

## SL2-485-EC90



## High Energy Signal Line Protection

The Novaris SL2...-EC90 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 gold-plated connectors are used between top and base modules.

## Earthing

The SL2...-EC90 range utilizes a base which can be locked to the DIN rail by a screw that also provides an earth termination. The -EC90 gas discharge tube located in the top module allows screened cable to be protected without the screen being directly earthed, thereby avoiding noise caused by "earth loops".

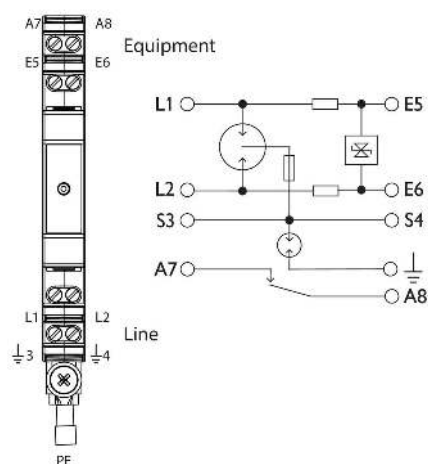
## Failsafe design

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

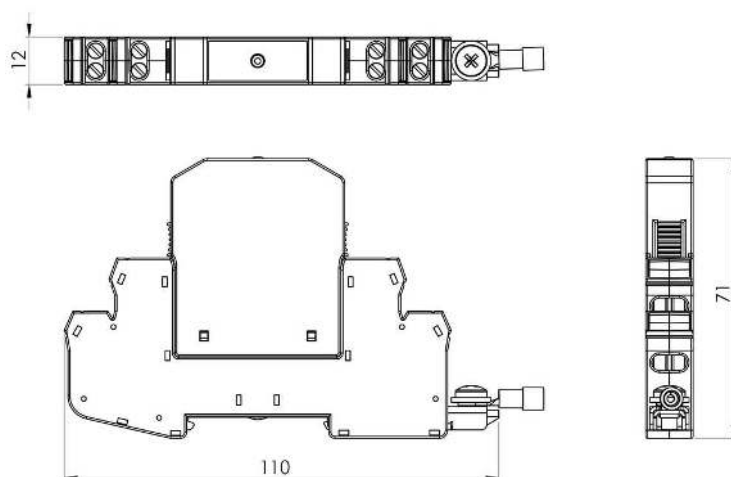
## Indication and alarm

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.

## Wiring



## Dimensions








## Standards

IEC 61643-21  
AS/NZS 1768  
UL497, A, B  
AS/NZS4117  
AS7708

SPD connected to telecommunications and signaling networks – Cat C2, D1  
Lightning Protection  
Protectors for telecommunications, data and fire alarm circuits  
Surge protective devices for telecommunications applications  
Signals earthing and surge protection

## 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 $\mu$ s)	$I_{max}$	10kA
Maximum common mode discharge current (8/20 $\mu$ s)		20kA
Maximum discharge current (10/350 $\mu$ s)		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		1Arms
Overstressed fault mode		Mode 3
Response time	$t_A$	<5ns
Line resistance		3.9 $\Omega$
Insertion loss @ 150 $\Omega$		<0.5dB @ <70kHz
3 dB Frequency @ 150 $\Omega$		60MHz



### Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	35V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	35V
Voltage protection level @ 100 V/ s		15V
Capacitance	- +	32pF













### Electrical (L-PE) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	350V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	600V
Voltage protection level @ 100 V/ s		230V
Capacitance	- +	2pF

### Indication Specifications

Alarm		Impulse overload current and thermal
Alarm isolation		100V

### 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
Terminal type		Screw cage
Terminal capacity		2.5mm <sup>2</sup>
Terminal screw torque		0.5Nm
Terminal labels		Klemsan 505850 DB 5
Earthing		90V isolation
Length		110mm
Width		12mm
Height		71mm
Dimensional tolerance		0.5mm

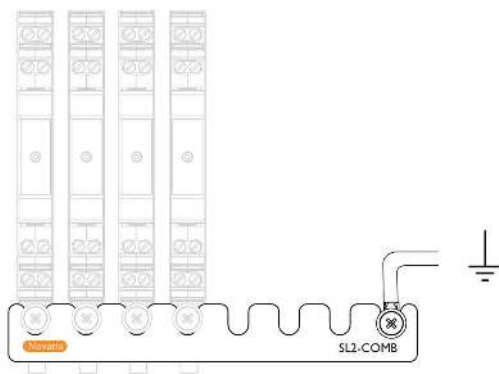
### Other Specifications

Product Code		SL2-485-EC90
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### Shipping Specifications

Weight		70g
Customs tariff		85363000, 85363010

### Earth Comb Option



Earth comb sold separately

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

