# DINsafe

### Surge Counter





TSC1 TSC1-DIN TSC1-DIN/EC

## SURGE COUNTER AND EARTH CLAMP

Novaris transient event counters are designed to count lightning strikes and other surge events. This provides the user with valuable information on how frequently the site experiences lightning strikes and other surge events. Furthermore, the user gains an important insight into the performance of their surge protection equipment.

### **DIN 43880 Compliant**

Housed in DIN 43880 compliant enclosures the TSC1-DIN allows for convenient installation on DIN rail fittings commonly used in switchboards worldwide.

#### Safe Metal Enclosure

The TSC1-DIN is housed in a safe all metal enclosure. In the event of a prolonged overvoltage they will not catch fire or explode.

#### **Reliable and Consistent**

Novaris transient event counters are engineered for reliable, consistent performance. The display is powered by a lithium battery with a 10-year lifetime that ensures ongoing performance long into the future.

#### **Dual Functionality**

The TSC1-DIN/EC model features dual functionality: surge counting and earth clamping. During a surge, sites with separate earthing systems are highly susceptible to damage caused by differences in earth potential. This is a major cause of equipment damage.

The TSC1-DIN/EC overcomes the problem by employing a very high-energy gas-filled surge arrester that electrically clamps separate earthing systems together during disturbances. Upon restoration of normal conditions the earth clamp automatically resets and the earthing systems are again isolated.

DIN 43880 Compliant

Safe Metal Enclosure

	Ordering Guide
	TSC1- x/y
x = DIN rail version:	DIN
y = Earth Clamp:	EC
Installation	

**TSC1:** Using the clamps provided, the TSC1 model is simply clamped to a downconductor or to an earth return conductor of a surge diverter or surge filter.





To earth terminal of surge

diverter or surge filter

**TSC1-DIN:** The TSC1-DIN model is connected between earth and the earth terminal of a surge diverter or surge filter as shown below. **Lead lengths must be kept as short as possible**. Note that the unit will work equally as effectively with the connections to terminals T1 and T2 reversed. This should be considered during installation as it may result in shorter leads.

The LCD display unit is connected as shown

below. The connecting leads can be made as long as 3 metres, allowing the display unit to be panel mounted in a convenient location.



**TSC1-DIN/EC:** The TSC1-DIN/EC model is connected between two different earthing systems as shown above. Lead lengths must be kept as short as possible.



**Specifications** All models Description: Transient event counter Sensitivity: 100A > 100A available on request Working temperature: -40  $\rightarrow$  85 °C Working humidity:  $0 \rightarrow 90\%$ Powered by: 10 year lithium battery Display: Resettable LCD display TSC1 Peak surge handling: > 150kA (8/20µs) Enclosure: IP66 - dust and water resistant Mounting: Easily clamps onto conductors up to 17mm thick (greater clamping capacity available on request) Weight: 400g **TSC1-DIN** Peak surge handling: > 150kA (8/20µs) Mounting: **DIN** rail (panel mount brackets available on request) Weight: 600g **TSC1-DIN/EC** Sparkover voltage: 230VDC Peak surge handling: 150kA (8/20µs) DIN rail Mounting: (panel mount brackets available on request) Weight: 600g

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