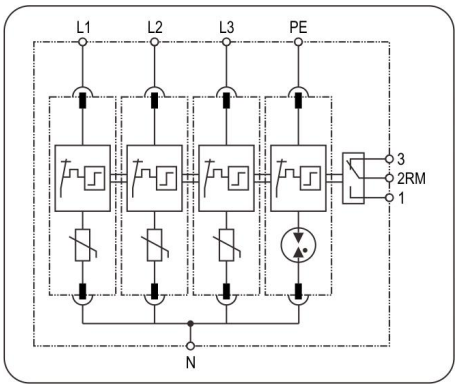

Basic circuit diagram

Product introduction

1. Summary:

RL 320-50M2-31R-B is for installation at LPZ 0_A-2 or higher, protecting low voltage devices from surge damages, specially designed for TT/TN-S system ("3+1" circuit). Applied in SPD Class I+II (Class B+C) for various power supply system of lightning current surge protection. Designed according to IEC 61643-11.

2. Main character

. Three-phase protection for TT/TN-S system ("3+1" circuit).
. High discharge capacity, quick response, pluggable
. Double thermal disconnector devices, providing more reliable protection
. Green window will change to red when fault occurs and also provide remote alarm control contact at the same time.

3. Application

RL 320-50M2-31R-B is applied in Class I+II (Class B+C) TT system.

4. Application environment

Temperature: -40℃...+80℃
Relative humidity: ≦95% (25°C)

Technical data

Model No		RL 320-50M2-31R-B
Art.-No.		923114
Rated voltage (max. continuous a.c voltage)	U_C	320V (L-N), 255V (N-PE)
Lightning impulse current (10/350us)	Iimp	8KA (L-N),25KA (N-PE)
Nominal discharge current (8/20μs)	I_n	30KA (L-N), 40KA (N-PE)
Max. discharge current (8/20μs)	Imax	50KA (L-N), 65KA (N-PE)
Voltage protection level	U_P	≤ 1.3KV (L-N), ≤ 1.5KV (N-PE)
Response time	T_A	≤ 25ns (L-N), ≤ 100ns (N-PE),
Max. back up fuse		125A gL/gG
MOV Maximum energy (Joule)		920J (L-N)
Operating temperature range		-40℃...+80℃
Cross-sectional area		25mm² solid/35 mm² flexible
Mounting on		35mm DIN rail
Enclosure material		UL94-V0
Degree of protection		IP20

Dimension		4 mods
Type of remote signaling 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 signaling contact		Max. 1.5mm^2 solid/flexible
Test standards		IEC 61643-11
Certification		CE

Installation instruction

According to lightning protection zones concept, for installation at LPZ 0_A-2 or higher, this surge protector is usually installed in distribution-box or feeder bus of UPS, protecting devices or equipment downstream.

Fuse must be installed at the upsteam of the SPD or the lightning protector 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 window not indicate red.
2. Mount the SPD on the 35mm DIN rail.
3. Connect conductors, the cross-sectional area of the cable must be larger than 6mm^2. The withstand voltage value of the 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's window indicate green, this indicates the unit is operating normally.

Regularly inspect the operating status, especially after lightning. Once the fuse or circuit breaker upstream break or the SPD's window indicates red, electrician should check/replace the SPD

Installation diagram: