

SDD2 Surge Diverters Installation Instructions





Thank you for choosing Novaris surge protection.

Novaris has been designing and manufacturing lightning and electrical disturbance protection for over 15 years. We specialise in the protection of power and data signalling. Our products are in use Australia wide, and internationally, and we are now world leaders in lightning and surge technology.

At our Australian headquarters we operate a full time research and development group, employing professional engineers, technical officers and drafting support staff. Our testing laboratory is capable of generating and measuring simulated lighting impulses in accordance with world power and telecommunications standards. We also have offices and distributors throughout Australia and world wide.

Novaris designs and manufactures all the products bought by you at our manufacturing locations under the ISO 9001:2000 quality assurance system. Giving you the reassurance that you surge protection will protect your equipment.

We guarantee the quality of our products.

We stand by our products for their quality, and ingenuity. If there are any improvements you feel can make on our products, please call us, email us, or visit us. Our engineering sales team are always keen to hear from our customers.

If you require further information about our company or have a suggestion to change this product to suit your need better,

Please call us on: (+613) 6229 7233 Or email us on: info@novaris.com.au Include in the subject line: "product improvement"



SDD2 Surge Diverters Installation Instructions

IMPORTANT: Please read these instructions carefully. Whilst straightforward, the installation of these devices is critical to their performance. Installation should only be carried out by a suitably qualified person in accordance with all relevant standards.

1. Introduction

1.1 These installation instructions apply to the Novaris DINsafe range of two phase surge diverters.

1.2 These products are surge diverters, designed for two phase AC or positive and negative DC power supplies.

They feature all mode protection (L1-L2, L1-E, L2-E). This is essential in split rail DC power supplies and 2 phase AC systems.

2. Before Installation

- **2.1** Ensure that the supply voltage is within the working range of the unit. Continuous overvoltage will damage Novaris surge diverters.
- **2.2** Ensure that the voltage at earth voltage lies mid way between the two phases or positive and negative supplies.
- **2.3** Turn the power off before beginning the installation.

Figure 1: SDD2-32-65-DC

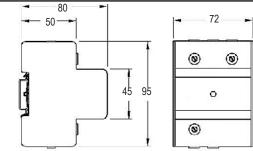


Figure 2: Dimensions of SDD2-xxx-yyy-zz

3. Installation

- 3.1 Wiring: Surge diverters are shunt connected (Figure 3). All connections must be present and correct. For example, if the active and earth connections are accidentally switched the surge diverter may be damaged. The surge diverter must be earthed to the systems common earth.
- **3.2 Point of Connection:** Units should be installed on the line side of and residual current devices in the system. Failure to do so may encourage nuisance tripping.
- **3.3 Mounting:** The unit should be positioned such that connecting leads can be made as short as possible. This means mounting the unit as close to the point of connection as possible. It may also mean that the unit is installed upside down or on its side.

The unit should be encased in a suitably rated enclosure. Suitable polycarbonate enclosures are available from Novaris.

Novaris surge diverters may be easily mounted on DIN rail using their integral clips. The unit may alternatively be panel mounted using brackets that are available from Novaris.

3.4 Connecting Leads: The terminals of the surge diverters have a capacity of 16mm². Multistranded conductor of at least 6mm² should be used. Ensure that the leads are capable of handling the rated current of the installation and circuit breaker or HRC fuse where present.

For optimum performance the inductance of connections must be minimised. Leads should be kept together (in conduit for example) for as much of their length as possible. All lead lengths must be kept as short as possible.

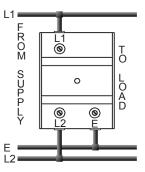


Figure 3: Wiring for installation of SDD2-xx-xx-xx

4. After Installation

- **4.1** Check the installation by switching the power on and observing the indicating LEDs on the unit. If all LEDs are lit then the installation has been successful.
- **4.2** Novaris surge diverters are very robust and require very little maintenance, however the surge diverter should be inspected periodically.
- **4.3** If the surge diverter appears damaged or defective in any way, please contact Novaris regarding a replacement.



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