (pcs)
26017	C	blank cover	White	1 mod		1/600
26013	C	computer socket RJ45 CAT5E	White	1 mod		1/300
26013C	C	computer socket RJ45 CAT6	White	1 mod		1/300
26012	C	phone socket	White	1 mod		1/300
26010	C	TV socket	White	1 mod	-	1/300
26011	C	Satellite socket	White	1 mod	-	1/300
26023	C	button without functional part	White	3 mod		1/360
26025	C	key power switch	white	3 mod	30A	

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



german type socket



double pin socket

italian standard
multi socket

door bell



2 port USB socket



universal socket



audio socket



italian type socket



HDMI socket



IP20

FUNCTIONAL PART "LECCE" SERIES

Catalogue number	Product category	Type	Colour	Size	Rated current In (A)	Packing/Box (pcs)
26008	C	german type socket	White	2 mod	16	1/140
26007SA	C	double pin socket	White	1 mod	16	1/300
26007	C	italian standard multi socket	White	1 mod	16	1/300
26015	C	door bell	White	2 mod		1/100
26014	C	2 port USB socket, Input: 90-240V Output: 5V 2A	White	1 mod		1/120
26009	C	universal socket	White	2 mod	13	1/120
26021	C	audio socket	White	1 mod		1/100
26020	C	italian type socket	White	2 mod	16	1/300
26022	C	HDMI socket	White	1 mod		1/300

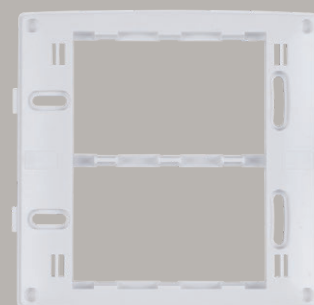
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box for suspended mounting
IP65 3 & 4 mod



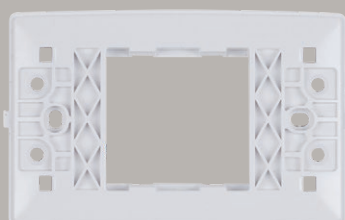
mounting frames
6 mod



mounting frames
3x2 mod



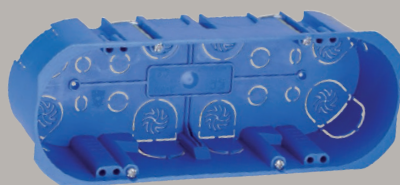
mounting frames
1 mod / 3 mod



mounting frames
2 mod



mounting frames
4 mod



Console box for plasterboard
26636



Console box for brick and concrete
24203
71304
68206



Console box for plasterboard
24205
24206



INSTALLATION FRAMES "LECCE"

Catalogue number	Product category	Type	Size	Packing/Box (pcs)
26019	C	mounting frames	1 mod	1/110
26019	C	mounting frames	3 mod	1/110
26018	C	mounting frames	2 mod	1/110
26054	C	mounting frames	4 mod	1/150
26156	C	mounting frames	6 mod	1/240
26056	C	mounting frames	2x3 mod	1/240
2603	C	box for suspended mounting IP65	3 mod	
2604	C	box for suspended mounting IP65	4 mod	
24203	C	Console box for brick and concrete	triple	1/300
71304	C	Console box for brick and concrete	quadruple	1/200
68206	C	Console box for brick and concrete	sixfold	1/200
24205	C	Console box for plasterboard	triple	1/300
24206	C	Console box for plasterboard	quadruple	1/200
26636	C	Console for plasterboard	sixfold	1/160

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



1 gang



2 gangs



3 gangs



1 GANG PANEL "LECCE" SERIES

Catalogue number	Product category	Type	Colour
26100	C	1 gang	White
26101	C	1 gang	Blue
26102	C	1 gang	Silver grey
26103	C	1 gang	Golden
26104	C	1 gang	Graphite mat
26105	C	1 gang	Graphite
26106	C	1 gang	Champagne
26107	C	1 gang	Green
26108	C	1 gang	Onix
26109	C	1 gang	Cherry-tree

2 gangs PANELS "LECCE" SERIES

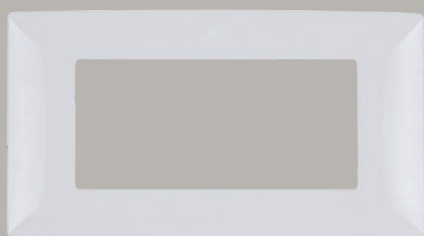
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26200	C	2 gangs	White
26201	C	2 gangs	Blue
26202	C	2 gangs	Silver grey
26203	C	2 gangs	Golden
26204	C	2 gangs	Graphite mat
26205	C	2 gangs	Graphite
26206	C	2 gangs	Champagne
26207	C	2 gangs	Green
26208	C	2 gangs	Onix
26209	C	2 gangs	Cherry-tree

3 gangs PANELS "LECCE" SERIES

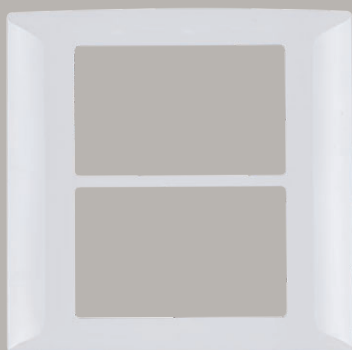
Catalogue number	Product category	Type	Colour
26300	C	3 gangs	White
26301	C	3 gangs	Blue
26302	C	3 gangs	Silver grey
26303	C	3 gangs	Golden
26304	C	3 gangs	Graphite mat
26305	C	3 gangs	Graphite
26306	C	3 gangs	Champagne
26307	C	3 gangs	Green
26308	C	3 gangs	Onix
26309	C	3 gangs	Cherry-tree

Packing/Box (pcs): 1 gang 1/180 | 2 gangs 1/180 | 3 gangs 1/180

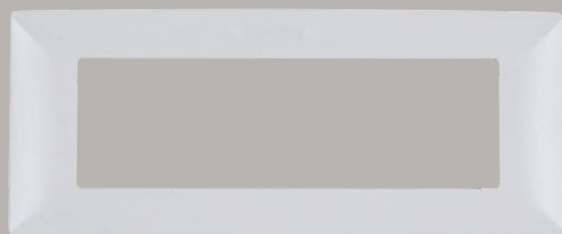
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4 gangs



3x2 gangs

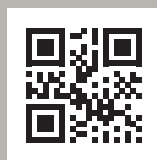


6 gangs



4 gangs PANELS "LECCE" SERIES

Catalogue number	Product category	Type	Colour
26400	C	4 gangs	White
26401	C	4 gangs	Blue
26402	C	4 gangs	Silver grey
26403	C	4 gangs	Golden
26404	C	4 gangs	Graphite mat
26405	C	4 gangs	Graphite
26406	C	4 gangs	Champagne
26407	C	4 gangs	Green
26408	C	4 gangs	Onix
26409	C	4 gangs	Cherry-tree



6 gangs PANELS "LECCE" SERIES

Catalogue number	Product category	Type	Colour
266001	C	6 gangs	White
26601	C	6 gangs	Blue
266021	C	6 gangs	Silver grey
26603	C	6 gangs	Golden
26604	C	6 gangs	Graphite mat
266051	C	6 gangs	Graphite
266061	C	6 gangs	Champagne
26607	C	6 gangs	Green
26608	C	6 gangs	Onix
26609	C	6 gangs	Cherry-tree



3x2 gangs PANELS "LECCE" SERIES

Catalogue number	Product category	Type	Colour
26600	C	6 gangs	White
26606	C	6 gangs	Champagne
26602	C	6 gangs	Silver grey
26605	C	6 gangs	Graphite

Packing/Box (pcs): 4 gangs 1/200 | 6 gangs 1/160 | 3x2 gangs 1/80

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



RHYME





White metallic



Champagne metallic



Grey metallic



Graphite metallic



Coffee metallic



11011
11021
11341



11041
11051



11721



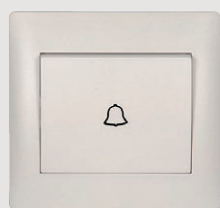
11171A



11411



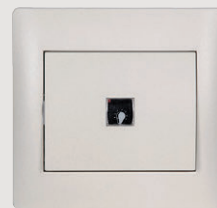
11191



11181



11181B



11181C



IP20

FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11011	C	1 button 1 way switch	White metallic	10	10/100
11021	C	1 button 2 way switch	White metallic	10	10/100
11341	C	1 button cross switch	White metallic	10	10/100
11041	C	2 buttons 1 way switch	White metallic	10	10/100
11051	C	2 buttons 2 way switch	White metallic	10	10/100
11721	C	3 buttons 1 way switch	White metallic	10	10/100
11171A	C	curtain control switch	White metallic	-	10/100
11411	C	sensor switch	White metallic	-	10/100
11191	C	dimmer switch	White metallic	-	10/80
11181	C	door bell switch	White metallic	-	10/100
11181B	C	door bell switch with name card	White metallic	-	10/100
11181C	C	Push light switch	White metallic	10	10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11211



11371



11211C



11261

11741
1173111281
112816E

11711



11251



11681



11331

IP20



FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11211	C	German type socket	White metallic	16	10/100
11211C	C	German type socket with cover	White metallic	16	10/100
11371	C	German type socket (double)	White metallic	16	10/50
11261	C	Phone socket RJ11	White metallic		10/100
11741	C	Phone socket RJ11 - double	White metallic		10/100
11731	C	Phone socket RJ11 + computer socket RJ45	White metallic		10/100
11281	C	Computer socket (cat5e) RJ45	White metallic		10/100
112816E	C	Computer socket RJ45 (CAT6e)	White metallic		10/100
11711	C	Computer socket RJ45 - double	White metallic		10/100
11251	C	TV socket	White metallic		10/100
11681	C	TV socket+FM socket + SAT socket *	White metallic		10/100
11331	C	Key card power switch *	White metallic		10/100

*is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11012
11022
11342



11042
11052



11722



11172A



11412



11192



11182



11182B



11182C



IP20

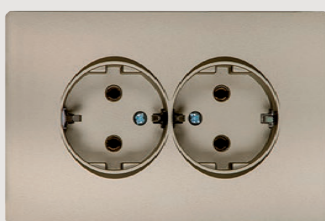
FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11012	C	1 button 1 way switch	Champagne metallic	10	10/100
11022	C	1 button 2 way switch	Champagne metallic	10	10/100
11342	C	1 button cross switch	Champagne metallic	10	10/100
11042	C	2 buttons 1 way switch	Champagne metallic	10	10/100
11052	C	2 buttons 2 way switch	Champagne metallic	10	10/100
11722	C	3 buttons 1 way switch	Champagne metallic	10	10/100
11172A	C	curtain control switch	Champagne metallic	-	10/100
11412	C	sensor switch	Champagne metallic	-	10/100
11192	C	dimmer switch	Champagne metallic	-	10/100
11182	C	door bell switch	Champagne metallic	-	10/100
11182B	C	door bell switch with name card	Champagne metallic	-	10/100
11182C	C	Push light switch	Champagne metallic	10	10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11212



11372



11212C



11262

11742
1173211282
112826E

11712



11252



11682



11332

IP20



FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11212	C	German type socket	Champagne metallic	16	10/100
11212C	C	German type socket with cover	Champagne metallic	16	10/100
11372	C	German type socket (double)	Champagne metallic	16	10/50
11262	C	Phone socket RJ11	Champagne metallic		10/100
11742	C	Phone socket RJ11 - double	Champagne metallic		10/100
11732	C	Phone socket RJ11 + computer socket RJ45	Champagne metallic		10/100
11282	C	Computer socket (cat5e) RJ45	Champagne metallic		10/100
112826E	C	Computer socket RJ45 (CAT6e)	Champagne metallic		10/100
11712	C	Computer socket RJ45 - double	Champagne metallic		10/100
11252	C	TV socket	Champagne metallic		10/100
11682	C	TV socket+FM socket + SAT socket *	Champagne metallic		10/100
11332	C	Key card power switch *	Champagne metallic		10/100

* is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11014
11024
11344



11044
11054



11724



11174A



11414



11194



11184



11184B



11184C



IP20

FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11014	C	1 button 1 way switch	Grey metallic	10	10/100
11024	C	1 button 2 way switch	Grey metallic	10	10/100
11344	C	1 button cross switch	Grey metallic	10	10/100
11044	C	2 buttons 1 way switch	Grey metallic	10	10/100
11054	C	2 buttons 2 way switch	Grey metallic	10	10/100
11724	C	3 buttons 1 way switch	Grey metallic	10	10/100
11174A	C	curtain control switch	Grey metallic	-	10/100
11414	C	sensor switch	Grey metallic	-	10/100
11194	C	dimmer switch	Grey metallic	-	10/100
11184	C	door bell switch	Grey metallic	-	10/100
11184B	C	door bell switch with name card	Grey metallic	-	10/100
11184C	C	Push light switch	Grey metallic	10	10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11214



11374



11214C



11264

11744
1173411284
112846E

11714



11254



11684



11334

IP20



FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11214	C	German type socket	Grey metallic	16	10/100
11214C	C	German type socket with cover	Grey metallic	16	10/100
11374	C	German type socket (double)	Grey metallic	16	10/50
11264	C	Phone socket RJ11	Grey metallic		10/100
11744	C	Phone socket RJ11 - double	Grey metallic		10/100
11734	C	Phone socket RJ11 + computer socket RJ45	Grey metallic		10/100
11284	C	Computer socket (cat5e) RJ45	Grey metallic		10/100
112846E	C	Computer socket RJ45 (CAT6e)	Grey metallic		10/100
11714	C	Computer socket RJ45 - double	Grey metallic		10/100
11254	C	TV socket	Grey metallic		10/100
11684	C	TV socket+FM socket + SAT socket *	Grey metallic		10/100
11334	C	Key card power switch *	Grey metallic		10/100

* is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11015
11025
11345



11045
11055



11725



11175A



11415



11195



11185



11185B



11185C



IP20

FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11015	C	1 button 1 way switch	Graphite metallic	10	10/100
11025	C	1 button 2 way switch	Graphite metallic	10	10/100
11345	C	1 button cross switch	Graphite metallic	10	10/100
11045	C	2 buttons 1 way switch	Graphite metallic	10	10/100
11055	C	2 buttons 2 way switch	Graphite metallic	10	10/100
11725	C	3 buttons 1 way switch	Graphite metallic	10	10/100
11175A	C	curtain control switch	Graphite metallic	-	10/100
11415	C	sensor switch	Graphite metallic	-	10/100
11195	C	dimmer switch	Graphite metallic	-	10/100
11185	C	door bell switch	Graphite metallic	-	10/100
11185B	C	door bell switch with name card	Graphite metallic	-	10/100
11185C	C	Push light switch	Graphite metallic	10	10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11215



11375



11215C



11265

11745
1173511285
112856E

11715



11255



11685



11335

IP20



FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11215	C	German type socket	Graphite metallic	16	10/100
11215C	C	German type socket with cover	Graphite metallic	16	10/100
11375	C	German type socket (double)	Graphite metallic	16	10/50
11265	C	Phone socket RJ11	Graphite metallic		10/100
11745	C	Phone socket RJ11 - double	Graphite metallic		10/100
11735	C	Phone socket RJ11 + computer socket RJ45	Graphite metallic		10/100
11285	C	Computer socket (cat5e) RJ45	Graphite metallic		10/100
112856E	C	Computer socket RJ45 (CAT6e)	Graphite metallic		10/100
11715	C	Computer socket RJ45 - double	Graphite metallic		10/100
11255	C	TV socket	Graphite metallic		10/100
11685	C	TV socket+FM socket + SAT socket *	Graphite metallic		10/100
11335	C	Key card power switch *	Graphite metallic		10/100

* is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11016
11026
11346



11046
11056



11726



11176A



11416



11196



11186



11186B



11186C



IP20

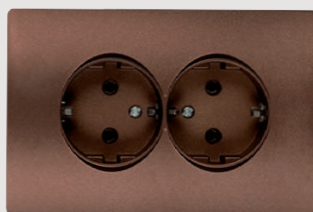
FUNCTIONAL PART "RHYME" SERIES

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11016	C	1 button 1 way switch	Coffee metallic	10	10/100
11026	C	1 button 2 way switch	Coffee metallic	10	10/100
11346	C	1 button cross switch	Coffee metallic	10	10/100
11046	C	2 buttons 1 way switch	Coffee metallic	10	10/100
11056	C	2 buttons 2 way switch	Coffee metallic	10	10/100
11726	C	3 buttons 1 way switch	Coffee metallic	10	10/100
11176A	C	curtain control switch	Coffee metallic	-	10/100
11416	C	sensor switch	Coffee metallic	-	10/100
11196	C	dimmer switch	Coffee metallic	-	10/100
11186	C	door bell switch	Coffee metallic	-	10/100
11186B	C	door bell switch with name card	Coffee metallic	-	10/100
11186C	C	Push light switch	Coffee metallic	10	10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



11216



11376



11216C



11266

11746
1173611286
112866E

11716



11256



11686



11336

**IP20****FUNCTIONAL PART "RHYME" SERIES**

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
11216	C	German type socket	Coffee metallic	16	10/100
11216C	C	German type socket with cover	Coffee metallic	16	10/100
11376	C	German type socket (double)	Coffee metallic	16	10/50
11266	C	Phone socket RJ11	Coffee metallic		10/100
11746	C	Phone socket RJ11 - double	Coffee metallic		10/100
11736	C	Phone socket RJ11 + computer socket RJ45	Coffee metallic		10/100
11286	C	Computer socket (cat5e) RJ45	Coffee metallic		10/100
112866E	C	Computer socket RJ45 (CAT6e)	Coffee metallic		10/100
11716	C	Computer socket RJ45 - double	Coffee metallic		10/100
11256	C	TV socket	Coffee metallic		10/100
11686	C	TV socket+FM socket + SAT socket*	Coffee metallic		10/100
11336	C	Key card power switch *	Coffee metallic		10/100

* is not compatible with another decorative frame or frame designed for more than one functional part

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



2 gangs



3 gangs



4 gangs



2 GANGS PANEL "RHYME" SERIES

Catalogue number	Product category	Type	Colour
11551	C	2 gangs	White metallic
11552	C	2 gangs	Champagne metallic
11554	C	2 gangs	Grey metallic
11555	C	2 gangs	Graphite metallic
11556	C	2 gangs	Coffee metallic

3 GANGS PANELS "RHYME" SERIES

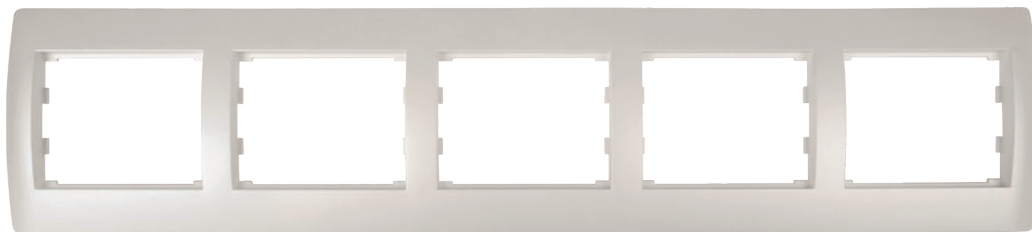
Catalogue number	Product category	Type	Colour
11661	C	3 gangs	White metallic
11662	C	3 gangs	Champagne metallic
11664	C	3 gangs	Grey metallic
11665	C	3 gangs	Graphite metallic
11666	C	3 gangs	Coffee metallic

4 GANGS PANELS "RHYME" SERIES

Catalogue number	Product category	Type	Colour
11361	C	4 gangs	White metallic
11362	C	4 gangs	Champagne metallic
11364	C	4 gangs	Grey metallic
11365	C	4 gangs	Graphite metallic
11366	C	4 gangs	Coffee metallic

Packing/Box (pcs): 2 gangs 20/200 | 3 gangs 20/200 | 4 gangs 10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



5 gangs



6 gangs



Outlet safety cap



Wall protector

**5 GANGS PANEL "RHYME" SERIES**

Catalogue number	Product category	Type	Colour
11601	C	5 gangs	White metallic
11602	C	5 gangs	Champagne metallic
11604	C	5 gangs	Grey metallic
11605	C	5 gangs	Graphite metallic
11606	C	5 gangs	Coffee metallic

6 GANGS PANELS "RHYME" SERIES

Catalogue number	Product category	Type	Colour
11621	C	6 gangs	White metallic
11622	C	6 gangs	Champagne metallic
11624	C	6 gangs	Grey metallic
11625	C	6 gangs	Graphite metallic
11626	C	6 gangs	Coffee metallic

OUTLET SAFETY CAP

Catalogue number	Type	Colour
192215	Outlet safety cap	White
192214	Outlet safety cap	Brown
192121/WH	Wall protector	White
192121/TR	Wall protector	Transperent

Packing/Box (pcs): 2 gangs 20/200 | 3 gangs 20/200 | 4 gangs 10/100

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



M030137



M030164

SWITCHES AND SOCKETS

WATER HEATER SWITCH

IP20



WATER HEATER SWITCH WITH LIGHT LABEO SERIES

Catalogue number	Product category	Type	Voltage (V)	Current (A)	Mounting type	Length (mm)	Height (mm)	Width (mm)	Packing/ Box (pcs)
M030137	G	LABEO FM	220 AC	25	flush	100	100	50	1
M030164	G	LABEO SM	220 AC	25	surface	100	100	50	1

2+0 standard +extended YEAR TOTAL WARRANTY

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 30 days.



26024



24203



24205



IP20

WATER HEATER SWITCH AND MOUNTING CONSOLE BOXES "LECCE" SERIES

Catalogue number	Product category	Type	Colour	Size	Rated current In (A)	Packing/Box (pcs)
26024	C	boiler switch with neon*	White	3 mod	45	1/60
24203	C	Console box for brick and concrete	Black	triple		1/300
24205	C	Console box for plasterboard	Blue	triple	-	1/300

* the product comes without decorative tripple panel

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



191011
191021
191031



191041



191012



191071

IP44



SWITCHES AND SOCKETS

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
191011	C	1 Gang 1 Way Switch	white	10AX	10/100
191021	C	1 Gang 2 Way Switch	white	10AX	10/100
191031	C	1 Gang Intermediate Switch	white	10AX	10/100
191041	C	2 gangs 1 Way Switch	white	10AX	10/100
191012	C	German type socket	white	16A	10/100
191071	C	German type socket- double	white	16A	10/100

5+0 standard +extended 5 YEAR TOTAL WARRANTY

In case of insufficient quantity in stock of any item listed on this page, the delivery time after order confirmation will be 90 days.



191111
191121
191181



191141



191112



191171

IP65



SWITCHES AND SOCKETS

Catalogue number	Product category	Type	Colour	Rated current In (A)	Packing/Box (pcs)
191111	C	1 Gang 1 Way Switch	grey	10AX	10/100
191121	C	1 Gang 2 Way Switch	grey	10AX	10/100
191141	C	2 gangs 1 Way Switch	grey	10AX	10/100
191181	C	1 Gang Push Button Switch	grey	10AX	10/100
191112	C	German type socket	grey	16A	10/100
191171	C	German type socket- double	grey	16A	10/100

5+0
standard
+extended

5

YEAR TOTAL
WARRANTY

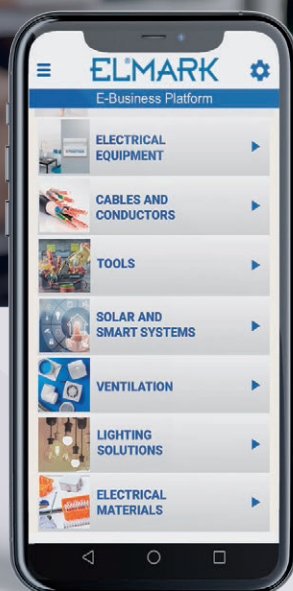
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