

### IS-SL2-36

#### Intrinsically Safe High Energy Signal Line Protection

The Novaris SL2 range provides 20kA high energy surge protection for balanced pair signaling circuits with line currents up to 500mA.

#### Multistage Protection

Following the primary GDT is a series coordinating impedance followed by a high-speed clamping diode circuit providing a safe voltage protection level for the connected equipment.

#### Pluggable Design

The protection circuitry is contained within a removable top module. This pluggable design allows for easy removal and replacement. Reliable goldplated connectors are used between top and base modules.

#### Earthing

The SL2 range utilizes a base which can be locked to the DIN rail by a screw that also provides an earth termination.

#### Failsafe Design

In the event of excessive surge current, a fuse will rupture, preventing a short circuit to earth.

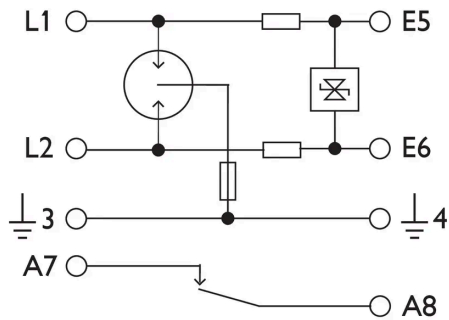
#### Indication and Alarm

In the event of a failure a red indicating flag on the module will be activated. A normally closed alarm contact will open providing a means for remote condition monitoring.

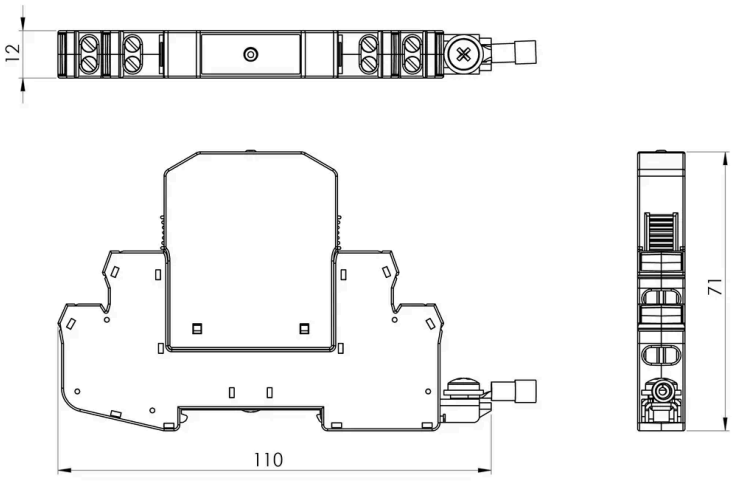


Image for illustrative purposes only

### Wiring



### Dimensions



**Earth Comb Option**

Earth comb sold separately

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

G rail clip

**Alarm Busbar Link**

U-Link busbar (sold separately)

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

## Product Datasheet

## Electrical Specifications

Connection type		Series
Number of lines		1 pair
Modes of protection		Transverse & Common
Maximum continuous voltage (DC)	$U_c$	34V
Maximum continuous voltage (AC)	$U_c$	24V
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	10kA
Maximum common mode discharge current (8/20 $\mu$ s)		20kA
Maximum discharge current (10/350 $\mu$ s)	$I_{imp}$	2.5kA
Maximum common mode discharge current (10/350 $\mu$ s)	$I_{imp}$	5kA
Impulse durability C2 10x8/20 $\mu$ s		10kA
Impulse durability D1 2x10/350 $\mu$ s		5kA
Maximum load current	$I_L$	500mA
AC durability 5x1s		1A rms
Overstressed fault mode		Mode 3
Line resistance		3.9 $\Omega$
Insertion loss @ 150 $\Omega$		<0.5dB @ <70kHz
3 dB Frequency @ 150 $\Omega$		60MHz
Earthing		Direct

## Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	40V
Voltage protection level @ 100 V/ s		38V
Capacitance		32pF
Response time	$t_A$	1ps

## Electrical (L-PE) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	350V
Voltage protection level @ 100 V/ s		230V
Capacitance		2pF

## Safety Specifications

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

## 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 UL 94 V-0
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-SL2-36
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