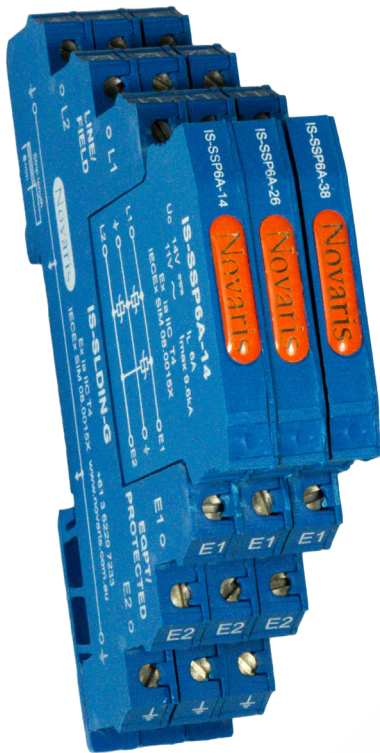


IS-SSP6A - Intrinsically Safe Protectors



Intrinsically Safe Series Surge Protectors

The IS-SSP6A intrinsically safe series surge protectors complement the IS-SL range for applications of load currents up to 6A. Typical applications may include power supplies, digital outputs and other low voltage requirements up to 6A.

IEC Ex and ATEX certified

Novaris 'IS-' products have been certified intrinsically safe according to IEC Ex and ATEX; the group IIC T4 certification makes it acceptable for use with all gas/air mixtures.

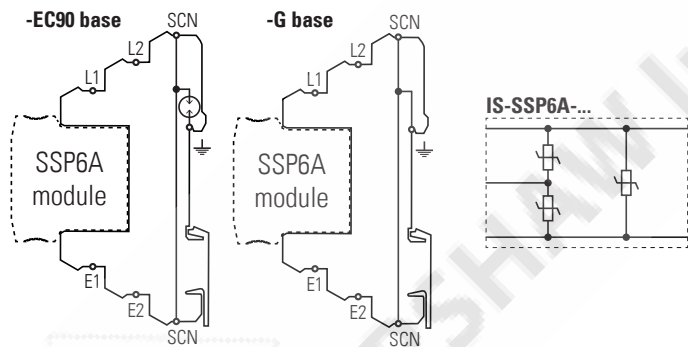
Two different earthing options

With two different base options the SL protectors offer either direct earthing via Din rail, for the most effective, low impedance earth connection (-G base) or a connection via GDT to the DIN rail, offering isolation under normal conditions and equipotential bonding during a surge (-EC90 base).

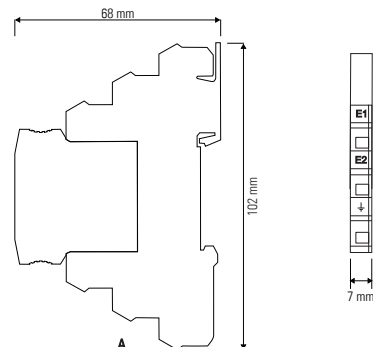
Slimline pluggable modules

The plug-in design provides simple and rapid replacement and testing - no rewiring needed. This also provides a convenient method of field equipment isolation if required.

Diagram / Installation



Dimensions



Ordering Information

Model	Signal Type		Base Option	
			direct earthing	indirect earthing
IS-SSP6A-14	12 VDC	-	-G	-EC90
IS-SSP6A-26	24 VDC	12 VAC	-G	-EC90
IS-SSP6A-38	36 VDC	24 VAC	-G	-EC90

Product Specifications

Model		IS-SSP6A-14	IS-SSP6A-26	IS-SSP6A-38
Electrical Specifications				
Connection Type		Series	Series	Series
Number of lines		1 pair	1 pair	1 pair
Modes of protection		Transverse and common mode		
Maximum continuous voltage (DC)	U_c	14 V	26 V	38 V
Maximum continuous voltage (AC)	U_c	11 V	20 V	30 V
Maximum discharge current (8/20 μ s)	I_{max}	4.8 kA per line (9.6 kA common mode)		
Maximum discharge current (10/350 μ s)	I_{imp}	-		
Impulse durability		C2 10 x 2.5 kA 8/20 μ s		
Maximum load current	I_L	6 A		
L-L Voltage protection level @ 1 kV/ μ s	U_p	35 V	55 V	75 V
L-L Voltage protection level @ 3 kA 8/20 μ s	U_p	70 V	95 V	105 V
L-L Voltage protection level @ 100 V/ s		20 V	35 V	55 V
L-PE Voltage protection level @ 1 kV/ μ s	U_p	35 V	55 V	75 V
L-PE Voltage protection level @ 3 kA 8/20 μ s	U_p	70 V	95 V	105 V
L-PE Voltage protection level @ 100 V/ s		20 V	35 V	55 V
AC durability		5 x 1 s, 1 Arms	5 x 1 s, 1 Arms	5 x 1 s, 1 Arms
Overstressed fault mode		Mode 3 (open circuit)		
Response time	t_A	< 5 ns	< 5 ns	< 5 ns
Line resistance		0.02 Ω	0.02 Ω	0.02 Ω
Line inductance		-	-	-
L-L capacitance		48 nF	28 nF	16 nF
L-PE capacitance		48 nF	28 nF	16 nF
Insertion loss @ 150 Ω		< 0.5 dB (< 20 kHz)	< 0.5 dB (< 20 kHz)	< 0.5 dB (< 20 kHz)
3 dB Frequency @ 150 Ω	f_c	80 kHz	80 kHz	80 kHz
Safety Parameters				
Max. input voltage	U_i	30 V	30 V	30 V
Max. input current	I_i	-	-	-
Max. input power	P_i	2.2 W	2.2 W	2.2 W
Capacitance	C_i	0	0	0
Inductance	L_i	0	0	0
Mechanical Specifications				
Operating temperature @ I_L		-20 to +40 $^{\circ}$ C	-20 to +40 $^{\circ}$ C	-20 to +40 $^{\circ}$ C
Humidity Range		5 to 95% non-condensing	5 to 95% non-condensing	5 to 95% non-condensing
Connection type / capacity		0.25 – 2.5 mm ² Cage Clamp	0.25 – 2.5 mm ² Cage Clamp	0.25 – 2.5 mm ² Cage Clamp
Terminal screw torque		0.5 Nm	0.5 Nm	0.5 Nm
Environmental		IP 20 / indoor	IP 20 / indoor	IP 20 / indoor
Mounting		TS35 DIN rail	TS35 DIN rail	TS35 DIN rail
Earthing		- Direct earth connection via DIN rail and screw terminals with -G base option - 90 V isolation between DIN rail earth and shield with -EC90 base option		
Enclosure / colour		Polycarbonate UL 94 V-0 / blue	Polycarbonate UL 94 V-0 / blue	Polycarbonate UL 94 V-0 / blue
Accreditations				
TÜV 14 ATEX 7569 X		II 1 G Ex ia IIC T4 Ga		
IECEX ITA 14.0011X		Ex ia IIC T4		
Standards				
Directive 94/9/EC		Equipment and protective systems intended for use in potentially explosive atmospheres		
IEC 60079-0		Explosive atmospheres - Part 0: Equipment - General requirements		
IEC 60079-11		Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'		
IEC 61643-21:2012		SPD connected to telecommunications and signalling networks - Cat C2		
AS/NZS 1768:2007		Signalling/Telecommunications surge protection		
UL 1449 3 rd edition & UL 497B		Protectors for data communications and fire-alarm circuits		
ITU-T K.44: 2012		Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents		
Shipping				
Weight		35 g	35 g	35 g
Customs Tariff		85363000	85363000	85363000

