Thermal-magnetic Type | MCB | 6/10kA

MCB ETM1-125(H)

Mini Circuit Breaker

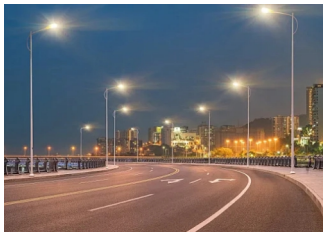
- Voltage: 240/415V AC systems (50/60Hz)
- Electro-magnetic type
- Current range: 63A to 125A
- Contact position indication
- Breaking capacity: 6kA/10kA options
- MCB according to IEC/EN 60947-2

Applications

Main circuit protection in residential distribution systems

Lighting circuit control in commercial buildings

Power supply line protection for industrial equipment



Electrical safety assurance in public facilities

Overview

ETM1-125(H) High-Current Miniature Circuit Breaker is intended for overload and short-circuit protection in low-voltage electrical installations. It is available with rated currents from 63A to 125A and rated short-circuit breaking capacities of 6kA or 10kA.

The circuit breaker is designed for 240/415V AC systems in accordance with EN 60947-2. It can also be used for infrequent switching under normal operating conditions. Typical applications include distribution panels, commercial and industrial installations, machinery, and infrastructure electrical systems.

Product Tips

1. Reversible line and load connectior
2. The position of handle lock
3. Rated current up to 125A
4. Contacts position indication window

Technical Data

General data		
Model	ETM1-125	ETM1-125H
Protection	Overcurrent and short circuit	
Type of trip	Thermal-magnetic	
No. of poles	1P, 2P, 3P, 4P	
Rated operational voltage (Ue)	1P: 230/400V~ (240/415V~); 2P, 3P, 4P: 400/415V~	
Rated current (In)	63, 80, 100, 125A	
Rated frequency	50/60Hz	
Rated insulation voltage (Ui)	690V	
Rated impulse withstand voltage (Uimp) (1.2/50μs)	6kV	
Dielectric test voltage	2kV (50/60Hz,1 min.)	
Fire resistance (glow-wire test)	960±15°C (Enclosure); 650±10°C (Handle)	
Pollution degree	2	

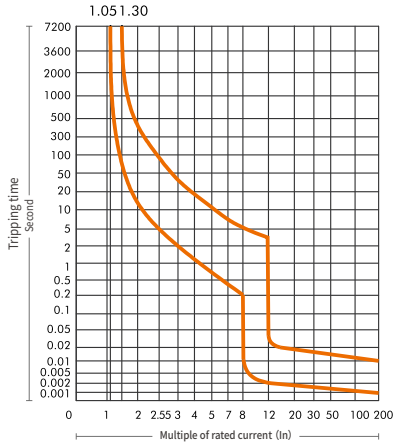
Data acc. to IEC/EN 60947-2		
Rated ultimate short circuit breaking capacity Icu (kA)	6kA	10kA
Rated service short circuit breaking capacity Ics (kA)	6kA	7.5kA
Thermal tripping characteristics	1.05In: no tripping within 2h; 1.30In: tripping within 2h	
Instantaneous tripping characteristics	8In-12In (Default)	
	L: 6In-10In; K: 10In-14In (Optional)	

Mechanical data	
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indication	green OFF / red ON
Protection degree	IP20
Reference temperature	30°C
Operating ambient temperature (with daily average≤35°C)	-5°C ~ +40°C
Storage temperature	-30°C ~ +70°C

Installation	
Terminal connection type	Cable/ Pin-type
Terminal block	Screw press-connected
Max. terminal size for cable	35mm² flexible/ 50mm² rigid
Max. tightening torque	3.5N.m
Mounting type	Mounting on 35mm DIN rail
Incoming method	Bi-Directional

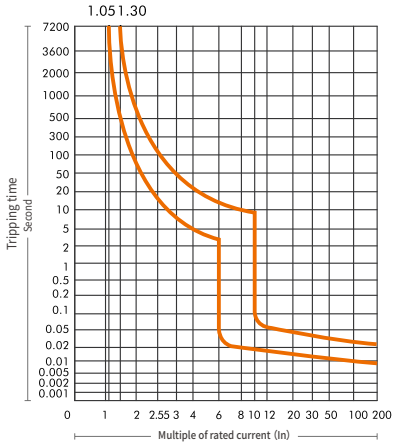
Tripping Characteristic

Default curve: 8In-12In



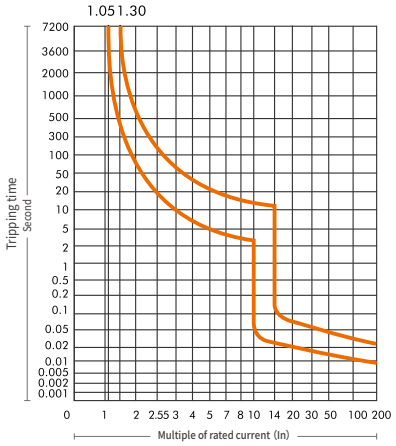
- I=1.05In, t≥2h, not trip
- I=1.3In, t<2h, trip
- I=2.55In, 1s<t<120s (In=63-125A)
- Instantaneous trip: 8In-12In

L curve: 6In-10In (Optional)



- I=1.05In, t≥2h, not trip
- I=1.3In, t<2h, trip
- I=2.55In, 1s<t<120s (In=63-125A)
- Instantaneous trip: 6In-10In

K curve: 10In-14In (Optional)

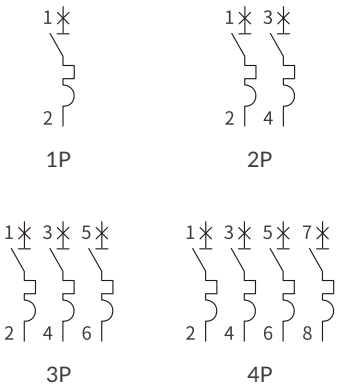


- I=1.05In, t≥2h, not trip
- I=1.3In, t<2h, trip
- I=2.55In, 1s<t<120s (In=63-125A)
- Instantaneous trip: 10In-14In

Temperature Derating Table

Rated current (A)	Correction factor for ambient temperature											
	-40°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
63	84	81.3	78.6	75.7	72.7	69.6	66.4	63	59.4	55.6	51.4	47
80	106.4	103.2	100	96	92	88.8	84	80	75.2	70.4	65.6	60
100	133	129	125	120	115	111	105	100	94	88	82	75
125	166.3	161.3	156.3	150	143.8	138.8	131.3	125	117.5	110	102.5	93.8

Wiring Diagram



Dimension (mm)