

Miniature Circuit Breakers (MCB)

Description



In accordance with european and international standards:

EN 60898-1 | IEC 60898-1: "Circuit Breakers for Overcurrent Protection for household and similar installations".



Installation in DIN rail track, in Panelboards.

Characteristics

Number of poles: **1; 1P+N; 2; 3; 4**

Voltage: **230/400 V**

Rated current: **1; 2; 3; 4; 6; 10; 16; 20; 25; 32; 40; 50; 63**

Tripping curves: **B; C; D**

Breaking capacity (Icn): **4,5 kA; 6 kA; 10 kA**

Frequency: **50/60 Hz**

Energy limitation class: **3**

Maximum voltage pulse: **6,2 KV**

Mechanical useful life: **>20000 cycles**

Electrical useful life: **>8000 cycles**

Connection by **"U" Type Busbar**

Connection by **Pin Type Busbar**

Terminal capacity: **25 mm²**

Terminal height: **19 mm**

Maximum tightening torque: **2,0 Nm**

Installation ambient temperature: **-5 °C to +40 °C** (average temperature must not exceed 35 °C)

Humidity must not exceed **50 % to 40 °C** or **90 % at 25 °C**.

The device must be installed vertically in a place free from impacts and heavy vibrations.

Operation

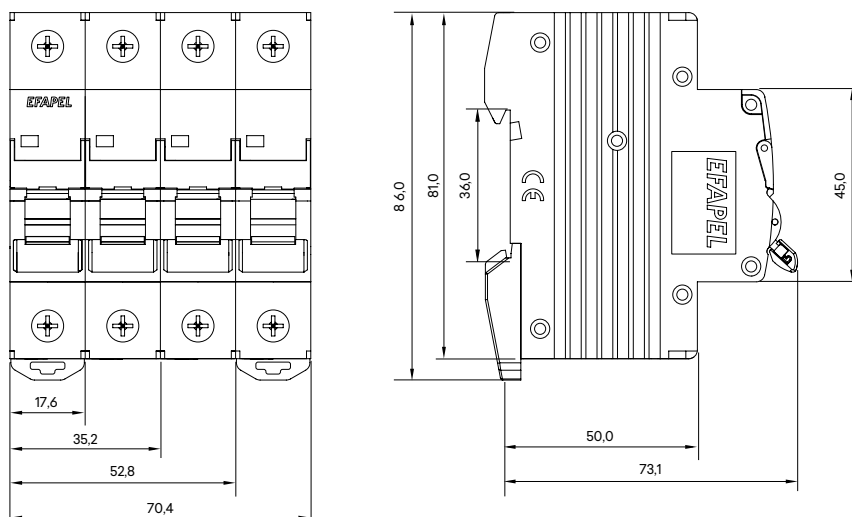
Operation as circuit breaker.

Indication of contact position.

Ability to quickly dissipate energy stored during tripping.

High resistance to short-circuit current.

Dimensions (mm)



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Operating Time when Operating in Overload

Current	Operating Time	Zone
1,13 In	$T \geq 1$ Hour	①
1,45 In	$T < 1$ Hour	②
2,55 In	$I_n \leq 32\text{ A} \Rightarrow t < 60$ seconds	③
	$I_n > 32\text{ A} \Rightarrow t < 120$ seconds	④

Operating Time when Operating in Short-circuit

Curve	Current	Operating Time	Zone	Application
B	3 In	$t \geq 0,1$ seconds	⑤	Protection of electrical circuits with resistive loads.
	5 In	$t < 0,1$ seconds	⑥	
C	5 In	$t \geq 0,1$ seconds	⑦	Circuits protection of general use.
	10 In	$t < 0,1$ seconds	⑧	
D	10 In	$t \geq 0,1$ seconds	⑨	Protection of electrical circuits with loads that produce current peak.
	20 In	$t < 0,1$ seconds	⑩	

Tripping Curves

