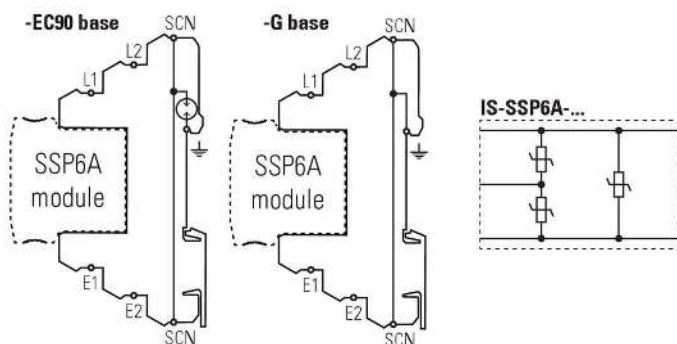


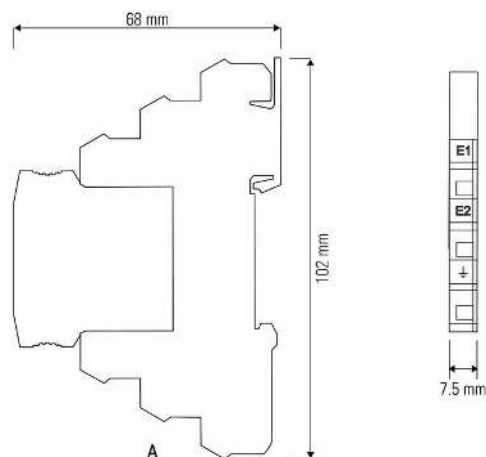
## IS-SSP6A-14-EC90



## Wiring



## Dimensions



## Intrinsically Safe Protectors

The IS-SSP6A intrinsically safe series surge protectors complement the IS-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.

## IEC Ex and ATEX certified

Novaris 'IS-' products have been certified intrinsically safe according to IEC Ex and ATEX; the group IIC T4 certification makes it acceptable for use with all gas/ air mixtures.

## Two different earthing options

With two different base options the SL 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.

## Standards

|                               |  |
|-------------------------------|--|
| Directive 94/9/EC             | Equipment and protective systems intended for use in potentially explosive atmospheres       |
| IEC 60079-0                   | Explosive atmospheres - Part 0: Equipment - General requirements                             |
| IEC 60079-11                  | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'                |
| IEC 61643-21:2012             | SPD connected to telecommunications and signalling networks - Cat C2                         |
| AS/NZS 1768:2007              | Signalling/Telecommunications surge protection   |
| UL 1449 3rd 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 |

## Product Datasheet






## Accreditations Specifications

|                    |                        |
|--------------------|------------------------|
| TÜV 14 ATEX 7569 X | II 1 G Ex ia IIC T4 Ga |
| IECEX ITA 14.0011X | Ex ia IIC T4           |

## Other Specifications

Product Code  IS-SSP6A-14-EC90

## Electrical Specifications

|  |   |                       |
|--|---|-----------------------|
| Connection type                                      |  | Series                |
| Number of lines                                      |  | 1 pair                |
| Modes of protection                                  |  | Transverse and Common |
| Maximum continuous voltage (DC)                      | $U_c$   | 14V                   |
| Maximum continuous voltage (AC)                      | $U_c$   | 11V                   |
| Maximum discharge current (8/20 $\mu$ s)             | $I_{max}$   | 4.8kA                 |
| Maximum common mode discharge current (8/20 $\mu$ s) |   | 9.6kA                 |
| Impulse durability C2 10x8/20 $\mu$ s                |   | 2.5kA                 |
| Maximum load current                                 | $I_L$   | 6A                    |
| AC durability 5x1s                                   |   | 1Arms                 |
| Overstressed fault mode                              |   | Mode 3                |
| Response time  | $t_A$   | <5ns                  |
| Line resistance                                      |  | 0.02 $\Omega$         |
| Insertion loss @ 150 $\Omega$                        |  | <0.5dB @ <20kHz       |
| 3 dB Frequency @ 150 $\Omega$                        |   | 80kHz                 |














## Electrical (L-L) Specifications

|  |       |      |
|--|-------|------|
| Voltage protection level @ 1 kV/ $\mu$ s     | $U_p$ | 35V  |
| Voltage protection level @ 3 kA 8/20 $\mu$ s | $U_p$ | 70V  |
| Voltage protection level @ 100 V/ s          |       | 20V  |
| Capacitance                                  | $\pm$ | 48nF |

## Electrical (L-PE) Specifications

|  |       |      |
|--|-------|------|
| Voltage protection level @ 1 kV/ $\mu$ s     | $U_p$ | 35V  |
| Voltage protection level @ 3 kA 8/20 $\mu$ s | $U_p$ | 70V  |
| Voltage protection level @ 100 V/ s          |       | 20V  |
| Capacitance                                  | $\pm$ | 48nF |

## Mechanical Specifications

|                               |   |                         |
|-------------------------------|---|-------------------------|
| Minimum operating temperature |  | -20°C                   |
| Maximum operating temperature |  | 40°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                 |   | Cage clamp              |
| Terminal capacity             |  | 2.5mm <sup>2</sup>      |
| Terminal screw torque         |  | 0.5Nm                   |
| Earthing                      |   | 90V isolation           |
| Length                        |  | 102mm                   |
| Width                         |  | 7mm                     |
| Height                        |  | 68mm                    |

## Safety Specifications

|                    |      |
|--------------------|------|
| Max. input voltage | 30V  |
| Max. input power   | 2.2W |
| Capacitance        | 0    |
| Inductance         | 0    |

## Shipping Specifications

|                |   |          |
|----------------|---|----------|
| Weight         |  | 35g      |
| Customs tariff |  | 85363000 |