Intelligent Miniature Circuit Breaker PEIB-125

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– Switch To Safety! –

All-in-one, Intelligent, Safe and Reliable

Main Functions

- Overload Protection
- Short circuit Protection
- Arc Fault Protection
- Leakage Current Protection
- Metering Two-Way
- Remote Communication

Optional Functions

- Over Temperature Protection
- Timing
- Over/Under Voltage protection
- Remotely Reclosing
- Phase loss Protection

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Naming

PEIB	–	125	S	/C	32	–	2
Projoy Intelligent MCB		Frame Current 125:125A	Breaking Capacity S: 6kA; H:10kA	Tripping Curve C: Type C (5-10In); D: D type (10-20In)	Rated Current 6, 10, 16, 20, 25, 32, 40, 50, 63, 80, 100A 125A		Number of Poles 1N:1P+N 1 2 3 4

Accessories

Power Module

12V Power Source

- Input voltage: AC85-265V
- Output voltage: DC12, DC24, DC48 Optional
- Power: 36W
- Voltage accuracy: ±2%
- Ripple: 50~100mV, 20MHZ
- Standby power consumption: 0.5W

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P: Power Module
1:12VDC（Default）, 2:24VDC, 3:48VDC

Power: 36W

Remarks: Input and output are phoenix terminals as accessories

Communication module

- Communication rate: 10/100 Mbps
- Input: RS-485 Cable
- Output: TCP/IP, WiFi, Zigbee, 4G, NB-IoT Optional
- Power input: DC12V, DC24V, DC48V

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Communication module

TI:TCP/IP, WI:WIFI, ZG:Zigbee, NB: NB-IoT, 4G:4G
(The NANO card needs to be provided by user for 4G.)

Remarks: Input and output are phoenix terminals as accessories

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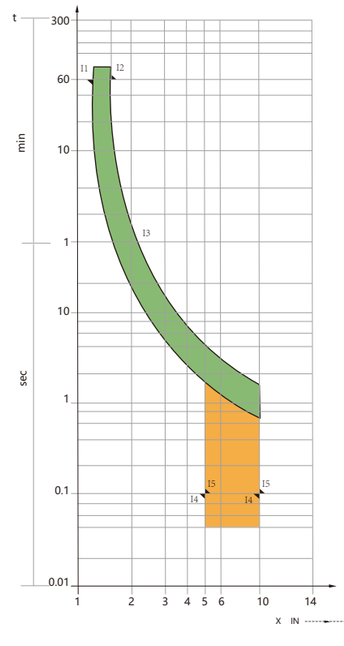
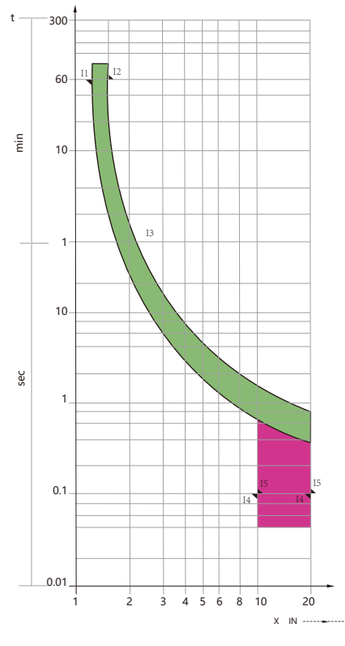
Technical data

Rated current	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A, 80A, 100A, 125A				
Tripping curves	C, D				
Rated operating voltage	230VAC（1PN，1P，2P）；400VAC（3P，4P）				
Poles	1PN , 1P, 2P, 3P, 4P				
Rated insulation voltage	500V				
Rated impulse withstand voltage	4kV				
Rated breaking capacity	S : 6kA ; H:10kA				
Time of Remote closing	tc≤3S				
Time of Remote opening	td≤1S				
Mechanical life/Electrical life	20,000 operation cycle / 6,000 operation cycle				
Requirements of Terminals	M7 screw, Torque 3.5Nm; 2.5mm² ~35mm² copper cable				
Shell Material	Flame retardant material used, comply with UL94-V0				
Metal Contacts	Final pressure: ≥4N				
Instantaneous tripping characteristics	Tripping curve	Starting	Current	Time	Result
	C	cold state	5In	0.1S	Not trip
		cold state	10In	<0.1S	trip
	D	cold state	10In	0.1S	Not trip
		cold state	20In	<0.1S	trip
Time-delayed tripping characteristics	Tripping curve	Starting	Current	Time	Result
	a	cold state	1.05In	1h (for In≤63A) 2h (for In>63A)	Not trip
	b	hot state after "a"	1.3In	1h (for In≤63A) 2h (for In>63A)	trip
	c	cold state	2.55In	1S<t≤60S (for In≤32A) 1S<t≤120S (for In>32A)	trip
Residual current protection	Tripping type: B type, A type and AC type, Tripping current: 30mA, 50mA, 100mA adjustable Operating type: Instantaneous type and Time-delay type				

Tripping Curves



Type C



Type D

Altitude Derating

Altitude (m)	2000	3000	4000
Rated current	1	0.97	0.91
Rated insulation voltage Ui	1	0.90	0.82
Power frequency withstand voltage	1	0.90	0.82
Rated impulse withstand voltage Uimp	1	0.90	0.82
Rated breaking capacity Icn	1	0.87	0.77
Electrical life	1	0.87	0.77

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Features

High precision measurement
0.5% measuring accuracy fo voltage and current. 1% measuring accracy for active and reactive power.

Adjustable alert threshold
The Protection alarm threshold of voltage, current, cable temperature and residual current and etc is settable.

Double tripping drive
Double tripping drive mechanism, which ensures disconnecting quickly and reliably.

Records keeping
2 years data keeping for building in clock circuit and button battery

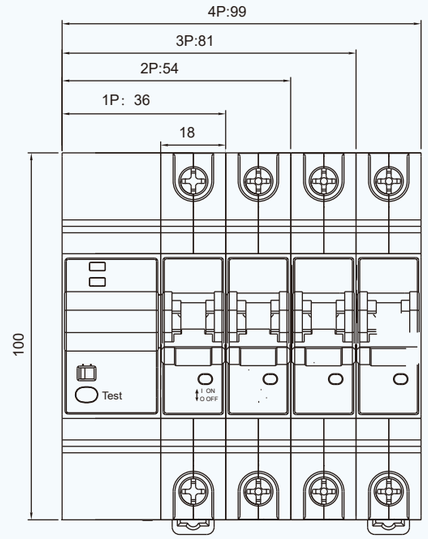
Self-checking
Self checking function for residual current is available, by controlling remotely or presetting

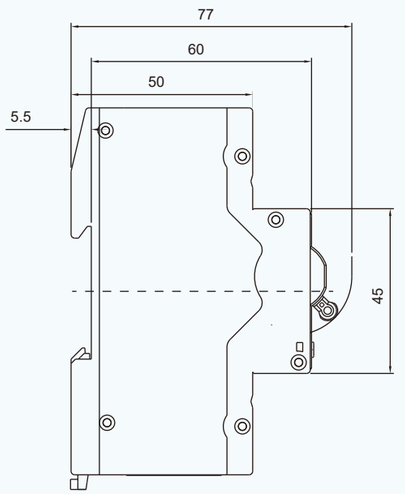
Remotely control
Remotely control and support timing function

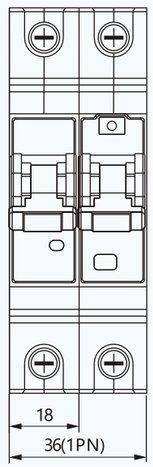
Energy consumption analysis
Cloud platform supports power generation, power consumption, power factor and other electricity parameters analysis and display

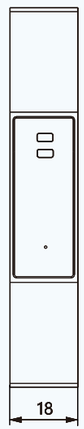
Dimensions

Unit: mm

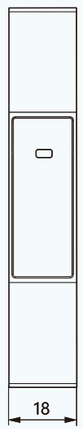








Split communication module



Split power module

Remark

1: Both of communication module and power module are 18mm width for 1P/2P and 27mm width for 3P/4P.

2: Need to connect N line at the secondary terminal for 1P and 3P