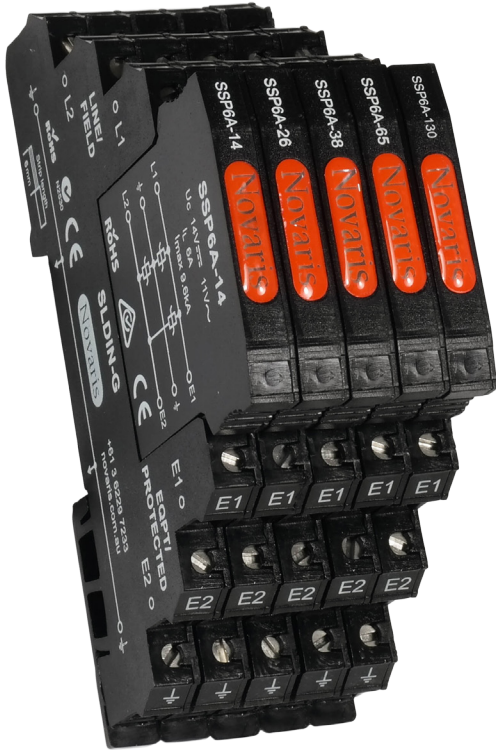


# SSP6A - Slimline Series Surge Protectors



## High Current Series Surge Protectors

Novaris slimline surge protection devices (SPDs) provide surge protection for most twisted pair signaling schemes.

### Load current up to 6 A

The SSP6A series surge protectors complement the SL range for applications of load currents up to 6A. Typical applications may include power supplies, digital outputs and other low voltage requirements up to 6A.

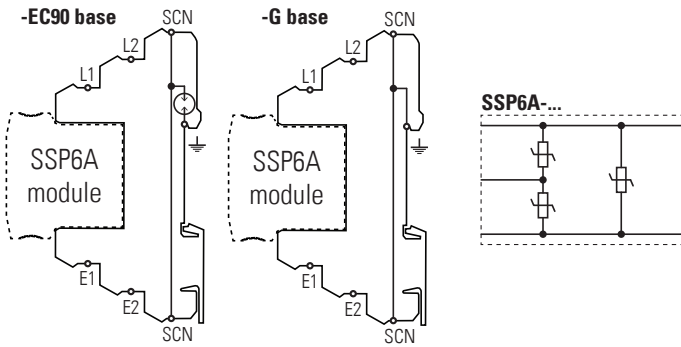
### Two different earthing options

With two different base options the SSP6A protectors offer either direct earthing via DIN rail, for the most effective, low impedance earth connection (-G base) or a connection via GDT to the DIN rail, offering isolation under normal conditions and equipotential bonding during a surge (-EC90 base).

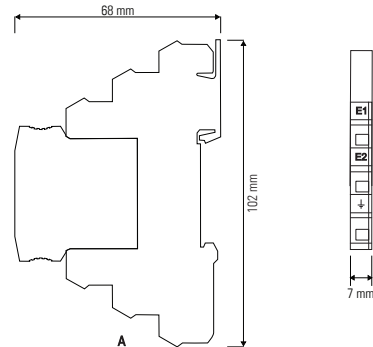
### Slimline pluggable modules

The plug-in design provides simple and rapid replacement and testing - no rewiring needed. This also provides a convenient method of field equipment isolation if required.

## Diagram / Installation



## Dimensions



## Ordering Information

| Model     | Signal Type |         | Base Option     |                   | Hazardous Area Product |
|-----------|-------------|---------|-----------------|-------------------|------------------------|
|           |             |         | direct earthing | indirect earthing |                        |
| SSP6A-14  | 12 VDC      | -       | -G              | -EC90             | IS-SSP6A-14            |
| SSP6A-26  | 24 VDC      | 12 VAC  | -G              | -EC90             | IS-SSP6A-26            |
| SSP6A-38  | 36 VDC      | 24 VAC  | -G              | -EC90             | IS-SSP6A-38            |
| SSP6A-65  | 48 VDC      | 48 VAC  | -G              | -EC90             | -                      |
| SSP6A-130 | 110 VAC     | 110 VAC | -G              | -EC90             | -                      |

## Product Specifications

| Model   |           | SSP6A-14  | SSP6A-26           | SSP6A-38           | SSP6A-65           | SSP6A-130          |
|---|-----------|---|--------------------|--------------------|--------------------|--------------------|
| <b>Electrical Specifications</b>                  |           |   |                    |                    |                    |                    |
| Connection Type                                   |           | Series  | Series             | Series             | Series             | Series             |
| Number of lines                                   |           | 1 pair  | 1 pair             | 1 pair             | 1 pair             | 1 pair             |
| Modes of protection                               |           | Transverse and common mode  |                    |                    |                    |                    |
| Maximum continuous voltage (DC)                   | $U_c$     | 14 V  | 26 V               | 38 V               | 65 V               | 170 V              |
| Maximum continuous voltage (AC)                   | $U_c$     | 11 V  | 20 V               | 30 V               | 50 V               | 130 V              |
| Maximum discharge current (8/20 $\mu$ s)          | $I_{max}$ | 4.8 kA per line (9.6 kA common mode)  |                    |                    |                    |                    |
| Maximum discharge current (10/350 $\mu$ s)        | $I_{imp}$ | –   |                    |                    |                    |                    |
| Impulse durability                                |           | C2 10 x 2.5 kA 8/20 $\mu$ s   |                    |                    |                    |                    |
| Maximum load current                              | $I_L$     | 6 A   |                    |                    |                    |                    |
| L-L Voltage protection level @ 1 kV/ $\mu$ s      | $U_p$     | 35 V  | 55 V               | 75 V               | 130 V              | 450 V              |
| L-L Voltage protection level @ 3 kA 8/20 $\mu$ s  | $U_p$     | 70 V  | 95 V               | 105 V              | 210 V              | –                  |
| L-L Voltage protection level @ 100 V/ s           |           | 20 V  | 35 V               | 55 V               | 90 V               | 220 V              |
| L-PE Voltage protection level @ 1 kV/ $\mu$ s     | $U_p$     | 35 V  | 55 V               | 75 V               | 130 V              | 450 V              |
| L-PE Voltage protection level @ 3 kA 8/20 $\mu$ s | $U_p$     | 70 V  | 95 V               | 105 V              | 210 V              | –                  |
| L-PE Voltage protection level @ 100 V/ s          |           | 20 V  | 35 V               | 55 V               | 90 V               | 220 V              |
| AC durability                                     |           | 5 x 1 s, 1 Arms   | 5 x 1 s, 1 Arms    | 5 x 1 s, 1 Arms    | 5 x 1 s, 1 Arms    | 5 x 1 s, 1 Arms    |
| Overstressed fault mode                           |           | Mode 3 (open circuit)   |                    |                    |                    |                    |
| Response time                                     | $t_A$     | < 5 ns  | < 5 ns             | < 5 ns             | < 5 ns             | < 5 ns             |
| Line resistance                                   |           | 0.02 $\Omega$   | 0.02 $\Omega$      | 0.02 $\Omega$      | 0.02 $\Omega$      | 0.02 $\Omega$      |
| Line inductance                                   |           | –   | –                  | –                  | –                  | –                  |
| L-L capacitance                                   |           | 48 nF   | 28 nF              | 16 nF              | 4 nF               | 16 nF              |
| L-PE capacitance                                  |           | 48 nF   | 28 nF              | 16 nF              | 4 nF               | 20 nF              |
| Insertion loss @ 150 $\Omega$                     |           | < 0.5 dB (< 20kHz)  | < 0.5 dB (< 20kHz) | < 0.5 dB (< 20kHz) | < 0.5 dB (< 20kHz) | < 0.5 dB (< 20kHz) |
| 3 dB Frequency @ 150 $\Omega$                     | $f_c$     | 80 kHz  | 80 kHz             | 80 kHz             | 80 kHz             | 80 kHz             |
| <b>Mechanical Specifications</b>                  |           |   |                    |                    |                    |                    |
| Operating temperature                             |           | -40 to +70 °C   |                    |                    |                    |                    |
| Humidity Range                                    |           | 5 to 95% non-condensing   |                    |                    |                    |                    |
| Connection type / capacity                        |           | 0.25 – 2.5 mm <sup>2</sup> cage clamp   |                    |                    |                    |                    |
| Terminal screw torque                             |           | 0.5 Nm  |                    |                    |                    |                    |
| Environmental                                     |           | IP20 / indoor   |                    |                    |                    |                    |
| Dimensional Drawing                               |           | A   |                    |                    |                    |                    |
| Mounting  |           | TS35 DIN rail   |                    |                    |                    |                    |
| Earthing  |           | - Direct earth connection via DIN rail ans screw terminals with -G base option<br>- 90 V isolation between DIN rail earth and shield with -EC90 base option |                    |                    |                    |                    |
| Enclosure / Colour                                |           | Polycarbonate UL 94 V-0 / black   |                    |                    |                    |                    |
| <b>Standards</b>                                  |           |   |                    |                    |                    |                    |
| IEC 61643-21:2012                                 |           | SPD connected to telecommunications and signalling networks - Cat C2  |                    |                    |                    |                    |
| AS/NZS 1768:2007                                  |           | Signalling/Telecommunications surge protection  |                    |                    |                    |                    |
| UL 1499 3 <sup>rd</sup> edition & UL 497B         |           | Protectors for data communications and fire-alarm circuits  |                    |                    |                    |                    |
| ITU-T K.44: 2012                                  |           | Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents  |                    |                    |                    |                    |
| AS/CA S008:2010                                   |           | Requirements for Customer Cabling Products  |                    |                    |                    |                    |
| AS/NZS 4117:1999                                  |           | Surge Protective Devices for Telecommunications Applications  |                    |                    |                    |                    |
| <b>Shipping</b>                                   |           |   |                    |                    |                    |                    |
| Weight  |           | 35 g  | 35 g               | 35 g               | 35 g               | 35 g               |
| Customs Tariff                                    |           | 85363000  | 85363000           | 85363000           | 85363000           | 85363000           |

