

# EKM1-40N 6KA MCB

Mini Circuit Breaker

**ETEK**<sup>®</sup>

Standard\_ IEC60898-1



## Technical Data

<b>Electrical Features</b>	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 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 1 min	2kV
	Pollution degree	2
Thermo-magnetic release characteristic	B,C	
<b>Mechanical Features</b>	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°C~+40°C
	Storage temperature	-25°C~+70°C
<b>Installation</b>	Terminal connection type	Cable/Pin-type busbar
	Terminal size top/bottom for cable	16mm <sup>2</sup> 18-5AWG
	Terminal size top/bottom for busbar	16mm <sup>2</sup> 18-5AWG
	Tightening torque	1.5Nm 14In-lbs
	Mounting	On DIN rail EN60715(35mm) by means of fast clip device
	Connection	From top and bottom
<b>Combination with accessories</b>	Auxiliary contact	EKM1-OF
	Alarm contact	EKM1-FB
	Shunt release	EKM1-MX
	Over/Under voltage release	EKM1-MV+MN

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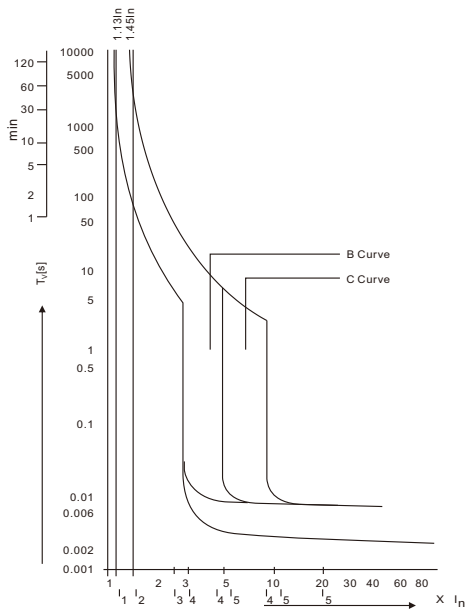
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## MCB Characteristics

### Characteristics Curves



As per IEC60898	Thermal Tripping		Magnetic Tripping			
	No tripping current	Tripping current $I_2$	Time Limits t	Hold current $I_4$	Trip current $I_5$	Time Limits t
B Curve	$1.13 \times I_N$	$1.45 \times I_N$	$\geq 1h$ $< 1h$	$3 \times I_N$	$5 \times I_N$	$\geq 0.1s$ $< 0.1s$
C Curve	$1.13 \times I_N$	$1.45 \times I_N$	$\geq 1h$ $< 1h$	$5 \times I_N$	$10 \times I_N$	$\geq 0.1s$ $< 0.1s$

### 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.

### Circuit Diagram



## Overall and Installation Dimension(mm)

