

REFIL VCL SP

Plug for Monopolar Class II SPD (IEC 61643-1) with Metal Oxide Varistor (MOV) technology associated to a thermal (overtemperature) and an electrical (overcurrent) protection device.



REFIL VCLSP is a plug for monopolar Class II SPD, a voltage limiter device type, made of Metal Oxide Varistor (MOV Technology), with surge current drain capacity up to 45 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.

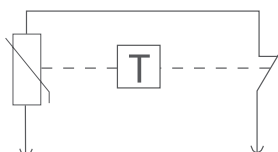
For many times it may actuate without the need of substitution. REFIL VCL SP has a thermoplastic isolating housing, fireless propagating and with V-0 flammability degree, according to UL 94.

Characteristics	Un.	REFIL VCL SP
Standards	-	IEC 61643-1 / UL 1449
Response time	ns	< 25
Thermal protection	-	yes
Maximum short-circuit current without back-up fuse	kA	NA
Operation temperature	°C	-40....+80
Mounting type	-	Plug for VCL base
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	45 x 57,6 x 17.5

Performance Characteristics:

REFIL VCL SP	Maximum Continuous Operation Voltage		Nominal Current at 8/20 μ s	Maximum Surge Current at 8/20 μ s	Maximum Energy Absorption at 10/1000 μ s	Maximum Dissipation Power	Reference Voltage	Protection Level	Residual Voltage at 5 kA	Weight
Model	U _c		I _N	I _{MAX}	W _{MAX}	P _{MAX}	U _{REF}	U _P	U _{RES}	g
	AC	DC								
REFIL 75V 20KA VCL SP	75 V	100 V	10 kA	20 kA	145 J	1,0 W	120 V	0,4 kV	0,33 kV	39
REFIL 75V 30KA VCL SP	75 V	100 V	10 kA	30 kA	280 J	1,2 W	120 V	0,5 kV	0,33 kV	43
REFIL 75V 45KA VCL SP	75 V	100 V	20 kA	45 kA	340 J	1,4 W	120 V	0,6 kV	0,30 kV	45
REFIL 175V 20KA VCL SP	175 V	225 V	10 kA	20 kA	350 J	1,0 W	270 V	0,8 kV	0,70 k V	41
REFIL 175V 30KA VCL SP	175 V	225 V	10 kA	30 kA	700 J	1,2 W	270 V	0,8 kV	0,60 kV	46
REFIL 175V 45KA VCL SP	175 V	225 V	20 kA	45 kA	840 J	1,4 W	270 V	1,2 kV	0,60 kV	50
REFIL 275V 20KA VCL SP	275 V	350 V	10 kA	20 kA	530 J	1,0 W	430 V	1,2 kV	1,10 kV	43
REFIL 275V 30KA VCL SP	275 V	350 V	10 kA	30 kA	1060 J	1,2 W	430 V	1,3 kV	1,00 kV	51
REFIL 275V 45KA VCL SP	275 V	350 V	20 kA	45 kA	1280 J	1,4W	430 V	1,5 kV	1,00 kV	55
REFIL 320V 20KA VCL SP	320 V	420 V	10 kA	20 kA	680 J	1,0 W	510 V	1,5 kV	1,30 kV	44
REFIL 320V 30KA VCL SP	320 V	420 V	10 kA	30 kA	1350 J	1,2 W	510 V	1,5 kV	1,30 kV	52
REFIL 320V 45KA VCL SP	320 V	420 V	20 kA	45 kA	1620 J	1,4 W	510 V	1,8 kV	1,30 kV	59
REFIL 385V 20KA VCL SP	385 V	505 V	10 kA	20 kA	1025 J	1,0 W	620 V	1,8 kV	1,50 kV	46
REFIL 385V 30KA VCL SP	385 V	505 V	10 kA	30 kA	1390 J	1,2 W	620 V	1,7 kV	1,50 kV	56
REFIL 385V 45KA VCL SP	385 V	505 V	20 kA	45 kA	1660 J	1,4 W	620 V	2,0 kV	1,50 kV	62
REFIL 460V 20KA VCL SP	460 V	615 V	10 kA	20 kA	810 J	1,0 W	750 V	2,5 kV	2,00 kV	47
REFIL 460V 30KA VCL SP	460 V	615 V	10 kA	30 kA	1610 J	1,2 W	750 V	2,5 kV	1,90 kV	60
REFIL 460V 45KA VCL SP	460 V	615 V	20 kA	45 kA	1930 J	1,4 W	750 V	2,5 kV	1,90 kV	67

Electrical Circuit:



Mechanical Drawing:

