# BDM-125
# PV DC Moulded Case Circuit Breaker

TUV-027275-E

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



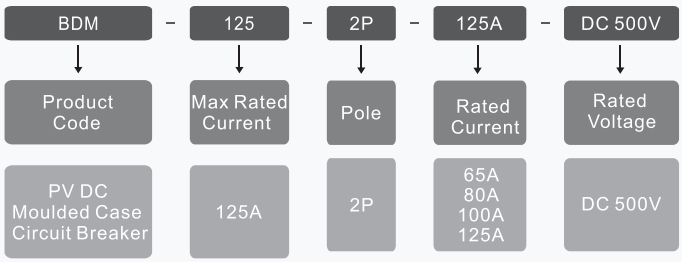
## Application

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



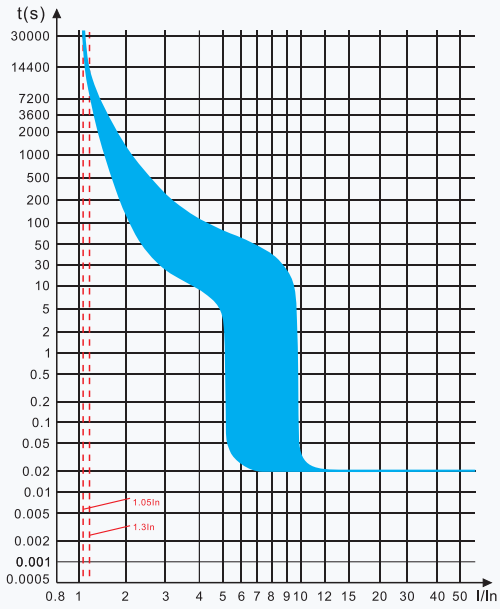

## Type Instruction




## Parameter

| Electrical Characteristics | | | |
|---|---|---|---|
| | | 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** | | | |
| Mechenical | 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 / Proprotion / Type | -40℃~40℃ | 50℃ | 60℃ | 70℃ | 80℃ |
| BDM-125 | 100% | 95% | 90% | 85% | 80% |

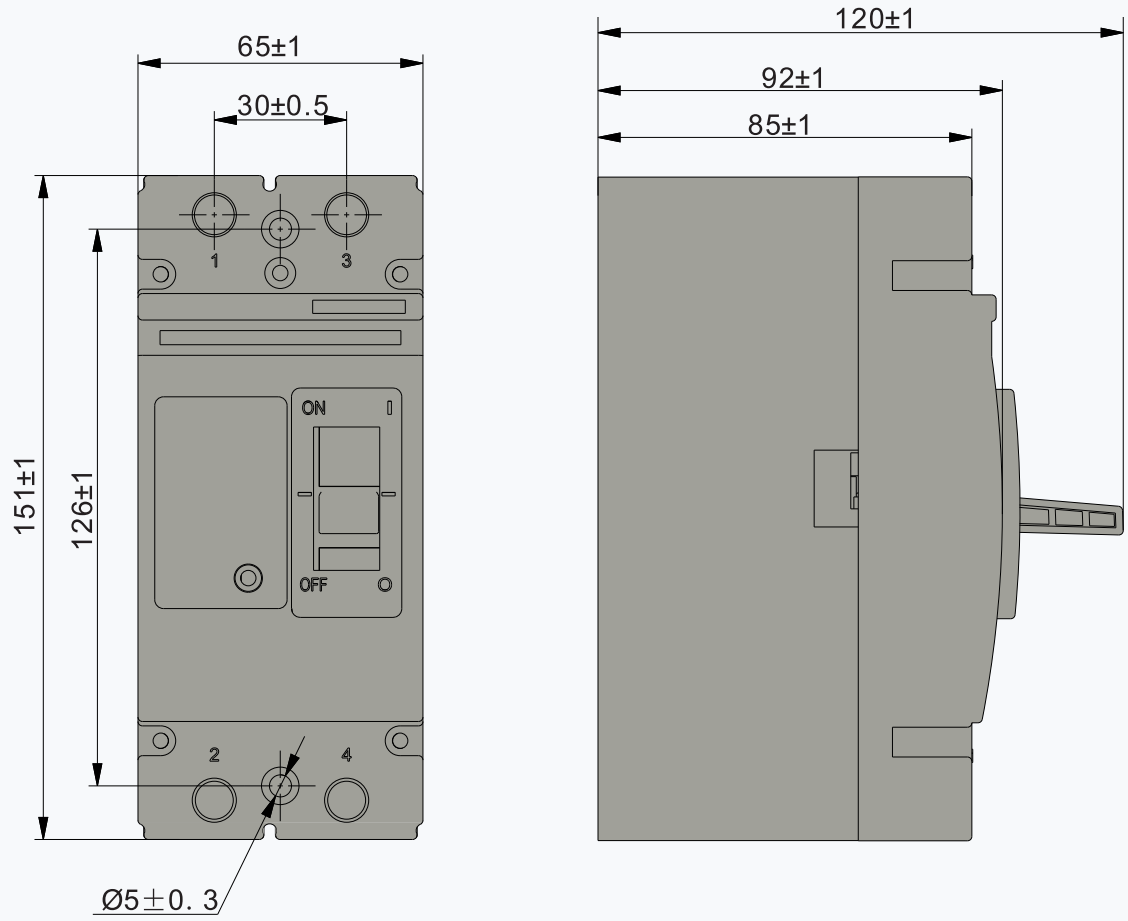
| Derating Altitude | | | | |
|---|---|---|---|---|
| Altitude | 2000m | 3000m | 4000m | 5000m |
| Power frequency withstand voltage | 100% | 100% | 100% | 100% |
| Isolation voltage | 100% | 100% | 100% | 100% |
| Working current | 100% | 100% | 90% | 80% |
| Working voltage | N/A | | | |

## 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)

