SURGE PROTECTION

BT PBM80 150 RM/2P

CE

• Technical data

Type		BT PBM80 150 RM/2P
Art.-No.		800 874
Rated voltage (max. continuous voltage)	U_C	150V~
Nominal discharge current (8/20)	I_n	40kA
Max. discharge current (8/20)	I_{max}	80kA
Voltage protection level	U_P	≤ 2.0kV
Response time	t_A	≤ 25ns
Max. back up fuse		200AgL/gG
Operating temperature range	T_U	-40°C...+80°C
Cross-sectional area		35mm^2 solid / 50 mm^2 flexible
Mounting on		35mm DIN rail
Enclosure material		light gray thermoplastic, UL94-V0
Dimension		4 mods
Test standards		IEC 61643-11; GB 18802.1; YD/T 1235.1
Certification		CE (LVD, EMC)
Type of remote signalling contact		Switching contact
Switching capacity	U_N/I_N	AC:250V/0.5A DC:250V/0.1A,125V/0.2A,75V/0.5A
Cross-sectional area for remote signalling contact		Max. 1.5mm^2 solid / flexible

• Product introduction

1. Summary

BT PBM80 150 RM/2P is designed to protect low voltage devices from surge damages, specially designed for TN system. mainly used in power supply system such as power distribution-room,distribution-cabinet and other important power supply system. Applied in SPD Class I (Class B) for power supply system. Designed according to IEC 61643-11; GB 18802.1; YD/T 1235.1

3. Application

BT PBM80 150 RM/2P is applied for TN power supply system of the single-phase circuit for the overvoltage protection.

2. Main character

- Combined SPD for single phase TN system
- High discharge capacity, quick response
- Low residual voltage, fine protection
- Multifunctional connection for conductors and busbars
- Window will display red when fault occurs, also provide remote alarm terminal at the same time

4. Application environment

- Temperature: -40°C ~ +80°C
- Relative humidity: ≤ 95% (25°C)

• Installation instruction

According to lightning protection zones concept, for installation at LPZ 0_A-1 or higher. This surge protective device is usually installed in distribution-box or feeder bus of UPS, protecting devices or equipment downstream.

Fuse must be installed at the upstream of the SPD or the lightning arrester to make sure that the protected system has double protection. The value of the fuse used in a SPD system should be conformed to:

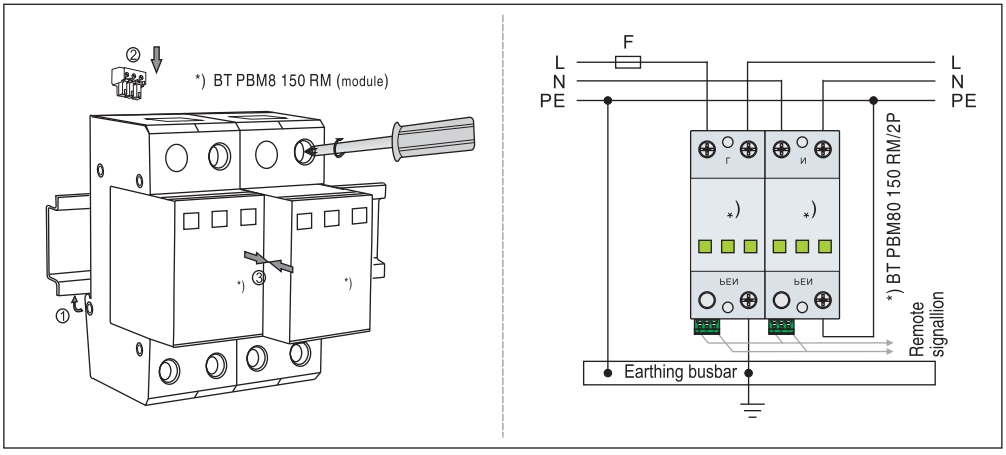
1. The value of FUSE should not be larger than the max. withstand capacity of the SPD's backup fuse value.
2. Under the status of the max. current in the power supply & close loop circuit available current, the fuse should be able to disconnect when overloaded or short-circuited.
3. Take 1 & 2 into consideration, the fuse should be as large as possible to allow the maximum surge discharge of SPD.

• Installation steps

1. Check the product for integrity of the package; make sure the product window indicates green.
2. Mount the SPD on 35 mm DIN rail.
3. Connect conductors, the cross-sectional area of cable must be larger than 16mm^2. The withstand voltage value of cable is not smaller than AC500V; ensure wiring reliable.
4. If need remote alarm, it should be connected signal lines to remote signal terminal 1 and 2, or 2 and 3 (When normal, 1 and 2 open, 2 and 3 close; when fault, the state is reversed).
5. After above, switch on the power supply and turn on the circuit breaker, if the SPD's window does not appear red, this indicates the unit is operating normally.

Regularly inspect the operating status, especially after lightning. Once the fuse upstream breaks, or the SPD's window indicates red, electrician should check/replace the SPD.

BT PBM80 150 RM/2P installation diagram:



WARNING:

1. **The device must be installed by electrically skilled person, conforming to national standards and safety regulations.**
2. **It is recommended that installation should be done under power off condition.**