EKM1-63H 10KA MCB

Mini Circuit Breaker















Technical Data

E	lectrical	
F	eatures	,

Rated current In	1,2,3,4,5,6,8,10,13,16,20,25,32,40,50,63A		
Poles	1P, 1P+N, 2P, 3P, 3P+N,4P		
Rated voltage Ue	230/240V		
Insulation voltage Ui	500V		
Rated frequency	50/60Hz		
Rated breaking capacity	10,000A		
Energy limiting class	3		
Rated impulse withstand voltage(1.5/50) Uimp	4,000V		
Dielectric test voltage at ind. Freq. for 1 min	2kV		
Pollution degree	2		
Thermo-magnetic release characteristic	B.C.D		

Mechanical

Features

Electrical life	8,000 Cycles
Mechanical life	20,000 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

Installation

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	25mm² 18-3AWG		
Tightening torque	2.5Nm 22In-lbs		
Mounting	On DIN rail EN60715(35mm) by means of fast clip device		
Connection	From top and bottom		

Combination

with accessories

Auxiliary contact	EKM1-OF
Alarm contact	EKM1-FB
Shunt release	EKM1-MX
Over/Under voltage release	EKM1-MV+MN

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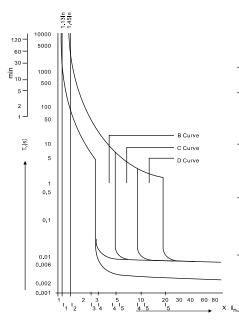
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MCB Characteristics

Characteristics Curves



	Thermal Tr	ipping		Magneti	c Tripping	
As per	No	Tripping	Time	Hold	Trip	Time
IEC60898	tripping current	current I2	Limits t	current I 4	current I 5	Limits t
B Curve	1.13×IN	1.45× I N	≥1h <1h	3×IN	5×IN	≥0.1s <0.1s
C Curve	1.13×IN	1.45× I N	≥1h <1h	5×IN	10×IN	≥0.1s <0.1s
D. C	1.12 × 181	1.45/110	>1 b	10 × 10	10×IN	>0.1-
D Curve	1.13×IN	1.45× I N	≥1h <1h	10×IN	20×IN	≥0.1s <0.1s

Tripping characteristics

Based on the Tripping Characteristics, MCB are available in "B", "C" and "D" curve to suit different types of applications.

"B" Curve for protection of electrical circuits with equipment that does not cause surge current (lighting and distribution circuits) Short circuit release is set to (3-5)In.

"C" Curve for protection of electrical circuits with equipment that cause surge current (inductive loads and motor circuits) Short circuit release is set to (5-10)In.

"D" Curve for protection of electrical circuits with cause high inrush current, typically 12-15 times the thermal rated current (transformes, x-ray machines etc.) Short circuit release is set to (10-20) In.

Circuit Diagram









Overall and Installation Dimension(mm)

