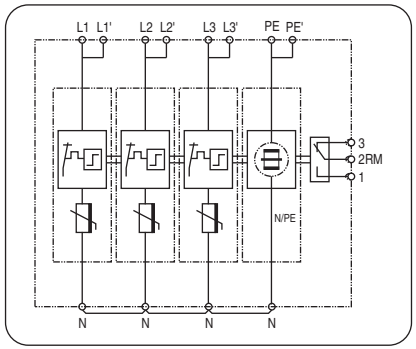
BlitzTrap® *Product Series* SPD

BT BCM30 275 RM/3+N

SPD-Type 1+2
(Class I/1/B)

IEC 61643-11
EN 61643-11
GB 18802.11

Basic circuit diagram:



• Technical data

Type		BT BCM30 275 RM/3+N
Art.-No.		807 332
Rated voltage (max. continuous voltage)	U_C	275V~ (L-N), 255V~(N-PE)
Lightning impulse current (10/350μs)	I_{imp}	30kA (L-N), 100kA (N-PE)
Nominal discharge current (8/20μs)	I_n	60kA (L-N), 100kA (N-PE)
Max. discharge current (8/20μs)	I_{max}	120kA (L-N), 150kA (N-PE)
Voltage protection level	U_p	≤ 2.0kV (L-N), ≤ 1.5kV (N-PE)
Response time	t_A	≤ 25ns (L-N), ≤ 100ns (N-PE)
Max. back up fuse		200A gL/gG
Operating temperature range	T_U	-40°C...+80°C
Min. cross-sectional area		10mm² solid / flexible
Max. cross-sectional area		25~35mm² solid / 50mm² flexible
Mounting on		35mm DIN rail
Enclosure material		Light grey thermoplastic, UL94-V0
Dimension		8 mods
Test standards		IEC 61643-11; EN 61643-11; GB 18802.11
Certification		CE (LVD, EMC), Rohs
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. 1.5mm² solid / flexible

• Product introduction

1. Summary

BT BCM30 275 RM/3+N for installation at LPZ 0_A-1 or higher. Protecting low voltage equipment against lightning and surge damages. Specially designed for TT/TN-S system ("3+1" circuit). Applied in SPD Class I+II (Class B+C) for various three-phase power supply system of lightning current surge protection. Designed according to IEC 61643-11/ EN61643-11/GB 18802.11.

3. Application

BT BCM30 275 RM/3+N is mainly for installing main power distribution-box to discharge direct lightning current. .

2. Main character

- Three-phase protection for TT/TN-S system("3+1"circuit)
- High discharge capacity, quick response, pluggable
- Double thermal disconnection devices, provide more reliable protection
- Multifunctional connection for conductors and busbars
- Windows will change to 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 is usually installed in power supply system sush as power distribution-room, distribution-cabinet and other important power supply system.
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 windows will not indicate red.
2. Mount the SPD on 35 mm DIN rail.
3. Connect conductors, the cross-sectional area of cable must be larger than 10mm². 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 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 ckeck/replace the SPD.

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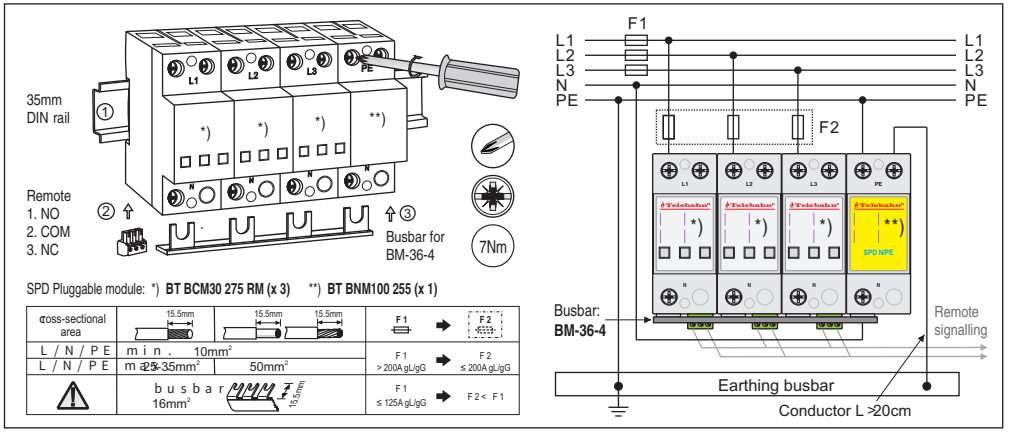

WARNING:

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.**