

## SCD-20-100

## Surge Cathodic Decoupler

The Novaris SCD solid state cathodic decoupler has been designed to provide pipelines with AC and DC voltage protection along with surge protection whilst providing low voltage DC isolation for cathodic protection. This combination provides the best electrical protection for ICCP systems, pipeline equipment and workers employed on these systems.

The SCD can conduct up to 20A RMS above 10Hz with an effective impedance of 0.06 ohm. At 50Hz the maximum terminal voltage rise is only 0.6V at 10A.

The SCD can conduct a 3.5kA RMS fault current at 50Hz for 500ms with a maximum terminal voltage rise of 15V. In addition, the SCD can conduct a maximum lightning impulse current of 100kA.

The DC voltage across the terminals varies with DC current being 1.5V at 0.02mA, 2.0V at 0.2mA rising to 5V at 1000mA and above.



Image for illustrative purposes only

## Specifications

## Electrical Specifications

DC Conductance	<2VDC blocking - AC and >2VDC passing
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$ 100kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$ 30kA
Voltage protection level @ 1kV/ $\mu$ s	<230V
AC Fault (500ms)	3.5kA @ 50Hz
AC Fault voltage rise	15V rms
AC Steady State	20A rms
AC Steady State voltage rise	0.6V @ 10A rms

## Mechanical Specifications

Minimum operating temperature		-40°C
Maximum operating temperature		70°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		8mm mounting tabs
Terminal		M10
Terminal - Earth		M6
Environmental rating		IP66
Environmental		IECEx IBE 09.0019, IBEExU07ATEX1148
Enclosure material		316 Stainless Steel
Enclosure finish		Raw
Length		150mm
Width		150mm
Height		90mm

## Shipping Specifications

Weight		3.5kg
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## Other Specifications

Product Code		SCD-20-100
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