



Novaris

Lightning and Surge
Protection

Novaris
SLDIN-G and
SLDIN-EC90
bases

Application for
process control
signals

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Novaris SLDIN-G and SLDIN-EC90 bases

Many process control and field instrument cables are screened. The usual practice is to earth one end of the screened cable only in order to avoid interference and noise caused by earth loops that could occur by earthing both ends of the screen at points of different potential. In a typical process control application the I/O end of the screen would be earthed to the instrument earth bar in the marshalling cubicle. For effective protection this must be bonded to the electrical earth in the cabinet. If this cannot be directly bonded it should be bonded via an EC20-90 earth clamp.

At the remote end, the field instrument, the screen would be left unterminated.

This principle conflicts with the requirement for effective protection from overvoltage disturbances where each end of the cable must be referenced to a common point. To overcome this difficulty Novaris manufactures two versions of its SL base. The SLDIN-G base connects the common terminal to earth via the DIN rail clip. The SLDIN-EC90 base connects the common terminal to earth through the DIN rail clip via a small gas discharge tube contained within the base.

At a location where the cable screen is earthed the SLDIN-G base is used and at a location where the cable screen is not earthed the SLDIN-EC90 base is used.

All Novaris SL, SL-i and SSP protection modules may be used with either base depending upon the circumstances. Figure 1 shows a typical application.

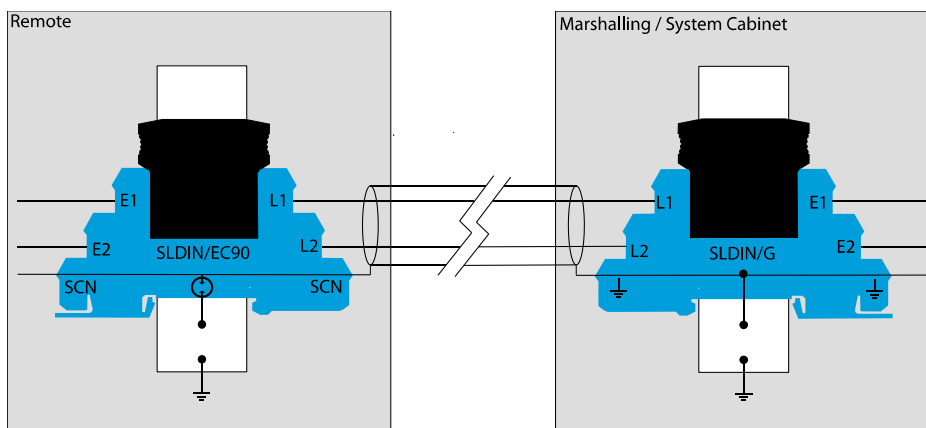


Fig 1. Application of SLDIN-G and SLDIN-EC90 bases