

# Technical Information Sheet

## SLH2-230



### Signal line high current protection

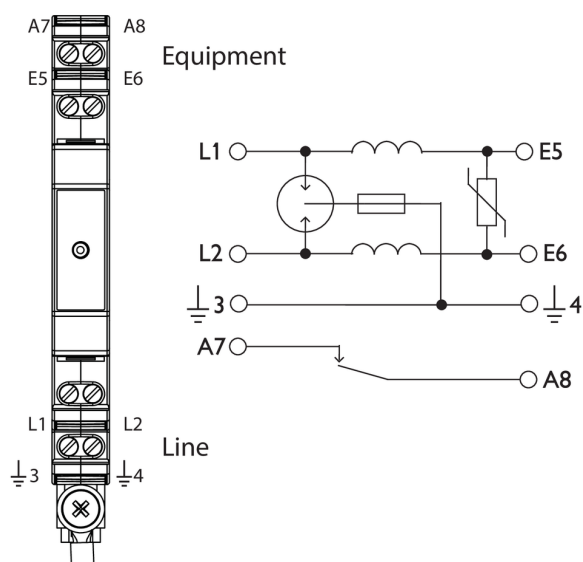
The Novaris SLH2 high energy high current range provides 20kA energy surge protection for balanced pair signaling circuits with line currents up to 2.5A. Applications include railway signaling, SCADA output signals and process controllers. The SLH2 is ideal in areas of high lightning activity.

**Failsafe design – external alarm.** Surge protection is provided by a high energy three terminal gas discharge tube with a common mode rating of 40kA. This SLH2 incorporates an indicating fuse, monitoring the integrity of the GDT. Should this fuse trip due to an excessive surge current a red indicator will appear and a normally closed alarm contact will open providing a means for remote monitoring. This design prevents a permanent short circuit to earth. This is important in many critical applications, particularly railway signaling.

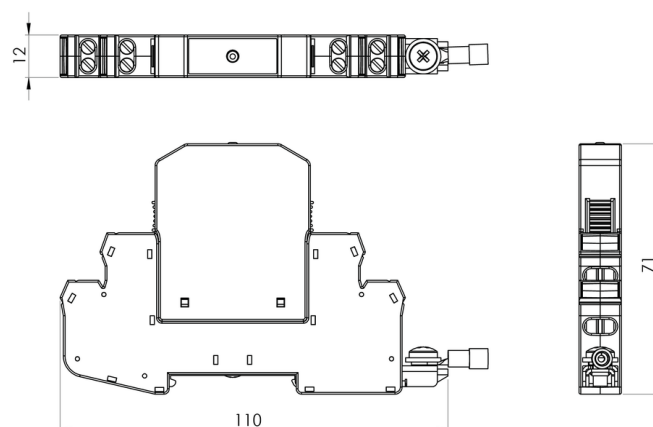
**Multistage protection.** Following the primary GDT is a series coordinating impedance in each signal leg. This can coordinate with secondary protection contained within the equipment to be protected or the TCP can stand alone.

**Earthing options.** This SLH2 plugs into a DIN rail mounted base. All protection components are contained within the removable cap. As well as separate earth terminals, the metallic DIN rail clamp provides a low impedance connection to earth via the DIN rail.

### Wiring



### Dimensions



### Standards

IEC 61643-21  
AS/NZS 1768  
UL497, A, B  
AS/NZS 4117





SPD connected to telecommunications and signalling networks - Cat C2, D1  
Lightning Protection  
Protectors for telecommunications, data and fire alarm circuits  
Surge Protective Devices for Telecommunications Applications

# Novaris

## Technical Information Sheet

## Specifications

## Electrical Specifications

Connection type		Series
Number of lines		1 pair
Modes of protection		Transverse & Common
Maximum continuous voltage (DC)	$U_c$	325V
Maximum continuous voltage (AC)	$U_c$	230V
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	$I_L$	2.5A
AC durability 5x1s		1Arms
Overstressed fault mode		Mode 3
Response time	$t_A$	<5ns
Insertion loss @ 150 $\Omega$		<0.5dB
3 dB Frequency @ 150 $\Omega$		60MHz



## Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	340V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	350V
Voltage protection level @ 100 V/ s		300V
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
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		Direct
Length		110mm
Width		12mm
Height		71mm

## Other Specifications

Product Code		SLH2-230
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## Shipping Specifications

Weight		55g
Customs tariff		85363000