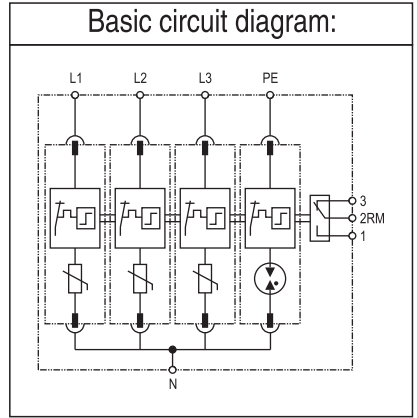




# LG M20 T2 275 RM/3+N



## • Technical data

Type	LG M20 T2 275 RM/3+N	
Art.-No.	810 857	
Nominal a.c. voltage	$U_N$	230V~ /440V~
Rated voltage (max. continuous voltage)	$U_c$	275V~ (L-N)    255V~ (N-PE)
Nominal discharge current (8/20)	$I_n$	10kA (L-N)    20kA (N-PE)
Max. discharge current (8/20)	$I_{max}$	20kA (L-N)    40kA (N-PE)
Voltage protection level at $I_n$	$U_p$	$\leq 1.0kV$ (L-N) $\leq 1.5kV$ (N-PE)
Response time	$t_A$	$\leq 25ns$ (L-N) $\leq 100ns$ (N-PE)
Max. back up fuse	63A gL/gG	
TOV voltage	1200V/200ms(N-PE)	
Operating temperature range	$T_u$	-40°C...+80°C
Cross-sectional area	1,5mm <sup>2</sup> ~ 25mm <sup>2</sup> solid / 35mm <sup>2</sup> flexible	
Mounting on	35mm DIN rail	
Enclosure material	Light gray thermoplastic, UL94-V0	
Dimension	4 mods	
Test standards	IEC 61643-11; GB 18802.11	
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 <sup>2</sup> solid / flexible	

## • Product introduction

### 1. Summary

LG M20 T2 275 RM/3+N is specially designed for TT and TN-S system ("3+1" circuit). For installation at LPZ 0<sub>B</sub>-1 or higher, used in power supply system such as power distribution-room,distribution-cabinet and other important power supply system. Designed according to EC 61643-11; GB 18802.11;

### 3. Application

LG M20 T2 275 RM/3+N is applied in TT system ("3+1" circuit).

## • Installation instruction

According to lightning protection zones concept, for installation at LPZ 0<sub>B</sub>-2 or higher. This surge protective device is usually installed in distribution-box or feeder bus of UPS, protecting devices or equipment downstream.

Fuse 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

- Three-phase protection for TT/TN-S system("3+1" circuit)
- High discharge capacity, quick response, pluggable
- Double thermal disconnection device, providing more reliable protection
- Prewired unit, integrated base design
- Green window will change when fault and also provide remote alarm control at the same time

## 4. Application environment

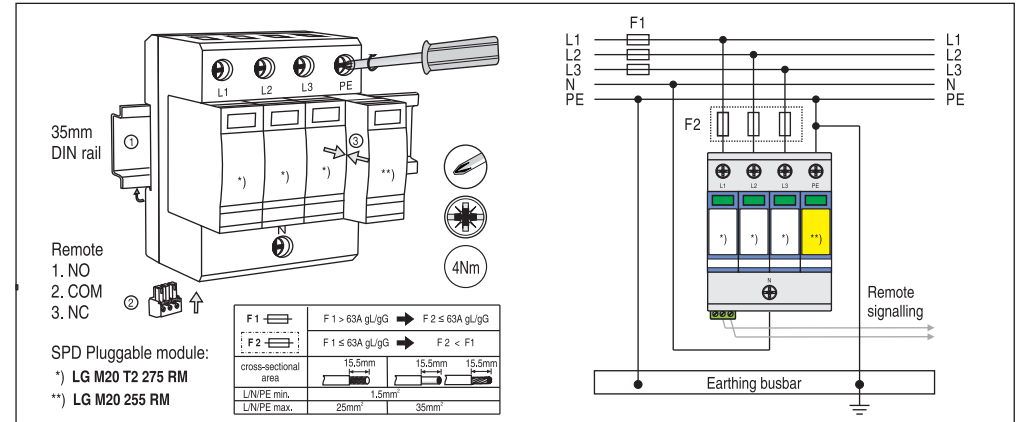
- Temperature: -40°C...+80°C
- Relative humidity:  $\leq 95\%$  (25°C)

## • 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 6mm<sup>2</sup>. 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 (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's window display green, this indicates the unit is operating normally.

**Regularly inspect the operating status, especially after lightning. Once the fuse upstream break, or the SPD's window not indicator green, electrician should check/replace the SPD.**

## 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.