

Monopolar Class I (IEC 61.643-1) with Spark Gap.

- High drain capacity impulse currents at 10/350 μ s waveform;
- Supportability to high interruption subsequent current;
- Direct connection to electrical bus at IEC or NEMA standard distribution boards.

Applications

Protection of electronic and professional equipments directly connected to the electric power lines against overvoltages originated by atmospheric discharge (lightning) or electrical switching of power lines.

Suitable for installation between line and ground, and between neutral and ground and in distribution or control boards.



SCL is a monopolar Class I SPD, a commutator voltage type, made of Carbon Spark Gap (CSG) with partial currents drain capacity of atmospheric discharge origin up to 60 kA at 10/350 μ s waveform. For many times it may actuate without the need of substitution. An open circuit is its end of lifetime. Its modular conception makes easy to connect many SPD together

in a single mounting plan, directly or not to the electrical bus, as well as to other components of the electric circuit distribution boards. SCL's fixing system is simple and fast, been done on standard 35 mm DIN rail (European Standard). SCL has a thermoplastic isolating housing, fireless propagating and with V-0 flammability degree, according to UL 94.

| Characteristics | Un. | SCL |
|--|-----------------|---|
| Standards | - | IEC 61643-1 / UL 1449 |
| Response time | ns | < 100 |
| Thermal protection | - | NA |
| Back-up fuse | A | 315 - gL/gG Class |
| Maximum short-circuit current without back-up fuse | kA | 80 |
| Operation temperature | °C | -40... +80 |
| Cross-section | mm ² | 4...25 |
| Mounting type | - | 35 DIN rail |
| Protection type acc. to IEC 60 529/ EN 60 529 | IP | 20 |
| Housing | - | Reinforced Polyamide box with glass fiber UL 94 V-0 |
| DIN 43 880 Dimension | Mod. | 2 |
| Dimension | mm | 90 x 67 x 36.2 |
| Remote signaling | - | NA |

Performance Characteristics:

| SCL | Maximum Continuous Operation Voltage | | Nominal Current at 8/20 μ s | Maximum Nominal Current at 8/20 μ s | Maximum Impulse Current at 10/350 μ s | Subsequent Interruption Current | Specific Energy | Protection Level | Weight |
|---------------|--------------------------------------|-------|---------------------------------|---|---|---------------------------------|------------------|------------------|--------|
| Model | U _c | | I _N | I _{MAX} | I _{IMP} | I _{FI} | W/R | U _p | g |
| | AC | DC | | | | | | | |
| SCL 275V 60kA | 275 V | 350 V | 60 kA | 120 kA | 60 kA | 20 kA | 900 kJ/ Ω | < 1.3 kV | 224 |
| SCL 440V 60kA | 440 V | 615 V | 60 kA | 120 kA | 60 kA | 3.5 kA | 900 kJ/ Ω | < 2.5 kV | 224 |

Electrical Circuit:



Mechanical Drawing:

