

IS-SL2-485

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.

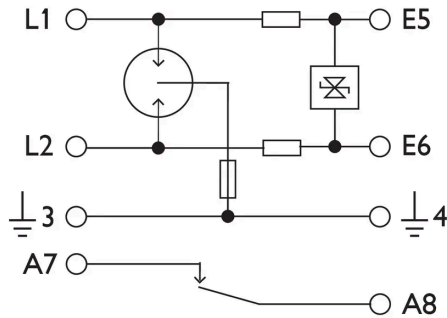
Indication and Alarm

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.

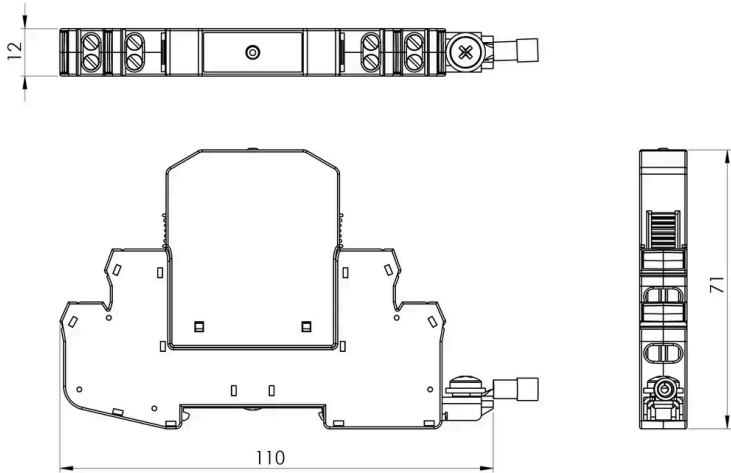


Image for illustrative purposes only

Wiring



Dimensions



Earth Comb Option

SL2-COMB
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	8V
Maximum continuous voltage (AC)	U_c	6V
Maximum discharge current (8/20 μ s)	I_{max}	10kA
Maximum common mode discharge current (8/20 μ s)		20kA
Maximum discharge current (10/350 μ s)	I_{imp}	2.5kA
Maximum common mode discharge current (10/350 μ s)	I_{imp}	5kA
Impulse durability C2 10x8/20 μ s		10kA
Impulse durability D1 2x10/350 μ s		5kA
Maximum load current	I_L	500mA
AC durability 5x1s		1A rms
Overstressed fault mode		Mode 3
Line resistance		3.9 Ω
Insertion loss @ 150 Ω		<0.5dB @ <70kHz
3 dB Frequency @ 150 Ω		60MHz
Earthing		Direct

Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ μ s	U_p	15V
Voltage protection level @ 100 V/ s		15V
Capacitance		32pF
Response time	t_A	1ps

Electrical (L-PE) Specifications

Voltage protection level @ 1 kV/ μ 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 ²
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-SL2-485
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