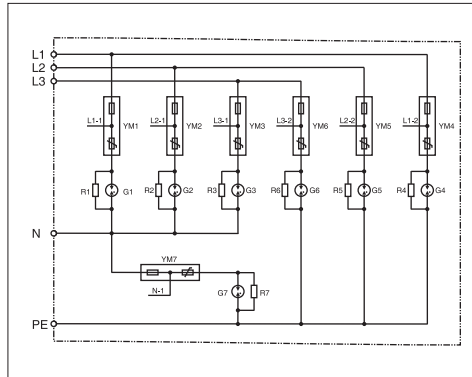


BT 5L BM 415 RM



Basic circuit diagram:



Product introduction

1. Summary

The protector is installed in the LPZ O_B interface and is mainly used in the main distribution system to protect the connected electronic devices from the transient over voltage on the power supply. For example, computer, communication or control equipment.

2. Main character

- All wires (phase line to neutral line, phase line to ground, neutral line to ground full protection mode) voltage protection level is very low.
- Full protection design, able to handle part of lightning current, protection equipment can continue normal operation.
- Repeated protection of innovative multiple thermal fuse technology in a lightning-intensive environment, part of the protection circuit that causes an abnormality or malfunction can be safely disconnected from the power supply system (does not affect the protection performance of the normal part)
- Visual protection status indication, with pre-failure indication and failure indication function.
- With remote alerting function, remote warning signal can be connected to the remote monitoring management system platform buzzer or LED.
- Visual warning indication of neutral/ground line fault due to faulty wiring.
- Solid housing, base can be used as ultra-low inductance grounding metal panel.

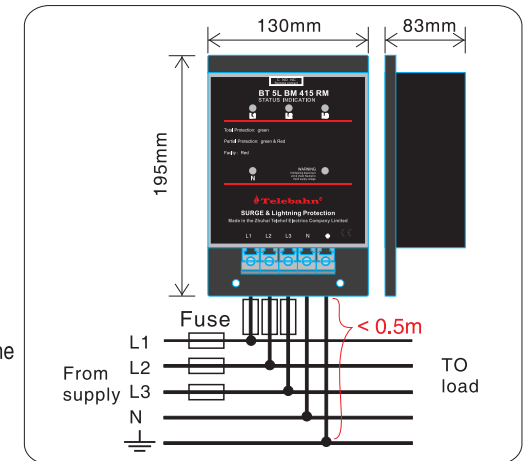
3. Application

Applied in distribution box or sub-distribution box of building.

Installation instruction

Reminders:

1. Check the voltage between neutral and earth/ground, it should not exceed to 10 volts. If the voltage exceed to 10 volts, the installation is not safe.
2. BT 5L BM 415 RM are connected in parallel with the power supply to be protected.
3. L1, L2, L3, & N/Ground must be connected to Phase /Line, neutral & earth respectively.
4. In no neutral connection, the N terminal should be connected to it's Earth/Ground. Other power supplies, the voltage between phase and earth/neutral may exceed the rating of the BT 5L BM 415 RM. Therefore, the supplies phase to earth voltage must be checked always before the installation.
5. After connecting the BT 5L BM 415 RM, Switch the power supply on. Check the green LED per phase and neutral is lit. Then, the unit is now fully operational. Furthermore, the line L1、L2、L3 and N should not be laid out together with the PE line. Cover the terminal cover after finishing wiring.



Status indication:

Green : **Fully protected** ; Green & Red : **Partially protected** ; Red : **Faulty**

When the warning light is illuminated there is an excessive voltage present between Neutral and Earth/Ground.

	WARNING:
	<ol style="list-style-type: none"> 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.

Technical data

Type		BT 5L BM 415 RM
Order number		840 202
Nominal voltage (phase line-neutral line)	U_o	240V~
Maximum continuous operating voltage (phase line-neutral line)	U_c	280V
Transient overvoltage TOV	U_T	350V
Short-circuit withstand capability		25kA/50 Hz
Operating voltage		346-484V
Frequency range	F	47-63 Hz
Backup fuse		$\leq 125A$
Leakage current (to the Ground)		$< 250\mu A$
Indicator circuit Current		$< 10mA$
Lightning impulse current (10/350)	I_{imp}	6.25kA
Total lightning impulse current (10/350)	I_{total}	12.5kA
Nominal discharge current 8/20 μS (per mode)	I_n	20kA
residual voltage	U_p	$< 1.2kV$
Maximum discharge current (per mode)	I_{max}	40kA
Voltage protection level 1.2/50US 6KV @ 3KA	U_p	600V
Operating temperature	T_u	-40°C ... +80°C
Connection Type		Screw terminals
Wiring Conductor cross section		10mm ² ~16mm ²
Dimension		195 x 130 x 83 (mm)
Test standards		IEC 61643-11; GB 18802.1; YD/T 1235.1
Certification		CE (LVD, EMC)