Lightning and Surge Protection

Railway Signaling Protection

Novaris

Lightning and Surge Protection
Novaris MPU Surge Protectors

Surges and transients appearing on signal lines pose a serious threat to the reliability of any electronic signaling system. Damage caused by the effects of lightning and switching transients frequently leads to malfunction or total shutdown of the system as well as large repair costs. In critical applications such as railway signaling, the consequences of such damage can be catastrophic.

Novaris’ range of MPU signal line protectors has been developed in consultation with signaling engineers, project managers and maintenance providers of SSI and VPI signaling equipment, in Australia and overseas. Each protector is designed to provide the highest level of surge immunity for connected equipment with minimum impact on normal system operation. The circuits are configured so that any component failure, within or external to the protector, will not compromise the operational safety of the signaling system.

Surge Diverters – Class 2

Novaris SDD surge diverters provide primary and secondary surge protection for main switchboards and distribution boards in accordance with IEC Class 2 specifications. All SDD models are housed in metal DIN compliant enclosures and provide all mode protection for worldwide application. Single and three phase models up to Imax of 100kA are available.

Railway Line Protection

Novaris RLP surge protectors are designed for the protection of railway line insulated joints. These units contain high energy gas discharge tubes capable of withstanding many direct lightning strikes. RLP models are housed within a certified IECEx-d explosion proof enclosure for external use and direct attachment to the track.
**Signal Solutions**
The Novaris SL range of signal line surge protectors features replaceable surge protection modules. All the surge protection circuitry is contained in the replaceable top module. These are ideal for the protection of PLC I/O, SCADA RTU, fire and security, telecommunications, railway signalling and industrial automation. Being only 7mm wide they are compact and may be easily retrofitted in marshalling cubicles. SL models are available for signalling systems up to 110V as well as 4/20mA instrument loops, RS485 and other industrial signalling schemes.

**Novaris RPU Surge Protectors**
Novaris High Energy Track Circuit Protectors have been designed to be installed into existing installations as direct replacements to older style spark gap devices. These units contain high energy gas discharge tubes capable of withstanding many direct lightning strikes and provide a clean clamping of a surge with no spark over noise.

Novaris Rail Protection Units (RPU) are the perfect building block for any new signaling system or as a means to upgrade simply as these devices are designed for simple replacement of existing devices and to provide a safe a robust primary protection environment.

Novaris RPU's utilise Gas Discharge Tube technology consisting of a sealed unit with an ionizing gas which provides a reliable discharge path with low residual energy.
Novaris has designed and manufactured lightning and surge protection systems since 1993. We specialise in the protection of power and data systems and we are now world leaders in lightning and surge protection technology.

At our Australian headquarters we operate a full time research and development facility. Our testing laboratory is capable of generating and measuring simulated lightning impulses in accordance with all major world standards.

Novaris can custom design a lightning and surge protection solution to suit your particular application. We can provide consultancy services including site inspection, risk assessment and detailed recommendations for protection methods in accordance with national and international standards.

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