

### IS-SSP10A-14

#### Intrinsically Safe Series Surge Protector 10A

The Novaris IS-SSP10A is a surge protection device designed to protect AC and DC low voltage power supplies. The IS-SSP10A has zero earth leakage current and will prevent the tripping of supply fuses down to 2A should a transient overvoltage occur. The SSP10A is DIN rail mountable and is locked onto the DIN rail when the earth lug screw is tightened.

#### Failsafe Design

In the event of an excessive common mode surge, a fuse will rupture isolating the earth thereby preventing a short circuit to earth. This is critical for applications like railway signaling.

#### Indicating Fuse

Should the earth fuse rupture a red indicating flag will pop up and a normally closed voltage free contact will change state.

#### External Alarm

In the event the earth fuse ruptures a normally closed alarm contact will open providing means for remote monitoring.

#### Pluggable Design

The pluggable design allows for easy removal and replacement.

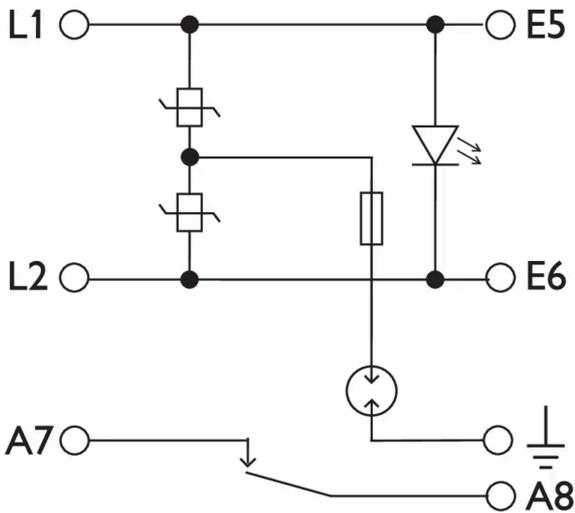
#### Power Indicator

An LED indicates the presence of power.

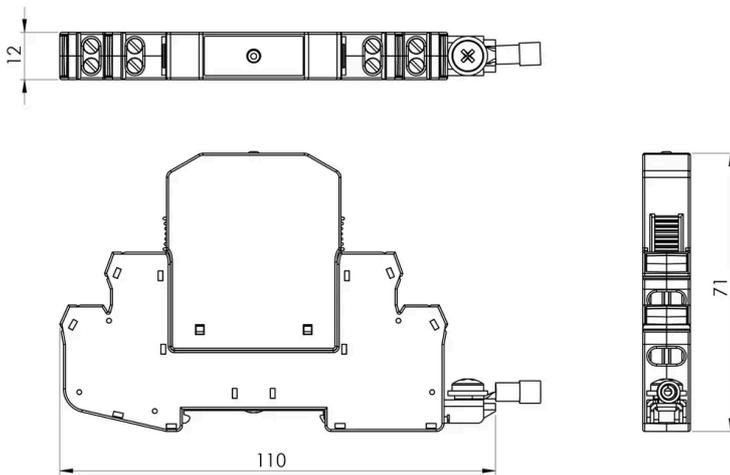


Image for illustrative purposes only

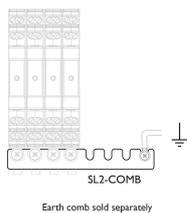
#### Wiring



#### Dimensions

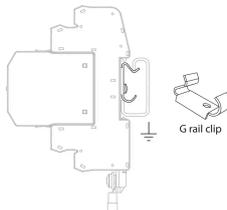


#### Earth Comb Option



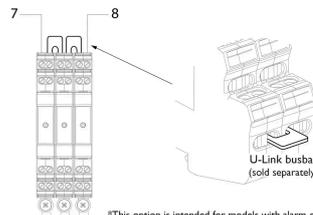
Earth comb sold separately

#### G Rail Mounting Clip Option (-G)



G rail clip

#### Alarm Busbar Link



\*This option is intended for models with alarm only.



## Product Datasheet

## Electrical Specifications

Connection type		Series
Tripping surge current for fail safe device		10kA
Number of lines		1 pair
Modes of protection		Transverse & Common
Maximum continuous voltage (DC)	$U_c$	14V
Maximum continuous voltage (AC)	$U_c$	11V
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	10kA
Maximum common mode discharge current (8/20 $\mu$ s)		20kA
Impulse durability C2 10x8/20 $\mu$ s		10kA
Maximum load current	$I_L$	10A
AC durability 5x1s		1A rms
Overstressed fault mode		Mode 3
Response time	$t_A$	<25ns
Line resistance	$\sim\sim\sim$	0.02 $\Omega$
3 dB Frequency @ 150 $\Omega$		18kHz
Minimum supply fuse rating		2A
Earthing		90V isolation

## Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	45V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	70V
Voltage protection level @ 100 V/ s		25V
Capacitance	- -	60nF

## Electrical (L-PE) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	560V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	755V
Voltage protection level @ 100 V/ s		210V
Capacitance	- -	<2pF

## Indication Specifications

Over current fault	LED (internal line fuse)
Common mode tripping surge fault	Alarm and flag (common mode fuse)
Transverse mode tripping surge fault	LED (internal line fuse)
Thermal failure	Alarm
Display	Power

## Safety Specifications

Max. input voltage	30V
Max. input current	1.639A
Max. input power	1.3W
Capacitance	0
Inductance	00

## Mechanical Specifications

Minimum operating temperature		-40°C
Maximum operating temperature		70°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		TS35 DIN Rail
Environmental rating		IP20
Enclosure material		Polycarbonate
Enclosure finish		Blue
Terminal type		Screw cage
Terminal capacity		2.5mm <sup>2</sup>
Terminal screw torque		0.5Nm
Terminal labels		Klemsan 505850 DB 5
Length		110mm
Width		12mm
Height		71mm
Dimensional tolerance		0.5mm

## Standard Specifications

IEC 60079-0	Explosive atmospheres - Part 0: Equipment - General requirements
Directive 94/9/EC	Equipment and protective systems intended for use in potentially explosive atmospheres
IEC 60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'
IEC 61643-21	SPD connected to telecommunications and signalling networks - Cat C2, D1
AS 1768	Lightning protection
UL 497A, B	Protectors for telecommunications, data and fire alarm circuits
AS/NZS 4117	Surge Protective Devices for Telecommunications Applications
AS 7708	Signals Earthing and Surge Protection

## Accreditations Specifications

IECEx SRM 24.0003X	Ex ia IIC T4 Ga
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## Shipping Specifications

Weight		70g
Customs tariff		85363000, 85363010

## Other Specifications

Product Code		IS-SSP10A-14
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