YCB8-125PV series

Miniature circuit breaker

OPERATION INSTRUCTION

Standard: IEC 60947-2

CNC Deliver Power For Better Life

⚠ Before installing and using this product, please read this instruction carefully and pay more attention to safety.

General

YCB8-125PV series circuit breaker is specially used for the photovoltaic system, it's rated working voltage can be up to DC1000V. The circuit breaker adopts a special extinguishing and current limiting system, which can quickly switch off the fault current of the DC distribution system, to protect the photovoltaic module, the important component in solar power generation system from the harm of high DC reverse current and AC feedback current caused by inverter failure, and ensure the reliable operation of the solar photovoltaic power generation system. It can not only be used as line overload, short circuit function protection, but also can be used as line infrequent conversion.

Operation Condition

2.1 Ambient temperature: -5℃ ~ +40℃, the average during 24 hours should not exceed +35℃;

2.2 Altitude:≤2000m.

2.3 Air conditions:At mounting site, relative humidity not exceed 50% at the max temperature of +40℃, higher relative humidity is allowable under lower temperature, for example, RH could be 90% at +20℃, special measures should be taken to occurrence of dews;

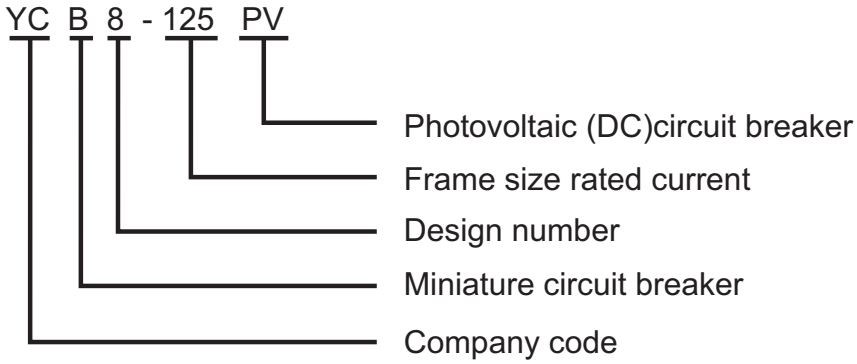
2.4 Mounting type: DIN rail TH 35-7.5 steel

2.5 Pollution grade: Ⅱ

2.6 Mounting conditions: inclination between mounting plane and vertical plane not exceed ±5º, the product should locate in the places where there are no obvious impact and shake;

Main specifications and technical parameters

3.1Type designation



3.2
Table 1: The basic specifications and
main technical parameters of the circuit breaker

Ui	Uimp	Number of poles	Rated voltage Ue	Rated Current In	Thermo-magnetic release characteristic	Rated short circuit breaking capacity Icn
1200V	4kV	1P/2P/3P/4P	DC250V/DC500V DC750V/DC1000V	63A, 80A,100A,125A	8~12In	6kA

3.3 Table 2 The over-current protection characteristics

Test	Test current	Initial status	Time limit for tripping or not tripping	Expected result	Remarks
a	1.05In	cold state	t≤1h(In≤63A) t≤2h(In > 63A)	Not tripping	current increase steadily within 5s
b	1.30In	Right after test number a	t<1h(In≤63A) t<2h(In > 63A)	Tripping	
c	2In	cold state	t≤4800s	Tripping	
d	8In	cold state	t≤0.2s	Not tripping	Turn on the power supply by closing the auxiliary switch
	12In	cold state	t<0.2s	Tripping	Turn on the power supply by closing the auxiliary switch

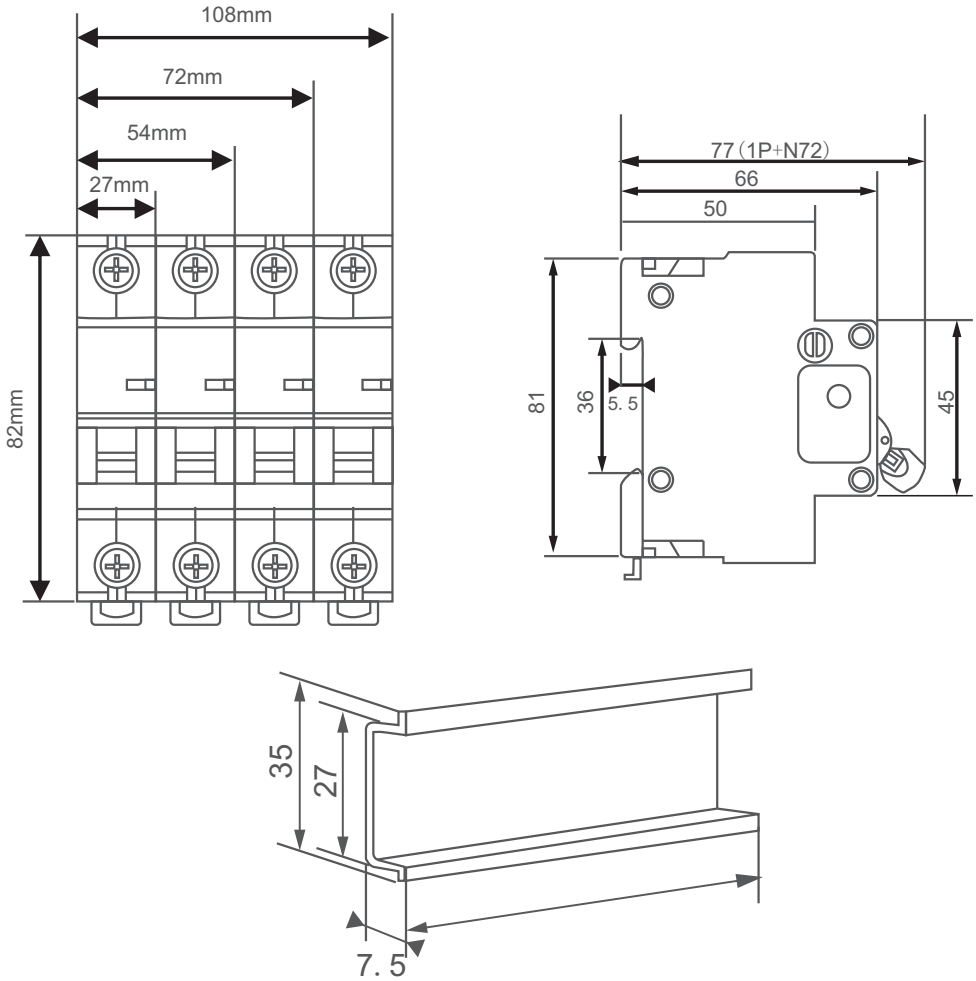
Note: The terminology “Cold state” means that the test is performed at the base calibration temperature with no load prior to the test.

3.4Mechanical and Electrical life

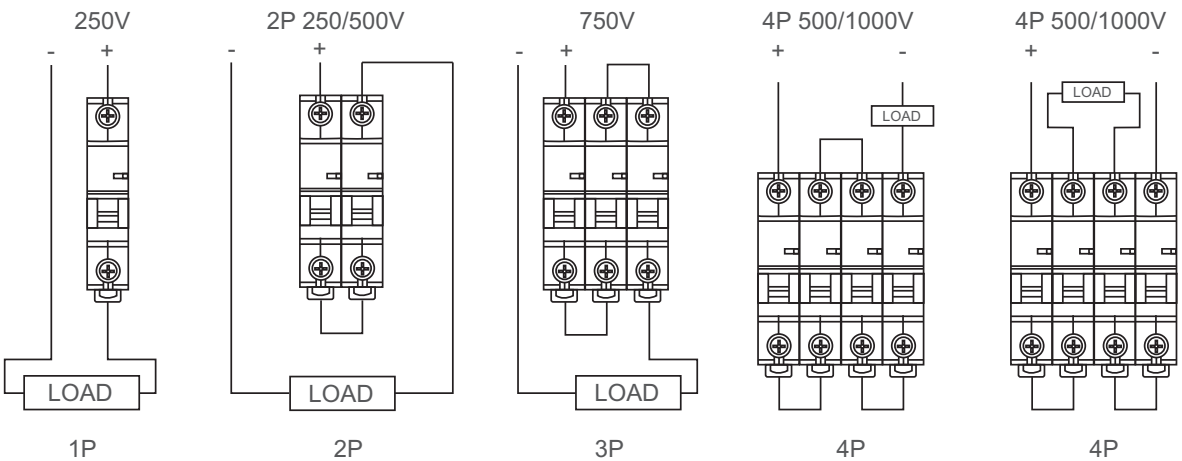
Electrical life: 4000 times
Mechanical life: 10000 times
Table 3. Cross sectional area of copper conductor corresponding to rated current

In/A	≤63A	≤80A	≤100A	≤125A
S/mm²	16	25	35	50

4.Overall and mounting dimensions



5.Wiring diagram



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CERTIFICATE

Product Model: YCB8-125PV series

Standard: IEC 60947-2

Inspector: CNC006

Production date: Printed on the product or package.

This product is qualified according to the delivery inspection

CNC ELECTRIC

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