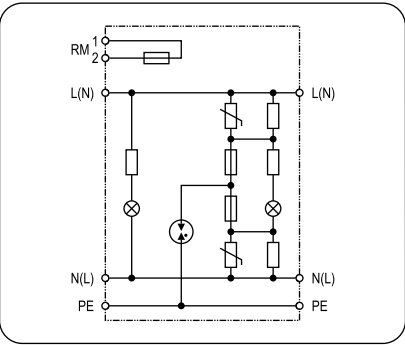




Basic circuit diagram:



• Technical data

Type		BT D 120 RM
Art.-No.		820 301
Rated voltage (max. continuous voltage)	U_c	150V~/-
Nominal current	I_L	16A
Nominal discharge current (8/20)	I_n	2.5kA (L - N) 5kA (L+N - PE)
Combination wave	U_{oc}	6kV (L - N) 10kA (L+N - PE)
Voltage protection level	U_p	$\leq 0.7kV$ (L - N) $\leq 1.1kV$ (L/N - PE)
Response time	t_a	$\leq 25ns$ (L - N) $\leq 100ns$ (L/N - PE)
Max. back up fuse		16A gL/gG
Operating temperature range	T_u	-40°C...+80°C
Cross-sectional area		0.5mm ² ~ 6mm ² solid / 4mm ² flexible
Mounting on		35mm DIN rail
Enclosure material		Purple thermoplastic, UL94-V0
Dimension		1.5 mods
Test standards		IEC 61643-1; GB 18802.1; YD/T 1235.1
Certification		CE (LVD, EMC)
Type of remote signalling contact		Break 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 D 120 RM is designed as fine protection for electronic devices. For installation at LPZ 1-2 or higher, applied in SPD Class III (Class D) for power supply system. Designed according to IEC 61643-1; GB 18802.1; YD/T 1235.1

3. Application

BT D 120 RM provide fine protection for single-phase power of low power supply system; e.g. icebox, air conditioner, copycat, communication equipment, network equipment and so on.

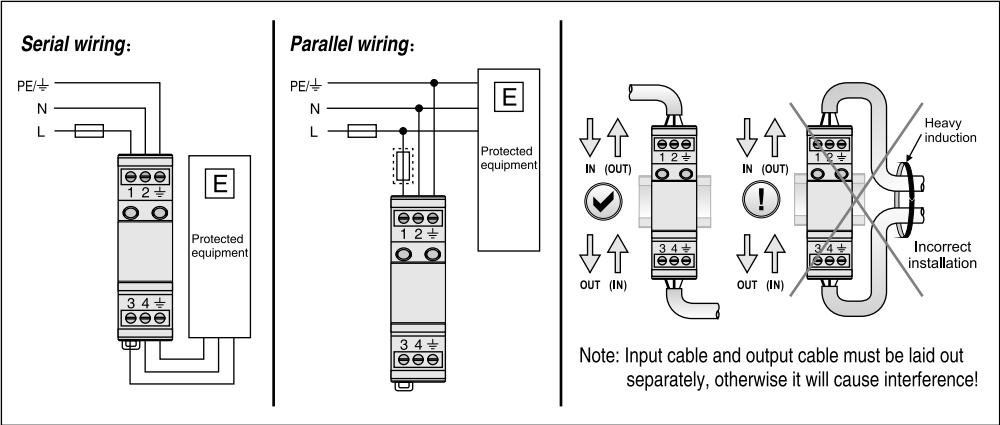
• Installation instruction

According to lightning protection zones concept, for installation at LPZ 1-2 or higher. This surge protective device is usually installed in distribution-box, protecting electronic devices.

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.

BT D 120 RM Installation diagram:



2. Main character

- Green light indicates normal and red indicates fault
- Single-phase protection and disconnector
- Remote signalling connector for fault indication

4. Application environment

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

• Installation steps

1. Mount the SPD on 35 mm DIN rail.
2. Connect conductors, the cross-sectional area of cable must be larger than 4mm². The withstand voltage value of cable is not smaller than AC500V; ensure wiring reliable.
3. If need remote alarm, it should be connected signal lines to remote signal terminal 1 and 2 connected.
4. After above, switch on the power supply and turn on the circuit breaker, if the SPD's indicator light displays green, this indicates the unit is operating normally.

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



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.