TGB2D-125RW Series, 6KA Photovoltaic & Building Dedicated MCB

1 Overview

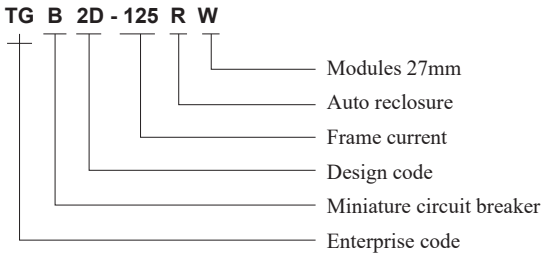
TGB2D-125RW photovoltaic grid-connected system dedicated circuit breaker is suitable for distributed photovoltaic grid-connected system for detection and determination of voltage on the photovoltaic power distribution line. The circuit breaker will open in delay automatically in case of overvoltage, undervoltage or voltage loss on the photovoltaic power distribution line, and will be closed when the voltage recovers to the normal value.

TGB2D-125RW self-recovery overvoltage & undervoltage protector (hereinafter referred to as building dedicated circuit breaker) is suitable for household low-voltage power distribution system or for similar application. It will open automatically in case of overvoltage or undervoltage caused by line failure, and can detect the line voltage automatically, and will be closed when the line voltage recovers to the normal value.

The photovoltaic dedicated circuit breaker complies with the following Standard: IEC60898-1

The building dedicated circuit breaker complies with the following Standard: IEC60898-1

2 Type Designation



3 Technical Parameters

3.1 Main technical parameters

Product Model	TGB2D-125RW
Rated current(A) In	63, 80, 100, 125
Number of poles	2P/4P
Rated voltage(V) Ue	AC230V/2P
	AC400V/4P
Rated insulation voltage(V) Ui	690
Rated impulse withstand voltage(kV) Uimp	6
Rated short-circuit breaking capacity(kA) Ics	6
Rated short-circuit breaking capacity(kA) Icn	6
Instantaneous trip characteristics	C
Mechanical life	10,000 times
Electrical life	6,000 times
temperaure	-25℃ ~ +65℃
Altitude	Not exceed 2,000 meters
Installation category	Class II and Class III
Pollution degree	2
Protection grade	IP20

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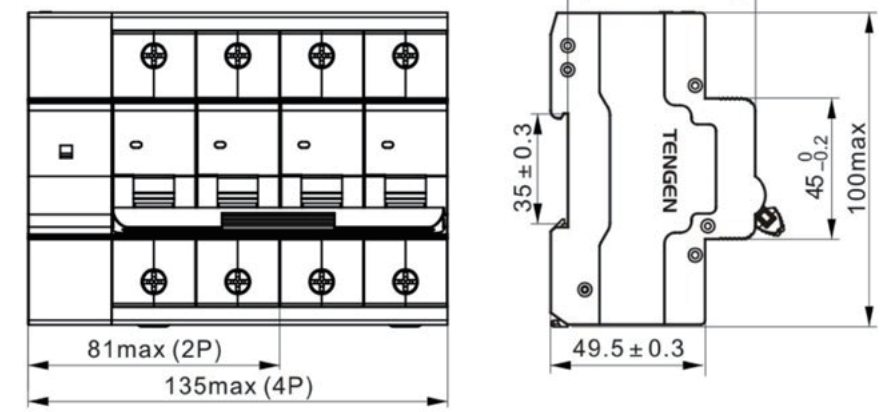
3.2 Recommended nominal sectional area of connecting copper wire

Rated current (A)	63	80	100	125
Sectional area of wire (mm^2)	16	25	35	50

3.3 Judgement of power voltage and control of action state of circuit breaker

No.	Power voltage		Starting state	State after action		Continuous power voltage state holding time
	Circuit breaker for photovoltaic	Circuit breaker for building		Auto mode	Manual mode	
1	180V≤U≤270V	185V≤U≤255V	ON	OFF	ON	0-10s
2	160V≤U≤290V	165V≤U≤275V	OFF	OFF	OFF	Stay initial state
3	U<160V	U<165V	OFF	ON	ON	0-10s
4	U<180V	U<185V	ON	ON	ON	Stay initial state
5	U>290V	U>275V	OFF	ON	ON	0-10s
6	U>270V	U>255V	ON	ON	ON	Stay initial state
7	U<45V (power outage and voltage loss)	U<45V (power outage and voltage loss)	OFF	ON	OFF	0-10s
8	Phase loss (only for three-phase four-wire)	Phase loss (only for three-phase four-wire)	ON	ON	ON	Stay initial state
9	Phase loss (only for three-phase four-wire)	Phase loss (only for three-phase four-wire)	OFF	ON	ON	0-10s

4 Outline and Installation Dimensions



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5 Ordering Notice

Please specify the following items when ordering:
5.1 Product name, such as TGB2D-125RW photovoltaic dedicated circuit breaker;
5.2 Number of poles: such as 4P;
5.3 Instantaneous trip type: such as C type;
5.4 Rated current, such as 80A;
5.5 Qty.: such as 100 pcs
5.6 Order example: TGB2D-125RW photovoltaic dedicated 4P C80 100 pcs.