MARKO
ELEKTROTECH

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Bedienungsanleitung

FI+LS Kombinierter Fehlerstromschutzschalter (RCBO)

EKL5-63

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Thank you for choosing Marko Elektrotech Series RCCB with overcurrent protection.

Please read this manual before installation, operation and maintenance

STANDARD AND QUALITY CERTIFICATES

IEC/EN61009-1 CE

Technical Data

Mode	EKL5-63,EKL15-63
Type	AC,A,S
Rated current In	6,8,10,13,16,20,25,32,40,50,63A
Poles	2P(1P+N),4P(3P+N)
Rated voltage Ue	2P 230/240V~
	4P 400/415V~
Insulation voltage Ui	500V
Rated frequency	50/60Hz
Rated residual operating current(I△n)	10,30,100,300mA
Break time under I△n	≤0.1s(S type <0.5s)
Rated breaking capacity	6,000A
Energy limiting class	3

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Rated impulse withstand voltage(1.5/50) Uimp	4,000V
Dielectric test voltage at ind.Freq. for 1min	2kV
Pollution degree	2
Thermo-magnetic release characteristic	B,C,D
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≤35°C)	-5°C~+40°C
Storage temperature	-25°C~+70°C
Terminal connection type	Cable/Pin-type busbar/U-type busbar
Terminal size top/bottom for cable	25mm² 18-3AWG
Terminal size top/bottom for busbar	25mm² 18-3AWG
Tightening torque	2.5Nm 22In-lbs
Mounting	On DIN rail EN60715(35mm) by means of fast clip device
Connection	From top
Auxiliary contact	EKM1-OF
Alarm contact	EKM1-FB
Shunt release	EKM1-MX

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Characteristics

Type	Tripping current I△/A		
AC	0.5I△n<I△<I△n		
A	Lagging Angle	I△n>0.01A	I△n≤0.01A
	0°	0.35I△n≤I△≤1.4I△n	0.35I△n≤I△≤2I△n
	90°	0.25I△n≤I△≤1.4I△n	0.25I△n≤I△≤2I△n
	135°	0.11I△n≤I△≤1.4I△n	0.11I△n≤I△≤2I△n

Characteristics curves

IEC/EN61009-1						30~35℃
	ThermalTripping			MagneticTripping		
	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
D Curve	1.13× IN		⩾1h	10× IN		⩾0.1s
		1.45× IN	<1h		20× IN	<0.1s

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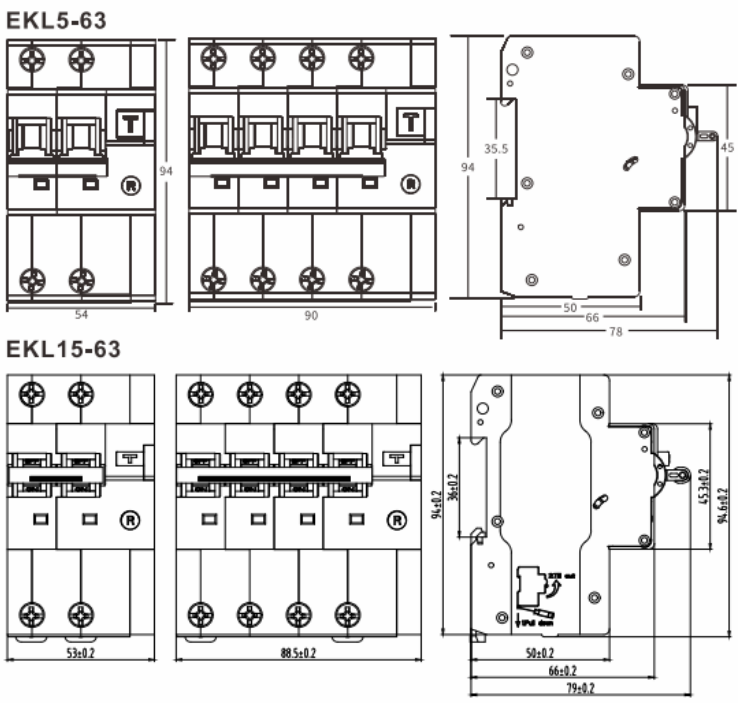
Overall and installation dimensions (mm)



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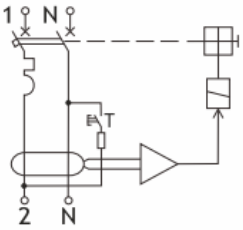
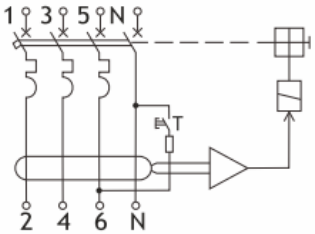
Circuit diagramm

EKL5-63





EKL15-63