

ELMARK[®]

The Brand of Electricity

COMBINED ELECTRONIC RESIDUAL CURRENT DEVICE JEL4 A



DESCRIPTION OF THE OPERATING SYSTEM »

RCBO JEL4A is with enhanced sensibility and fast - operating protection devices applicable in circuits with harmonic or direct pulsating current component presence.

"Phase line + neutral + leakage "protection circuit breaker JEL4A is applied to the single-phase residential circuit of 50Hz or 60Hz, rated voltage 230V, to protect leakage, civil electrical overload and short circuit. The product is provided with many advantages such as small size, high breaking capacity, cutting off zero-line, live line at the same time, and leakage protecting in the case of reverse wiring live line.

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.
- ∴ Switching off consumers at harmonic presence due to luminescent lights.
- ∴ Switching off consumers in DC circuits at fault currents presence.
- ∴ 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 »

- ∴ Mode: Electronic
- ∴ Type: A for AC/DC current
- ∴ Rated operating voltage U_e : 230/240V 50/60 Hz
- ∴ Insulation voltage U_i : 500V
- ∴ Circuit breaker rated current: according to the table
- ∴ Residual current responsiveness: 30; 300mA
- ∴ Break time under $I_{\Delta n}$: $\leq 0.1s$
- ∴ Circuit breaker tripping curve: C
- ∴ Energy limiting class: 3
- ∴ Breaking capacity: 6 000A
- ∴ Rated impulse withstand voltage (1.5/50)
- ∴ U_{imp} : $\geq 4000V$
- ∴ Dielectric test voltage at ind.Freq. for 1min: 2kV
- ∴ Pollution degree: 2
- ∴ Electrical life: 4 000 cycles
- ∴ Mechanical life: 10 000 cycles
- ∴ IP code: IP>20
- ∴ Indication for operating (switched on) position
- ∴ Terminal connection type: Cable
- ∴ Pin-type busbar
- ∴ U-type busbar
- ∴ Terminal size top/bottom for cable: 25mm²
- ∴ Terminal size top/bottom for busbar: 25 mm²
- ∴ Tightening torque: 2.5Nm
- ∴ Reference temperature for setting of thermal element: 30°C
- ∴ Ambient temperature: -10°C + 65°C
- ∴ Installation altitude: up to 2000 m

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 a 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).

PRODUCT DETAILS »

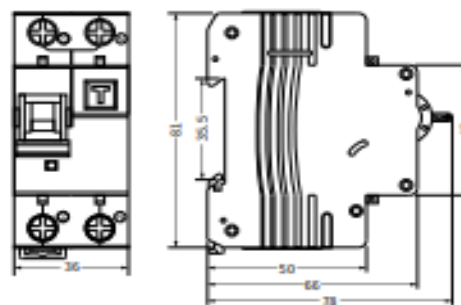
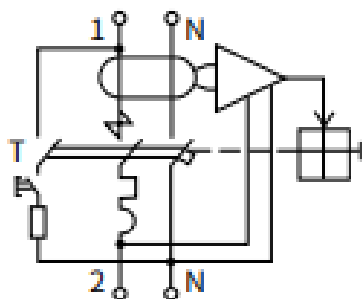
Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Leaking current I _{Δn} (mA)	Catalogue number
JEL 4A	1P+N	6	6	30	40206A
JEL 4A	1P+N	6	10	30	40211A
JEL 4A	1P+N	6	16	30	40215A
JEL 4A	1P+N	6	20	30	40225A
JEL 4A	1P+N	6	25	30	40240A
JEL 4A	1P+N	6	32	30	40265A
JEL 4A	1P+N	6	40	30	40274A

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Leaking current I _{Δn} (mA)	Catalogue number
JEL 4A	1P+N	6	6	300	40205A
JEL 4A	1P+N	6	10	300	40208A
JEL 4A	1P+N	6	16	300	40235A
JEL 4A	1P+N	6	20	300	40230A
JEL 4A	1P+N	6	25	300	40246A
JEL 4A	1P+N	6	32	300	40236A
JEL 4A	1P+N	6	40	300	40273A

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Leaking current I Δ n (mA)	Catalogue number
JEL 4A	3P+N	6	6	30	40470A
JEL 4A	3P+N	6	10	30	40471A
JEL 4A	3P+N	6	16	30	40472A
JEL 4A	3P+N	6	20	30	40473A
JEL 4A	3P+N	6	25	30	40474A
JEL 4A	3P+N	6	32	30	40475A
JEL 4A	3P+N	6	40	30	40476A

Type designation	Number of poles	Breaking capacity (kA)	Rated current (A)	Leaking current I Δ n (mA)	Catalogue number
JEL 4A	3P+N	6	6	300	40477A
JEL 4A	3P+N	6	10	300	40478A
JEL 4A	3P+N	6	16	300	40479A
JEL 4A	3P+N	6	20	300	40480A
JEL 4A	3P+N	6	25	300	40485A
JEL 4A	3P+N	6	32	300	40486A
JEL 4A	3P+N	6	40	300	40487A

[Circuit diagram»](#)



Overall and installation dimensions (mm)

ADDITIONAL INFORMATION »

Catalogue number	Packing / box (pcs)
40206A	1 / 90
40211A	1 / 90
40215A	1 / 90
40225A	1 / 90
40240A	1 / 90
40265A	1 / 90
40274A	1 / 90
40205A	1 / 90
40208A	1 / 90
40235A	1 / 90
40230A	1 / 90
40246A	1 / 90
40236A	1 / 90
40273A	1 / 90
40470A	1 / 30
40471A	1 / 30
40472A	1 / 30
40473A	1 / 30
40474A	1 / 30
40475A	1 / 30
40476A	1 / 30
40477A	1 / 30
40478A	1 / 30
40479A	1 / 30
40480A	1 / 30
40485A	1 / 30
40486A	1 / 30
40487A	1 / 30

