

## DCL SLIM

Monopolar Class II SPD (IEC 61643-1) with Silicon Avalanche Diode (SAD) technology associated to a thermal (overtemperature) and an electrical (overcurrent) protection device.

- The fastest protection among all technologies;
- Almost infinite lifetime for surge currents smaller than the maximum supported;
- Direct connection to electrical bus at IEC or NEMA standard distribution boards;
- Optional remote signaling.

### 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 neutral or between neutral and ground in distribution or control boards.

DCL SLIM is a monopolar, Class II SPD, a voltage limiter device type, made of Silicon Avalanche Diode (SAD Technology), with surge current drain capacity up to 20 kA, at 8/20  $\mu$ s waveform. It is provided with internal disconnecter to cut off the SPD from the electric line at the end of its lifetime or if an electrical disturbance occurs beyond its capacity to support it and a mechanical signaling system, by means of ON and OFF service indicator, that shows the status of operation.

It can also be optionally made with reverse electrical contact for remote signaling.



For many times it may actuate without the need of substitution. 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. DCL SLIM's fixing system is simple and fast, been done on standard 35 mm DIN rail (European Standard) or by NEMA grips (American Standard).

DCL SLIM has a thermoplastic isolating housing, fireless propagating and with V-0 flammability degree, according to UL 94.

Characteristics	Un.	DCL SLIM
Standards	-	IEC 61643-1 / UL 1449
Response time	ps	1
Thermal protection	-	yes
Back-up fuse	A	63...100 - gL/gG Class
Maximum short-circuit current without back-up fuse	kA	5
Operation temperature	°C	-40... + 80
Cross-section	mm <sup>2</sup>	4...25
Mounting type	-	35 DIN rail or NEMA grips
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.	1
Dimension	mm	90 x 64 x 17.5
Remote signaling	-	Optional
Electrical characteristics	-	120 VAC/1A 24VDC/1A
Cross-section	mm <sup>2</sup>	0.5...1.5
Weight	g	4

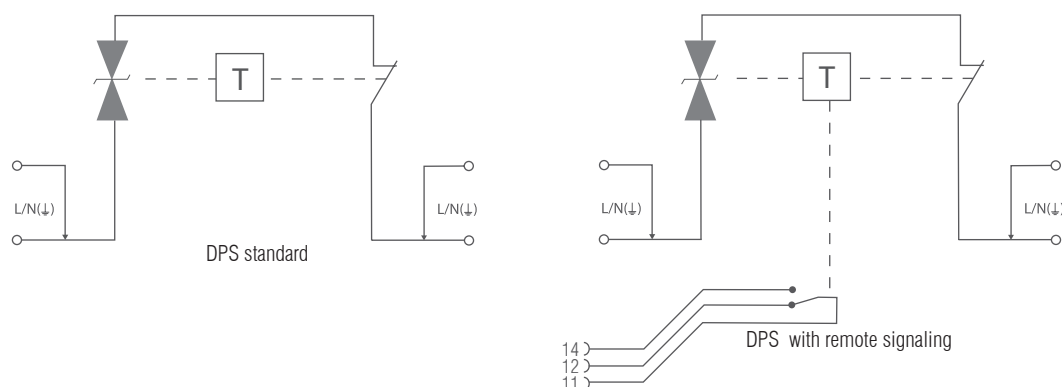
## Performance Characteristics:

DCL SLIM	Maximum Continuous Operation Voltage		Nominal Current at 8/20 $\mu$ s	Maximum Surge Current at 8/20 $\mu$ s	Maximum Energy Absorption at 10/1000 $\mu$ s	Protection Level	Weight
Model	U <sub>c</sub>		I <sub>N</sub>	I <sub>MÁX</sub>	W <sub>MÁX</sub>	U <sub>p</sub>	g
	Ac	Dc					
DCL 175V 5kA SLIM	175 V	225 V	5 kA	5 kA	257 J	435 V	84
DCL 175V 10kA SLIM	175 V	225 V	10 kA	10 kA	288 J	435 V	90
DCL 175V 20kA SLIM	175 V	225 V	20 kA	20 kA	576 J	435 V	95
DCL 275V 5kA SLIM	275 V	350 V	5 kA	5 kA	346 J	585 V	86
DCL 275V 10kA SLIM	275 V	350 V	10 kA	10 kA	648 J	586 V	90
DCL 275V 20kA SLIM	275 V	350 V	20 kA	20 kA	1296 J	585 V	100

NOTE: In order to specify the DCL with REMOTE SIGNALING, just put "SR" together with the name of the product.

Example.: DCL xxxV xxkA SLIM/SR

## Electrical Circuit:



## Mechanical Drawing:

