

BDM-125
PV DC Moulded Case
Circuit Breaker



- 1 Brand
- 2 Model
- 3 Rated Working Current
- 4 Rated Limit/operating Short-circuit Breaking Capacity
- 5 Compliant With Standards
- 6 Rated Operational Voltage
- 7 Instantaneous Current Setting Value
- 8 Certification Mark

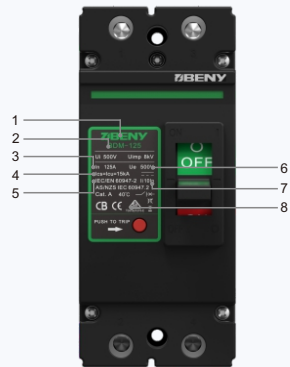
- Easy installation
- Convenient installation with high segmentation and good insulation performance
- Overload protection, short circuit protection, non frequency operation
- Rated Voltage:DC 500V
- Rated Current:125A
- Comply with:IEC60947-2, GB/T14048.2



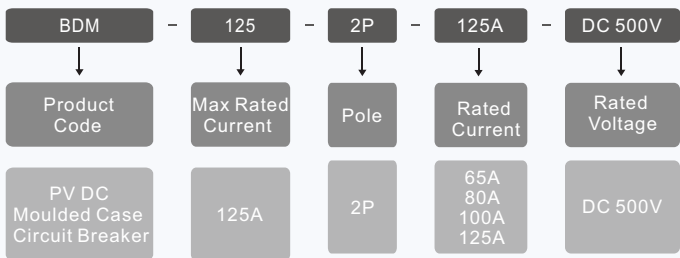
Application

ZBENY BDM-125 series PV DC moulded case circuit breakers are mainly used in large-scale photovoltaic power generation systems. Including photovoltaic junction box, photovoltaic inverter, photovoltaic DC cabinet, etc. Rated voltage DC 500V, rated current up to 125A, The fault current of the DC power distribution system can be quickly disconnected to ensure the reliable peration of the solar photovoltaic power generation system. At the same time, the circuit breaker is equipped with a dedicated waterproof box, with a protection level of up to IP65

Appearance Introduction



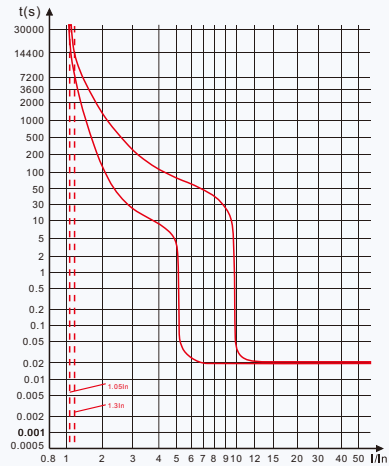
Type Instruction



Parameter

Electrical Characteristics			
Type	BDM-125		
Comply With	IEC 60947-2 /GB/T 14048.2		
Pole	2P		
Rated Working Voltage	Ue	DC 500V	
Max Rated Current	Ith	125A	
Rated Current	In	65A,80A,100A,125A	
Rated Insulated Voltage	Ui	DC 500V	
Rated Impulsed Voltage	Uimp	8kV	
Ultimate Breaking Capacity	Icu	15kA	
Run Breaking Capacity	Ics	15kA	
Service Life&Cycle Operation			
Mechanical	Actual Value	10000	
	Standard Value	In≤100	9700
		100<In≤315	7800
Electrical	Actual Value	1000	
	Standard Value	In≤100	300
		100<In≤315	200
Installation Environment			
Ingress Protection	IP20(without enclosure), IP65(with enclosure)		
Bottom mounting screw torque (M4)	1.2N·m~1.6N·m		
Product wiring torque (M8)	8N·m~11N·m		
Working Temperature	-40℃~-+80℃		
Storage Temperature	-40℃ ~ +85℃		
Pollution degree	3		

Circuit breaker action characteristic curve



- 1) cold state,I=1.05In,t<2h,not trip;
- 2) Hot state,I=1.3In,t<2h,trip;
- 3) cold state,I=3In,t≤500s;
- 4) Instantaneous trip:5In-10In.

Derating Date

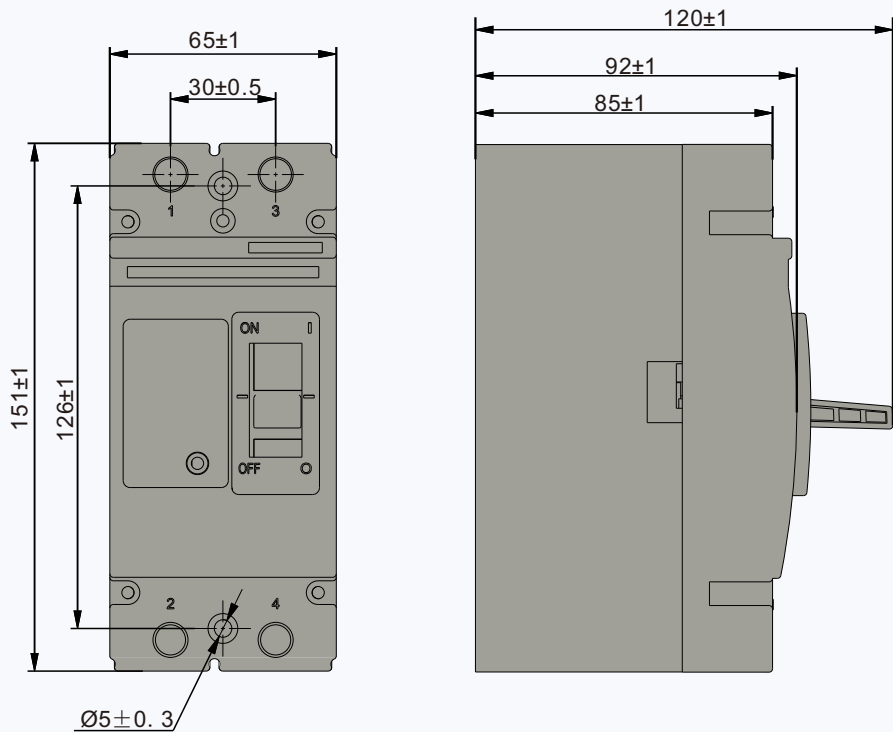
Derating Temperature					
Tem Proportion Type	-40℃~40℃	50℃	60℃	70℃	80℃
BDM-125	100%	95%	90%	85%	80%
Derating Altitude					
Altitude	2000m	3000m	4000m	5000m	
Power frequency withstand voltage	100%	100%	100%	100%	100%
Isolation voltage	100%	100%	100%	100%	100%
Working current	100%	100%	90%	80%	
Working voltage	N/A				

Conductor size

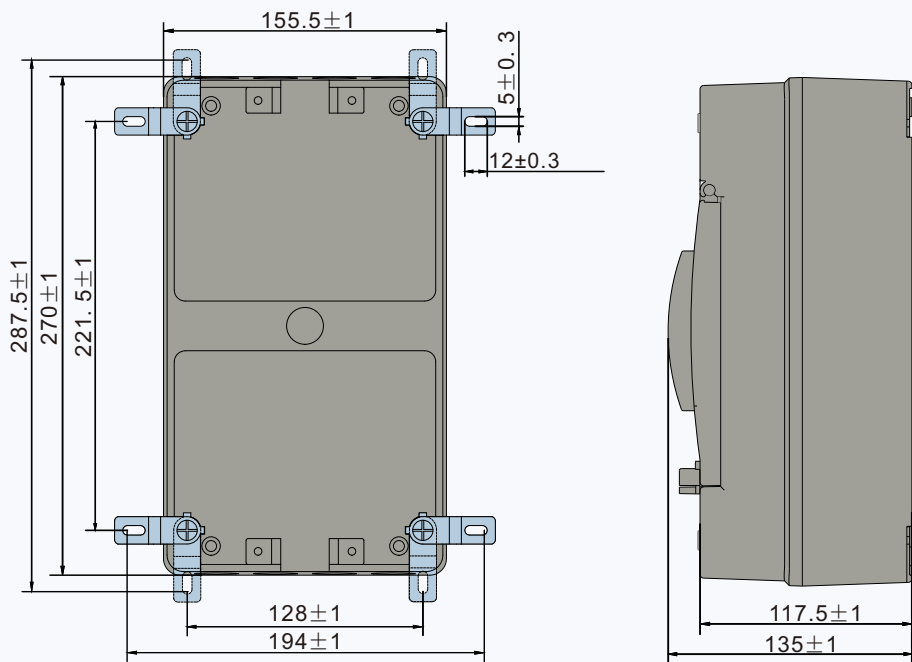
Terminal,A	65	80	100	125
Copper conductors,mm²	16	25	35	50

Note: The maximum outer diameter of the connecting wire for products with waterproof boxes is 14.5mm.

Outline dimension diagram of products without waterproof box (mm)



Outline Dimensional Drawing of Products with Waterproof Boxes (mm)



BDM-250
PV DC Moulded Case
Circuit Breaker



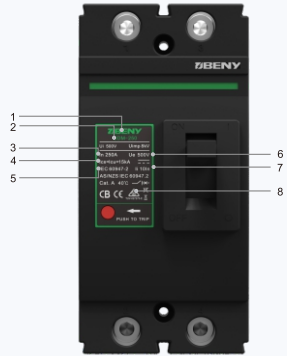
- 1 Brand
- 2 Model
- 3 Rated Working Current
- 4 Rated Limit/operating Short-circuit Breaking Capacity
- 5 Compliant With Standards
- 6 Rated Operational Voltage
- 7 Instantaneous Current Setting Value
- 8 Certification Mark

- Easy installation
- Convenient installation with high segmentation and good insulation performance
- Overload protection, short circuit protection, non frequency operation
- Rated Voltage:DC 500V
- Rated Current:125A
- Comply with:IEC60947-2, GB/T14048.2

Application

ZBENY BDM-250 series PV DC moulded case circuit breakers are mainly used in large-scale photovoltaic power generation systems . Including Photovoltaic junction box, photovoltaic inverter, photovoltaic DC cabinet, etc. Rated voltage DC 500V, rated current up to 250A, The fault current of the DC power distribution system can be quickly disconnected to ensure the reliable peration of the solar photovoltaic power generation system. At the same time, the circuit breaker is equipped with a dedicated waterproof box, with a protection level of up to IP65

Appearance Introduction



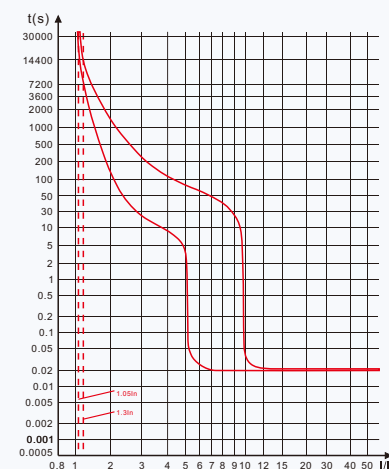
Type Instruction

BDM	250	2P	250A	DC 500V	Optional Accessories
Product Code	Max Rated Current	Pole	Rated Current	Rated Voltage	Optional Accessories
PV DC Moulded Case Circuit Breaker	250A	2P	125A, 160A, 175A, 200A, 250A	DC 500V	SW: Small waterproof box (default) LW: Large waterproof box SL: Safety lock

Parameter

Electrical Characteristics		
Type	BDM-250	
Comply with	IEC 60947-2, GB/T 14048.2	
Pole	2P	
Rated Working Voltage	Ue	DC 500V
Max Rated Current	Ith	250A
Rated Current	In	125A, 160A, 175A, 200A, 250A
Rated Insulated Voltage	Ui	DC 500V
Rated Impulsed Voltage	Uimp	8kV
Ultimate Breaking Capacity	Icu	15kA
Run Breaking Capacity	Ics	15kA
Service Life&Cycle Operation		
Mechanical	Actual Value	10000
	Standard Value	7800
Electrical	Actual Value	1000
	Standard Value	200
Installation Environment		
Ingress Protection	IP20(without enclosure), IP65(with enclosure)	
Bottom mounting screw torque (M4)	1.2N·m-1.6N·m	
Product wiring torque (M8)	8N·m-11N·m	
Working Temperature	-40℃~+80℃	
Storage Temperature	-40℃~+85℃	
Pollution degree	3	

Circuit breaker action characteristic curve



- 1) cold state, $I=1.05I_n$, $t < 2h$, not trip;
- 2) Hot state, $I=1.3I_n$, $t < 2h$, trip;
- 3) cold state, $I=3I_n$, $t \leq 500s$;
- 4) Instantaneous trip: $5I_n-10I_n$.

Derating Date

Derating Temperature					
Tem Proportion Type	-40℃~40℃	50℃	60℃	70℃	80℃
BDM-250	100%	95%	90%	85%	80%

Derating Altitude				
Altitude	2000m	3000m	4000m	5000m
Power frequency withstand voltage	100%	100%	100%	100%
Isolation voltage	100%	100%	100%	100%
Working current	100%	100%	90%	80%
Working voltage	N/A			

Conductor size

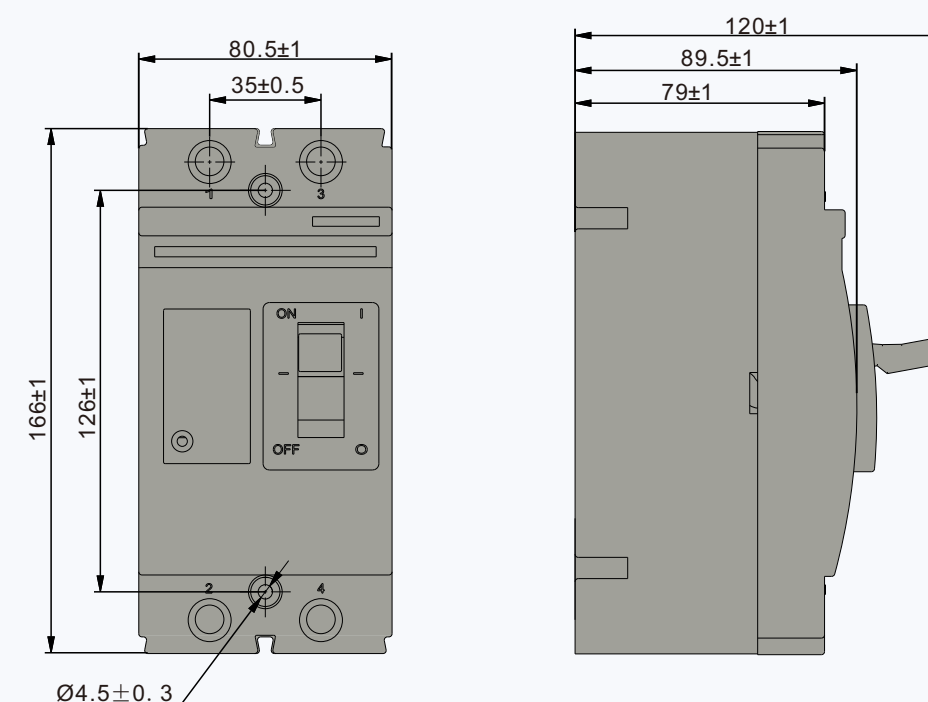
Table 10				
Terminal,A	125	160	200	250
Copper conductors,mm²	50	70	95	120

Products without waterproof boxes



- Protection Level IP20

Outline dimension diagram of products without waterproof box (mm)

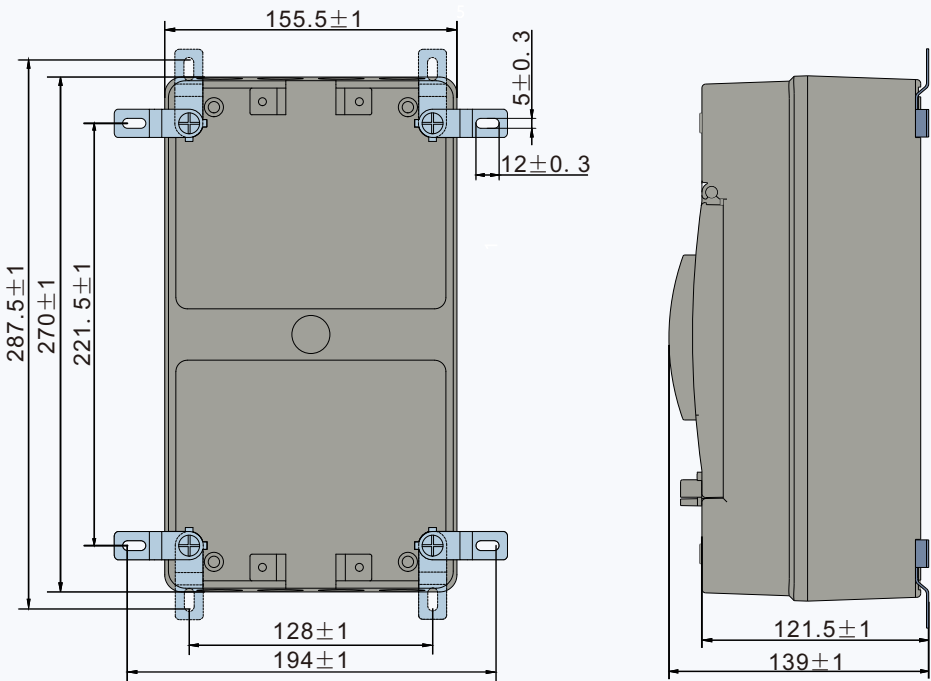


Products with small waterproof boxes



- Protection Level IP65
- The maximum diameter of the connecting wire is $\Phi 14.5\text{ mm}$

Outline Dimensional Drawing of Products with small Waterproof Boxes (mm)



Custom large waterproof box products



- Protection Level IP65
- The maximum diameter of the connecting wire is $\Phi 25\text{ mm}$

Outline dimension diagram of customized large waterproof box product (mm)

