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PEM1LE-63

RCBO Electronic

V1.0 20231124

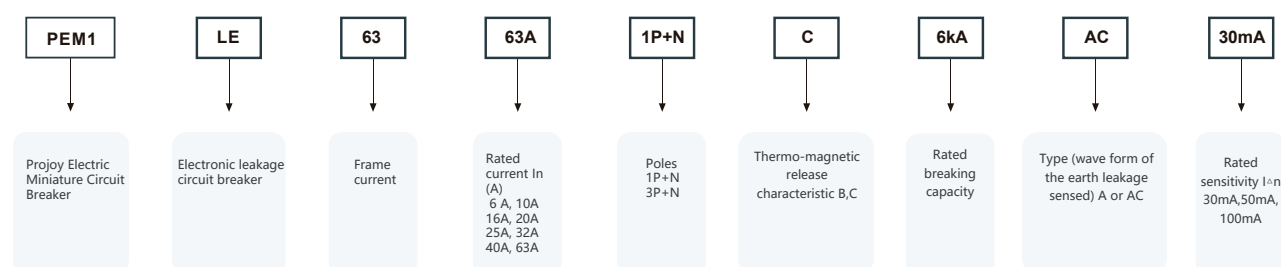
PEM1LE-63 Series RCBO

1

PEM1LE-63 series Residual Current Operated Circuit Breaker (RCBO) is mainly suitable for circuits with AC 50Hz, rated voltage 230V, and rated current up to 63A. When a person gets an electric shock or the grid leakage current exceeds the specified value, the device can quickly cut off the power supply to protect the safety of people and electrical equipment. Embedded with overload, short-circuit protection and isolation functions, it can also switch on and off electrical devices and lighting lines infrequently under normal circumstances, making it especially suitable for industrial, commercial and residential distribution systems.

The product complies with IEC / EN 61009-1 standards.

2 Product naming rules



3 Specifications

3.1 Basic Data

Product Name	PEM1LE-63
Standard	IEC/EN 61009-1
Electrical Features	
Number of poles	1P+N 、 3P+N (N can be switched on and off)
Rated frequency(Hz)	50
Frame rating current (A)Inm	63
Rated current(A)	6、 10、 16、 20、 25、 32、 40、 50、 63
Rated voltage(V)	AC230
Rated insulation voltage (V)Ui	500
Rated impulse withstand voltage (kV)Uimp	4
Rated operating short-circuit breaking capacity (kA)Ics	6
Rated short circuit capacity (kA)Icn	6
Rated residual making and breaking capacity (A) (IΔm)	2000
Max. breaking time at rated residual current	0.1s
Instantaneous tripping feature	B(3In~5In) C(5In~10In)
Trip mode	Thermal magnetic trip
Pollution level	2

PEM1LE-63 Series RCBO

Continue the above table

Electrical and mechanical accessories	MX: Shunt release SD: Alarm contact OF: Auxiliary contact MX+OF: Shunt + auxiliary release MV: Over-voltage release MN: Under-voltage release MV+MN: Over and under voltage release
Rated residual operating current (mA) (I _{Δn})	30, 50, 100
Mechanical Features	
Electrical life	6000
Mechanical life	10000
Protection level	IP20
Normal operating conditions and installation	
Ambient temperature	-35°C~+70°C
Installation altitude	Not more than 2,000m
Terminal connection type	Screw crimp
Max. wiring capacity	25
Max. Ultimate torque	2.5
Installation Type	II, III Type
Installation method	TH35-7.5 standard slide rail
Incoming line method	Upline

3.2 Over-current release operation of the circuit breaker (see Table 2)

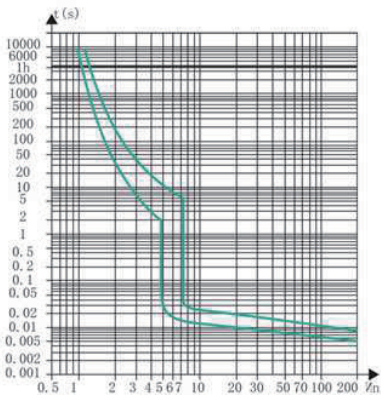
Table 2

Serial No.	Test current(A)	Starting state	Set time	Expected outcome	Remark
a	1.13I _n	Cold state	t ≤ 1h	No tripping	The current rises stably to the specified value within 5s
	1.45I _n	Then try it on 1.13I _n test	t < 1h	Trip	
	2.55I _n	Cold state	1s < t < 120s (For I _n > 32A) 1s < t < 60s (For I _n ≤ 32A)	Trip	
b	3I _n	Cold state	t ≤ 0.1s	No tripping	Closing the auxiliary switch to connect the current
	5I _n	Cold state	t < 0.1s	Trip	
c	5I _n	Cold state	t ≤ 0.1s	No tripping	Closing the auxiliary switch to connect the current
	10I _n	Cold state	t < 0.1s	Trip	

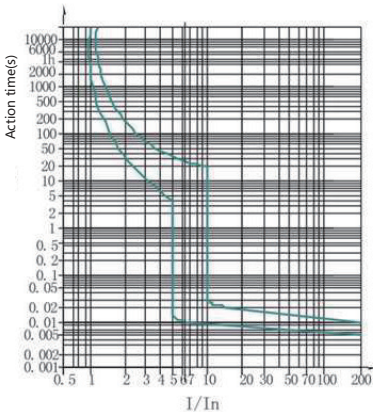
Note: Cold state refers to under the temperature of 30°C, there is no load before the test.

PEM1LE-63 Series RCBO

3.3 Protection curve of the circuit breaker



Type B protection curve



Type C protection curve

3.4 Wiring: It is suitable for wire connection of 25mm² or smaller (see Table 3). Use screws to tighten the wiring and the torque is 2.5N·m.

Table 3

Product Name	PEM1LE-63
1~6	1
10	1.5
16~20	2.5
25	4
32	6
40~50	10
63	16

4 Product appearance and installation dimensions

