

Product Datasheet

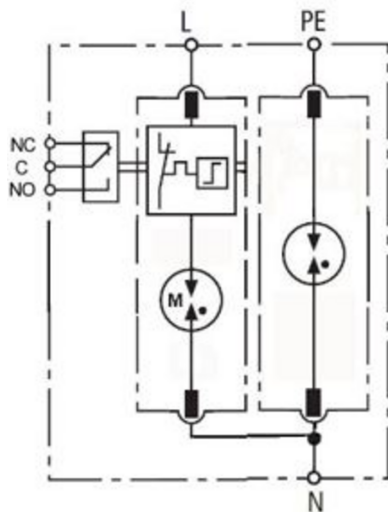
SG1-50-320-N



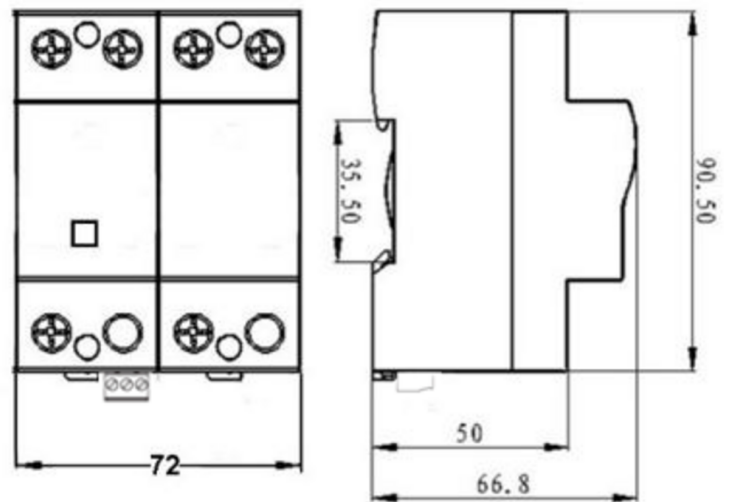
Spark Gap Surge Diverter

Spark Gap Surge Diverters provide point of entry protection for main switchboards where rugged direct strike protection is required. SG products can withstand a continuous overvoltage of 440V, making them ideal for unstable supply conditions where power system faults may occur.

Wiring



Dimensions



Standards

IEC 61643-11:2011
AS/NZS 1768:2007
UL 1449 3rd edition
IEEE 62.41.2:2002

SPD connected to low-voltage power systems - Type 1
A.C. power system SPD - Cat C
Low voltage SPD - Type 2 (distribution)
Low voltage SPD - Cat B (indoor)

Product Datasheet

Electrical Specifications

Connection type		Shunt
Modes of protection		L-N, N-PE
Number of ports		1
Number of phases		1
Location		Indoor
Nominal voltage	U_0	230VAC
Short circuit withstand level	I_{SSCR}	50kA
Maximum backup fuse		500A

Other Specifications

Product Code		SG1-50-320-N
--------------	---	--------------

Electrical (L-N) Specifications

Maximum continuous voltage AC	U_c	320VAC
Maximum discharge current (8/20 μ s)	I_{max}	120kA
Nominal discharge current (8/20 μ s)	I_n	30kA
Lightning impulse current (10/350 μ s)	I_{imp}	30kA
Voltage protection level (6kV 1.2/50 μ s)	U_p	<1800V
Response time	t_A	<100ns

Electrical (N-PE) Specifications

Maximum continuous voltage	U_c	255VAC
Maximum discharge current (8/20 μ s)	I_{max}	200kA
Lightning impulse current (10/350 μ s)	I_{imp}	120kA
Nominal discharge current (8/20 μ s)	I_n	100kA
Voltage protection level (6kV 1.2/50 μ s)	U_p	<1500V
Response time	t_A	<100ns
Follow current interrupt rating	I_{fi}	100A

Indication Specifications

Display		Mechanical Flag
Alarm		SPDT power and thermal failure
Alarm isolation		4kV

Mechanical Specifications

Minimum operating temperature		-40°C
Maximum operating temperature		80°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		TS35 DIN Rail
Environmental rating		IP20
Enclosure material		Thermoplastic
Enclosure finish		Textured Black
Terminal capacity - power		35mm²
Terminal screw torque - power		2Nm
Terminal capacity - alarms		2.5mm²
Terminal screw torque - alarms		0.5Nm
Length		91mm
Width		72mm
Height		67mm

Shipping Specifications

Weight		485g
Customs tariff		85363000, 85363010