SSP3 - Series Surge Protectors

Series Surge Protectors - Three Phase

Novaris SSP protectors are suitable for installation in circuits up to 63A. The SSP range has been engineered to provide excellent performance in an economical package.

Compact design

Their compact design makes them an ideal choice for space restricted applications.

All Mode Protection

Protection is provided for all combinations of lines (L-N, L-PE, N-PE) ensuring the maximum level of protection is achieved at all times.

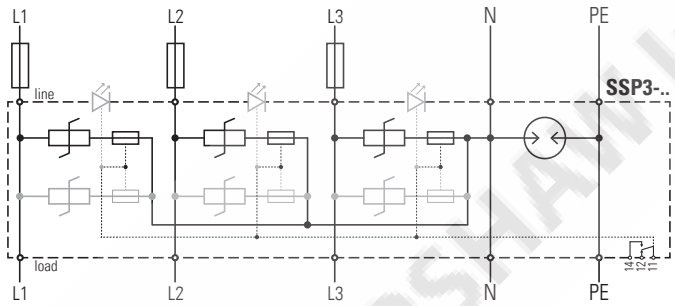
Safe Metal Enclosure

Novaris surge protection products are housed in safe, all metal enclosures. In the event of a prolonged overvoltage they will not catch fire or explode.

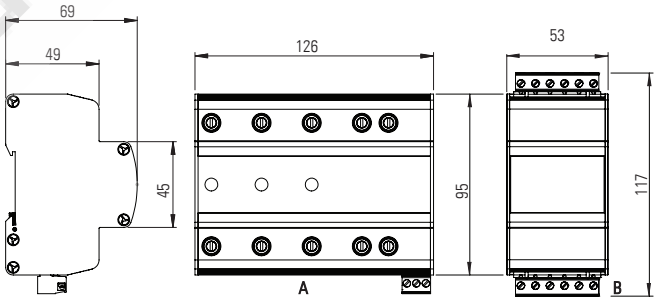
Installation independent performance

Series surge protectors house the shunt (parallel) connection of the protection components internally within the device. This reduces the connection impedance to a minimum to guarantee optimal performance in all installations.

Diagram / Installation



Dimensions



Ordering Information

	Low exposure		Medium exposure		Options	
	Single Phase	Three Phase	Single Phase	Three Phase	SPDT alarm contact	Polycarbonate enlosure
Max Load Current						
10 A	–	SSP3-10-10-275	–	–	-A (Passive NC)	-P
20 A	SSP1-20-50-275	SSP3-20-50-275	SSP1-20-100-275	SSP3-20-100-275	-A	-P
32 A	SSP1-32-50-275	SSP3-32-50-275	SSP1-32-100-275	SSP3-32-100-275	-A	-P
63 A	SSP1-63-50-275	SSP3-63-50-275	SSP1-63-100-275	SSP3-63-100-275	-A	-P

Product Specifications

Model		SSP3-10-10-275	SSP3-20-50-275	SSP3-20-100-275	SSP3-32-50-275	SSP3-32-100-275	SSP3-63-50-275	SSP3-63-100-275
Electrical Specifications								
Connection type		Series	Series	Series	Series	Series	Series	Series
Modes of protection		L-N, L-PE, N-PE	L-N, L-PE, N-PE	L-N, L-PE, N-PE	L-N, L-PE, N-PE	L-N, L-PE, N-PE	L-N, L-PE, N-PE	L-N, L-PE, N-PE
Phases		3	3	3	3	3	3	3
Nominal voltage	U_o	230 VAC	230 VAC	230 VAC	230 VAC	230 VAC	230 VAC	230 VAC
Short circuit withstand level	I_{SCCR}	25 kA	25 kA	25 kA	25 kA	25 kA	25 kA	25 kA
Maximum backup fuse (gL/gG)		10 A	20 A	20 A	32 A	32 A	63 A	63 A
L-N								
Maximum continuous voltage	U_C	275 VAC	275 VAC	275 VAC	275 VAC	275 VAC	275 VAC	275 VAC
Maximum load current	I_L	10 A	20 A	20 A	32 A	32 A	63 A	63 A
Maximum voltage Drop (% of U_o)	ΔU	0	0	0	0	0	0	0
Maximum discharge current (8/20 µs)	I_{max}	10 kA	50 kA	100 kA	50 kA	100 kA	50 kA	100 kA
Lightning impulse current (10/350 µs)	I_{imp}	–	–	–	–	–	–	–
Nominal discharge current (8/20 µs)	I_n	5 kA	20 kA	40 kA	20 kA	40 kA	20 kA	40 kA
Voltage protection level @ 3 kA 8/20 µs	U_p	< 800 V	< 800 V	< 800 V	< 800 V	< 800 V	< 800 V	< 800 V
Voltage protection level @ I_n	U_p	< 1300 V	< 1300 V	< 1700 V	< 1300 V	< 1700 V	< 1300 V	< 1700 V
Response time	t_A	< 5 ns	< 5 ns	< 5 ns	< 5 ns	< 5 ns	< 5 ns	< 5 ns
Temporary overvoltage (TOV)	U_T	440 V / 5 sec (Withstand)						
N-PE								
Maximum continuous voltage	U_C	255 V	255 VAC	255 VAC	255 VAC	255 VAC	255 VAC	255 VAC
Maximum discharge current (8/20 µs)	I_{max}	25 kA	60 kA	60 kA	60 kA	60 kA	60 kA	60 kA
Lightning impulse current (10/350 µs)	I_{imp}	–	–	–	–	–	–	–
Nominal discharge current (8/20 µs)	I_n	10 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA
Voltage protection level @ 1 kV/ µs	U_p	< 1200 V	< 700 V	< 700 V	< 700 V	< 700 V	< 700 V	< 700 V
Voltage protection level @ I_n	U_p	< 1500 V	< 1300 V	< 1300 V	< 1300 V	< 1300 V	< 1300 V	< 1300 V
Response time	t_A	< 100 ns	< 100 ns	< 100 ns	< 100 ns	< 100 ns	< 100 ns	< 100 ns
Temporary overvoltage (TOV)	U_T	1200 V / 0.2 s	1200 V / 0.2 s	1200 V / 0.2 s	1200 V / 0.2 s	1200 V / 0.2 s	1200 V / 0.2 s	1200 V / 0.2 s
Follow current interrupt rating	I_{fi}	100 A	100 A	100 A	100 A	100 A	100 A	100 A
Earth leakage current		< 10 µA	< 10 µA	< 10 µA	< 10 µA	< 10 µA	< 10 µA	< 10 µA
Indication								
Display		–	LED status per phase					
External alarm		Active alarm optional						
Display / Alarm function		Passive NC	Power fail safe, thermal overload, SPDT voltage free contact					
Alarm isolation		4 kV						
Mechanical Specifications								
Operating temperature		-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C
Humidity Range		5 to 95% non–condensing						
Terminal capacity – power		2.5 – 16 mm^2	2.5 – 16 mm^2	2.5 – 16 mm^2	2.5 – 16 mm^2	2.5 – 16 mm^2	2.5 – 16 mm^2	2.5 – 16 mm^2
Terminal capacity – alarms		0.5 – 2.5 mm^2	0.5 – 2.5 mm^2	0.5 – 2.5 mm^2	0.5 – 2.5 mm^2	0.5 – 2.5 mm^2	0.5 – 2.5 mm^2	0.5 – 2.5 mm^2
Terminal screw torque – power		2.0 Nm	2.0 Nm	2.0 Nm	2.0 Nm	2.0 Nm	2.0 Nm	2.0 Nm
Terminal screw torque – alarm		0.5 Nm	0.5 Nm	0.5 Nm	0.5 Nm	0.5 Nm	0.5 Nm	0.5 Nm
Environmental / Location		IP 20 / Indoor	IP 20 / Indoor	IP 20 / Indoor	IP 20 / Indoor	IP 20 / Indoor	IP 20 / Indoor	IP 20 / Indoor
Dimensional Drawing		A						
Device width		126 mm						
Mounting		TS35 DIN rail / Panel mount						
Enclosure / Colour		Metal / Black						
Standards								
IEC 61643-11:2011		SPD connected to low-voltage power systems - Type 2 + 3						
AS/NZS 1768:2007		A.C. power system SPD - Cat C, B, A						
UL 1449 3rd edition		Low voltage SPD - Type 2, Type 3						
IEEE 62.41.2:2002		Low voltage SPD - Cat B, Cat C						
Shipping								
Weight		200 g	690 g	750 g	690 g	750 g	690 g	750 g
Customs Tariff		85354010	85354010	85354010	85354010	85354010	85354010	85354010