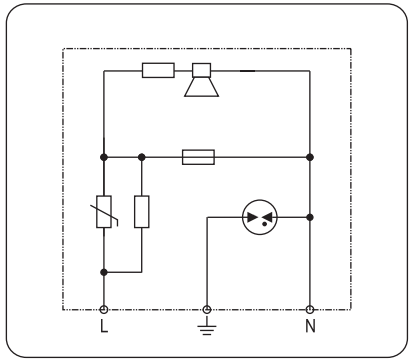
BlitzTrap SPD

BT E 230

Basic circuit diagram



• Technical data

Type		BT E 230
Order number		830 230
Nominal voltage	U_N	230V~
Rated voltage (max. continuous voltage)	U_C	320V~
Nominal discharge current (8/20)	I_n	3kA (L-N) 5kA (L+N-PE)
Combination wave	U_{OC}	6kV (L-N) 10kV (L+N-PE)
Voltage protection level	U_P	≤ 1.15kV (L-N) ≤ 1.50kV (L/N-PE)
Response time	t_A	≤ 25ns (L-N) ≤ 100ns (L/N-PE)
Max. backup fuse		16A gL/gG
Short withstand capability at max. backup fuse		$6kA_{rms}$
Indication of disconnection		Acoustic signal on
Operating temperature range		-25°C...+40°C
Terminal wires		$1mm^2$, length120mm
Enclosure material		Purple thermoplastic, UL94-V0
Test standards		IEC 61643-1; GB 18802.1; YD/T 1235.1
Certification		CE (LVD, EMC)

• Product introduction

1. Summary

BT E 230 is fine protection for devices with DC/AC power supply. When fault occurs, it will sound an alarm. Applied in SPD class III (class D) for protection of electronic equipment from surge. Designed according to IEC 61643-1 / GB 18802.1.

2. Main character

- High discharge capacity, low voltage protection level
- Quick response

3. Application

BT E 230 is fine protection for all devices on the system terminal equipment; applied in Class III power supply system circuit.

4. Application environment

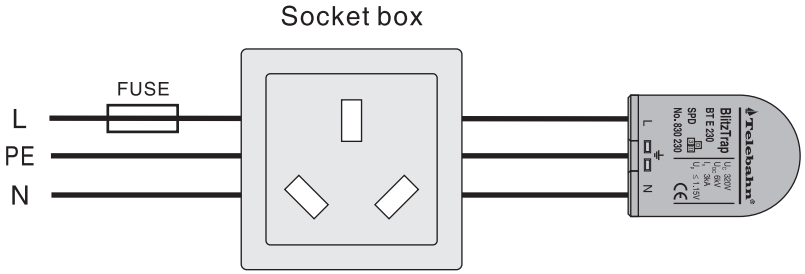
- Temperature: -25°C ~ +40°C
- Relative humidity: ≤ 95% (25°C)

• Installation instruction

BT E 230 can be soldered on printed circuit boards (PCBs) or installed in socket box to protect electronics equipment from surges.

Fuse must be installed at the upstream of the SPD 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 E 230 installation diagram:



Note: "L" to live wire, "N" to the Neutral wire, ⏚ to PE.

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.**