

SP1-D (Class III Protection)

Application



SP1-D series SPD is suitable for TT, IT, TN-S, TN-C-S power supply system with AC 50/60Hz, 230/400V and below. Its design based on IEC6143-1, GB18802.1 and GB50057 standard requirements, can discharge 20KA lightning over current, normally installed at the incoming low voltage distribution board of buildings.

D type lightning current SPD used as equipotential connection during lightning, installed at junction area of LPZ1, LPZ2 and LPZn zone, normally installed at the front of distribution box of residence, computer center, information equipment, electronic equipment and control equipment or in the nearest socket box.

Main Technical Parameters

Classification		SP1-D (Class III protection)							
Item & Data									
Poles		1P, 2P, 1P+N, 3P, 3P+N, 4P							
Rated Operating Voltage Un(V)		230/400							
Nominal Discharge Current In(8/20μs)KA		5				10			
Max. Discharge Current Imax(8/20μs)KA		10				20			
Max. Continuous Operating Voltage Uc(V)		275	320	385	420	275	320	385	420
U1mA Varistor Voltage (V)		430	510	620	680	430	510	620	680
Protection Level Up(KV)		<1.0	<1.2	<1.2	<1.2	<1.2	<1.5	<1.5	<1.5
Response time (ns)		<25							
Leakage Current 75% Uc 1mA		<20μA							
Test classification		Class II							
Protection Degree		IP20							
Max. Ambient Temperature		-40℃ ~+80℃							
Insulation enclosure material		PBT/PA66							
Flame Resistance Grade, confirm to UL94		VO							
Installation Mode		35mm standard rail							
Enclosure Color		Yellow/Gray							
Suggested Fuse or circuit breaker (A)		10~16							
Conductor cross section (mm ²)	Phase line, Neutral line	2.5-10 hard wire							
	Earthing Line	4-10 dual color							
Standard		GB18802.1 GB18802.21 IEC61643-1 IEC61643-21 UL1449 ed.2							