

Usage Manual



ETL3-63, ETL3-63H, ETL3-63M, ETL3-63MH, 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



Technical Data

Mode	ETL3-63, ETL3-63H Electronic ETL3-63M, ETL3-63MH Electromagnetic
Type	AC, A
Rated current I _n	6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63A
Poles	1P+N, 3P+N
Rated voltage U _e	1P+N: 230/240V~; 3P+N: 400/415V~
Insulation voltage U _i	500V
Rated frequency	50/60Hz
Rated residual operating current (I _{Δn})	10, 30, 100, 300mA (ETL3-63, ETL3-63H) 30, 100, 300mA (ETL3-63M, ETL3-63MH)
Break time under I _{Δn}	≤ 0.1s
Rated breaking capacity	6,000A, 10,000A
Energy limiting class	3
Rated impulse withstand voltage (1.5/50) U _{imp}	4,000V

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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	8,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Reference temperature for setting of thermal element	30°C
Ambient temperature (with daily average ≤ 35°C)	-25°C ~ +55°C
Storage temperature	-30°C ~ +70°C
Terminal connection type	Cable/Pin-type busbar /U-type busbar
Max. terminal size for cable	16mm ² flexible/ 25mm ² rigid
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Incoming method	Bi-directional

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Characteristics

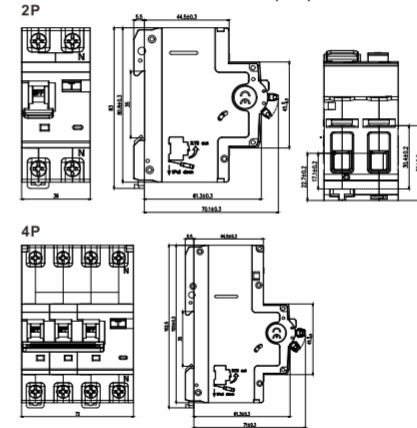
Type	Tripping current I _Δ /A	
AC	0.5I _{Δn} < I _Δ < I _{Δn}	
A	Lagging Angle	I _{Δn} > 0.01A
	0°	0.35I _{Δn} ≤ I _Δ ≤ 1.4I _{Δn}
	90°	0.25I _{Δn} ≤ I _Δ ≤ 1.4I _{Δn}
135°	0.11I _{Δn} ≤ I _Δ ≤ 1.4I _{Δn}	

CHARACTERISTICS CURVES

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

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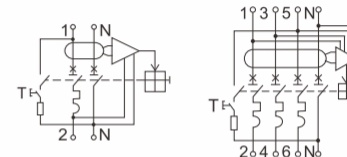
Overall Installation Dimension (mm)



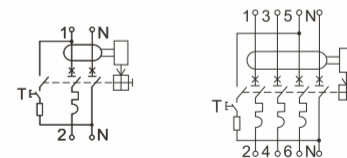
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Circuit Diagram

ETL3-63 ETL3-63H



ETL3-63M ETL3-63MH



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