

VCL 140 kA SLIM

Monopolar Class I/II SPD (IEC 61.643-1) with Metal Oxide Varistor (MOV) technology associated to a thermal (overtemperature) and an electrical (overcurrent) protection device.

- High drain capacity impulse currents at 10/350 μ s waveform;
- Supportability to 5 kA short-circuit current;
- Parallel protection by means of 3 blocks of independent varistors;
- 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 neutral or between neutral and ground in distribution or control boards.

VCL 140 kA SLIM is a monopolar Class I/II SPD, a voltage limiter device type, made of Metal Oxide Varistor (MOV Technology), with surge current drain capacity up to 14 kA at 10/350 μ s waveform and up to 140 kA at 8/20 μ s waveform.

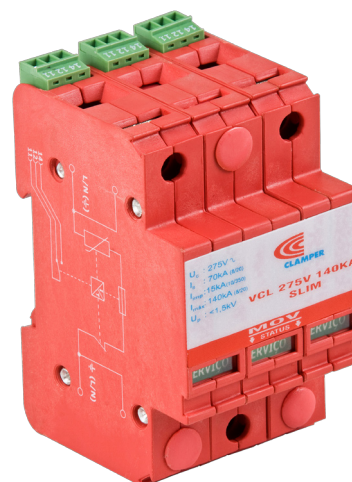
It is provided with internal disconnecter to cut off the SPD from the electric line at the end of its lifetime or if an electrical disturbance occurs beyond its capacity to support it and a mechanical signaling system, by means of ON and OFF service indicator, that shows the status of operation.

It can also be optionally made with reserve 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. VCL's fixing system is simple and fast, been done on standard 35 mm DIN rail (European Standard).

VCL 140 kA SLIM has a thermoplastic isolating housing, fireless propagating and with V-0 flammability degree, according to UL 94.



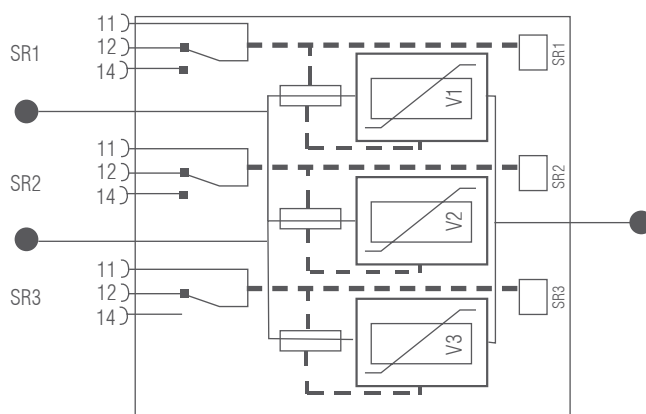
Characteristics	Un.	VCL 140 kA SLIM
Standards	-	IEC 61643-1 / UL 1449
Response time	ns	< 25
Thermal protection	-	yes
Back-up fuse	A	63...100 - gL/gG Class
Maximum short-circuit current without back-up fuse	kA	5
Operation temperature	°C	-40... + 80
Cross-section	mm ²	4...25
Mounting type	-	35 DIN rail 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.	3
Dimension	mm	90 x 64 x 54
Remote signaling	-	Optional
Electrical characteristics	-	120 VAC/1A 24VDC/1A
Cross-section	mm ²	0.5...1.5
Weight	g	4

Performance Characteristics:

VCL SLIM – Class I / II	Maximum Continuous Operation Voltage		Nominal Current at 8/20 μ s	Maximum Surge Current at 8/20 μ s	Maximum Surge Current at 10/350 μ s	Maximum Absorbed Energy at 10/1000 μ s	Reference Voltage at 1mA	Protection Level	Residual Voltage at 5 kA	Weight
Model	U_c		I_N	I_{MAX}	I_{IMP}	W_{MAX}	U_{REF}	U_p	U_{RES}	g
	AC	DC								
VCL 175V 140 kA SLIM	175 V	225 V	70 kA	140 kA	14 kA	5040 J	0, 27 kV	< 0,75 kV	0,55 kV	330
VCL 275V 140 kA SLIM	275 V	350 V	70 kA	140 kA	14 kA	7680 J	0,43 kV	< 1,50 kV	0,90 kV	378
VCL 460V 140 kA SLIM	460 V	615 V	70 kA	140 kA	14 kA	10293 J	0,75 kV	< 2,50 kV	1,70 kV	420

NOTE: In order to specify the VCL with REMOTE SIGNALING, just put "SR" together with the name of the product.
Example.: VCL xxxV 140 kA SLIM/SR

Electrical Circuit:



Mechanical Drawing:

