

Usage Manual



RCCB with Overcurrent Protection (RCBO)

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Thank you for choosing EK Series RCCB with Overcurrent Protection.
Please read this manual before installation, operation and maintenance.

STANDARD AND QUALITY CERTIFICATES

IEC/EN61009-1   **RoHS**

Technical Data

Mode	Electronic
Type	AC,A
Rated current I_n	6,8,10,13,16,20,25,32,40A
Poles	1P+N
Rated voltage U_e	230/240V~
Insulation voltage U_i	500V
Rated frequency	50/60Hz
Rated residual operating current ($I_{\Delta n}$)	10,30,100,300mA
Break time under $I_{\Delta n}$	$\leq 0.1s$
Rated breaking capacity	6,000A
Energy limiting class	3
Rated impulse withstand voltage (1.5/50) U_{imp}	4,000V

Dielectric test voltage at ind.Freq. for 1min	2kV
Pollution degree	2
Thermo-magnetic release characteristic	B,C
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Reference temperature for setting of thermal element	30°C
Ambient temperature (with daily average $\leq 35^{\circ}\text{C}$)	$-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$
Storage temperature	$-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Terminal connection type	Cable/Pin-type busbar /U-type busbar
Terminal size top/bottom for cable	25mm ² 18-3AWG
Terminal size top/bottom for busbar	25mm ² 18-3AWG
Tightening torque	2.5Nm 22In-lbs
Mounting	On DIN rail EN60715(35mm) by means of fast clip device

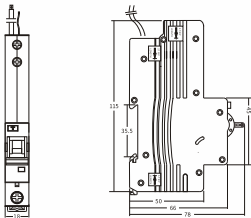
Characteristics

Type	Tripping current I_{Δ}/A		
AC	$0.5I_n < I_{\Delta} < I_n$		
A	Lagging Angle	$I_{\Delta} > 0.01A$	$I_{\Delta} \leq 0.01A$
	0°	$0.35I_n \leq I_{\Delta} \leq 1.4I_n$	$0.35I_n \leq I_{\Delta} \leq 2I_n$
	90°	$0.25I_n \leq I_{\Delta} \leq 1.4I_n$	$0.25I_n \leq I_{\Delta} \leq 2I_n$
	135°	$0.11I_n \leq I_{\Delta} \leq 1.4I_n$	$0.11I_n \leq I_{\Delta} \leq 2I_n$

CHARACTERISTICS CURVES

IEC/EN61009-1				30~35°C		
	Thermal Tripping			Magnetic Tripping		
	No tripping current	Tripping current	Time Limits t	Hold current	Trip current	Time Limits t
B Curve	1.13× IN		≥ 1h	3× IN		≥ 0.1s
		1.45× IN	<1h		5× IN	<0.1s
C Curve	1.13× IN		≥ 1h	5× IN		≥ 0.1s
		1.45× IN	<1h		10× IN	<0.1s

Overalland Installation Dimension(mm)



Circuit Diagram

