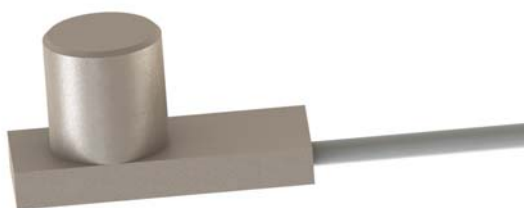


Airgap Flux Probe for Rotor Interturn Short Circuit Detection of Turbo Generators

ASC-2016

Key Features _____

- Individually designed to machine construction
- High Temperature range, very small signal cable allows to lay the cable through e.h. through ventilation hole



Applications _____

- Rotor Winding Short Turn Detection of Turbo Generators

General Description _____

The ASC-2016 is one of the ASC family of airgap search coils designed and manufactured by Sparks Instruments SA and is used to detect faults in the rotor winding insulation of turbo generators. The body is made out of fiber glass and the sensing element is encapsulated within high temperature epoxy resin. As many machine designs are different, the ASC sensor is typically designed especially for each type of machine.

The probe is installed on the wedge within the airgap between rotor and stator and the integrated small high temperature cable allows an easy routing outside of the machine. The open wires allows to lay also the cable through the ventilation holes instead passing it through the endwinding section.

The Probe measures the variation of the magnetic flux created from each rotor coil. It withstands up to 2 Tesla and is designed to operate for more than 155°C. The high temperature signal cable can be permanently used for up to 155 °C. If longer signal cables than 10m are required, the probe is delivered with a signal driver.

Ordering Information _____

| | | |
|-------------|--------------|--|
| Order Code: | 24.2016.00xx | 1x ASC-2016 with 5 or 10m integrated cable for airgaps up to 30mm and slotwidth >12mm |
| | 24.2016.K0xx | 1x ASC-2016 with 5 or 10m integrated cable for airgaps up to 30mm and slotwidth >12mm incl Signal Drive ASC-2000 |
| | 24.2000.0000 | 1x Signal Driver with 4 Pole M12 Connector, 24VDC Power +/-10V or 4..20mA Output |

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Technical Data

ASC-2016

Electrical

Magnetic Field Withstand: +/-2 Tesla Output Signal with driver: +/- 10V
Driver Power Supply: 24VDC +/- 20%

Environment

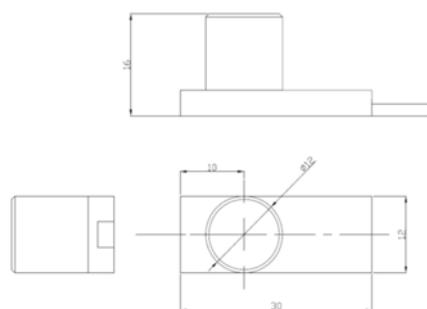
Sensor: Driver:
Operating Temperature Range: -50 .. +155°C Operating Temperature Range: 0.. 55°C

Mechanical

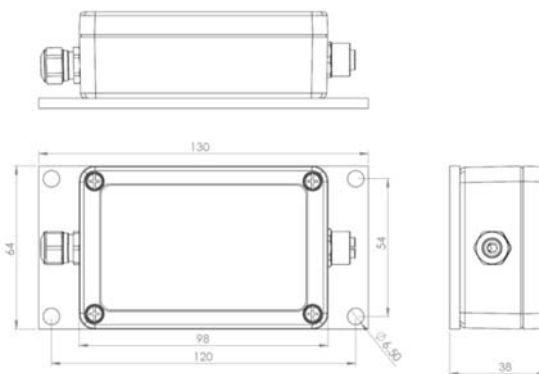
| | | | |
|-----------------------|-------------|------------------------|----------------------|
| Sensor: Dimensions | 30x12x16mm | Driver: Dimensions: | 130 x 64 x 38mm |
| Case Material: | Fiber Glass | Case Material: | Diecast Aluminium |
| Cable Length | 5 or 10m | Signal Connection | 4 pole M12 Connector |
| Cable Diameter | 3mm | | |

Dimensions

Sensor:



Driver



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