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.

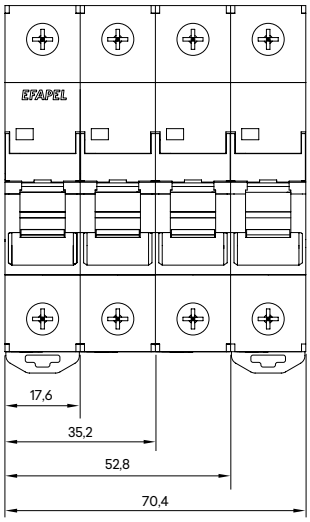
Characteristics

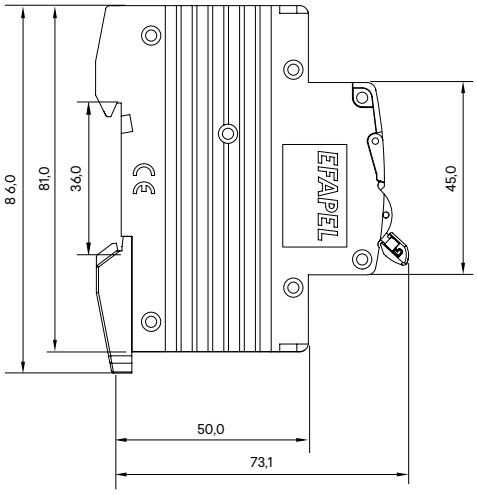
Number of poles: **1**; **1P+N**; **2**; **3**; **4**
Voltage: **230/400 V**
Rated current: **1**; **2**; **3**; **4**; **6**; **10**; **16**; **20**; **25**; **32**; **40**; **50**; **63**
Tripping curves: **B**; **C**; **D**
Breaking capacity (Icn): **4,5 kA**; **6 kA**; **10 kA**
Frequency: **50/60 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 ≥ 1 Hour	①
1,45 In	T < 1 Hour	②
2,55 In	In ≤ 32 A ⇨ t < 60 seconds	③
	In > 32 A ⇨ t < 120 seconds	④

Operating Time when Operating in Short-circuit

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

Tripping Curves

