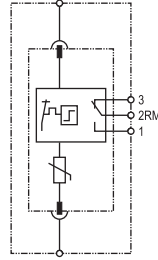




Basic circuit diagram:



• Technical data

Type		LG M40 T2 275 RM
Art.-No.		810 803
Rated voltage (max. continuous voltage)	U_c	275V- / 350V-
Nominal discharge current (8/20)	I_n	20kA
Max. discharge current (8/20)	I_{max}	40kA
Voltage protection level at I_n	U_p	$\leq 1.25kV$
Voltage protection level at 5kA	U_p	$\leq 1kV$
Response time	t_A	$\leq 25ns$
Max. back up fuse		125A gL/gG
Operating temperature range	T_u	-40°C...+80°C
Cross-section area		1.5mm ² ~ 25mm ² solid / 35mm ² flexible
Mounting on		35mm DIN rail
Enclosure material		Light grey thermoplastic, UL94-V0
Dimension		1 mod
Test standards		YD/T 1235.1-2002; GB 18802.1-2002; IEC 61643-1:1998-02
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

LG M40 T2 275 RM is designed for protecting low voltage devices from surge in power supply system. For installation at LPZ 0_s-1 or higher, applied in SPD Class II (Class C) for various power supply system.

Designed according to GB 18802.1-2002 / IEC 61643-1:1998-02.

3. Application

LG M40 T2 275 RM is applied in various industrial and civil power supply systems, providing II lightning protection.

• Installation instruction

According to lightning protection zones concept, for installation at LPZ 0_s-1 or higher. This surge protection is usually installed in distribution-box, protecting downstream devices. For TN system, usually use 3 or 4 pieces of this product, and for TT system, usually coordinate "3+1" system 1 (N/PE) or 3 pieces of this product; "1+1" system 1 (N/PE) or 1 piece of this product (please also see diagram below).

Fuse or circuit breaker must be installed at the upstream of the SPD or the lightning arrester to make sure that 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.

2. Main character

- Standard single chip structure, pluggable
- Consists of varistor, thermal disconnection devices
- High discharge capacity, quick response
- Double thermal disconnector device, providing more reliable protection
- Multifunctional terminal for connecting conductors and busbar
- Green window will change to red when fault occur and also provide remote alarm control at the same time

4. Application environment

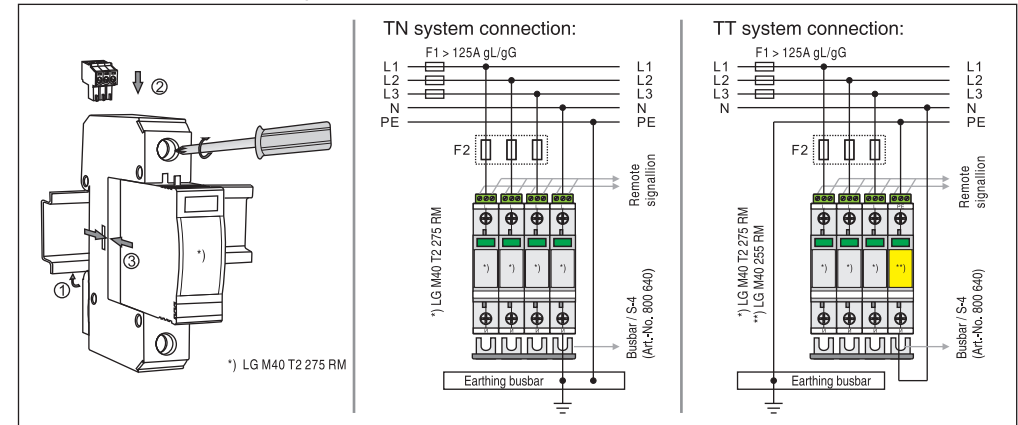
- Temperature: -40°C ~ +80°C
- Relative humidity: $\leq 95\%$ (25°C)

• Installation steps

1. Check the product for integrity of the package; make sure the product window indicate green.
2. Mount the SPD on 35 mm DIN rail.
3. Connect conductors, the cross-section area of cable must be larger than 6mm². 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 3, or 2 and 3 (When normal, 1 and 3 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 state, especially after lightning. Once the fuse or circuit breaker upstream break, or the SPD's window indicate red, electrician should check/replace the SPD.

LG M40 T2 275 RM 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.