

## THERMAWATCH<sup>®</sup> ROTOR TWR<sup>TM</sup>-100

### FAST-RESPONSE NON-CONTACT ROTOR POLE TEMPERATURE MONITORING

### DESCRIPTION

The ThermaWatch<sup>®</sup> Rotor sensor, TWR<sup>TM</sup>-100 and signal conditioner provide a fast-response on-line temperature reading from salient and non-salient field poles of large rotating machines. Its 4-20 mA linearized output can be connected to the ZOOM<sup>®</sup> system or to any other instrumentation.

Because of its small size, the TWR-100 is easy to install through a stator core ventilation hole or any other location where the sensor tip is positioned in front of rotor pole faces, circuits or amortisseur bars. TWR-100 can also monitor rotor pole joints. This sensor, in combination with other condition monitoring parameters and ZOOM system, provides users with a comprehensive analysis of rotor condition.

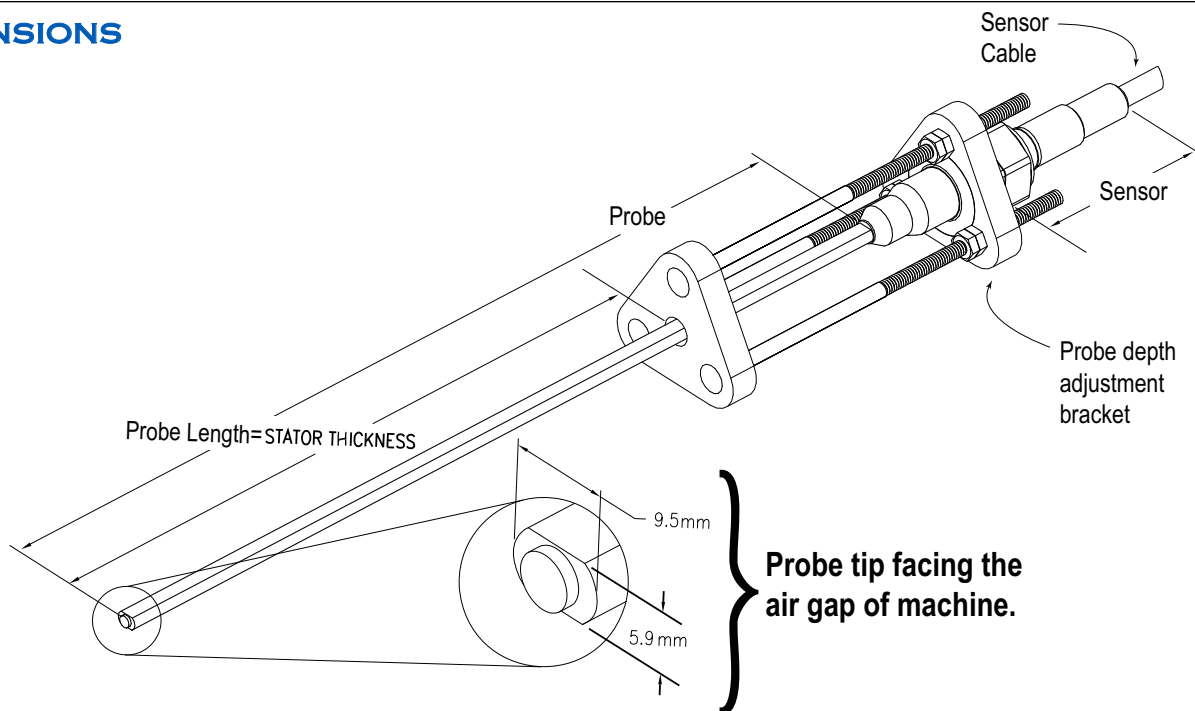
### APPLICATIONS

- Provides a fast-response temperature reading of each rotor pole (on-line monitoring)
- Monitor temperature of rotor pole face, rotor pole circuit, and/or rotor pole amortisseur bars
- Monitor temperature of rotor pole joints of salient pole machines

### FEATURES

- High-speed temperature sensing device
- Non-contact, temperature measurement from stator to rotor
- Small-size (5.9 mm/ 0.2 in.)
- Easy installation through one ventilation hole or near rotor pole
- On-line temperature monitoring of each rotor pole
- Patented pending technology

### DIMENSIONS





## TWR<sup>TM</sup>-100 GENERAL SPECIFICATION

### Operating

- Continuous Temperature Measuring Range 0°C to 200°C (32°F to 392°F)
- Accuracy <5°C/<9°F (40°C to 200°C/104°F to 392°F)
- Repeatability <1°C/<1.8°F
- Frequency Response DC to 350 Hz<sup>(1)</sup> (0°C to 200°C/32°F to 392°F)

(1) Note: For DC to 900 Hz, contact VibroSystM Sales Department

### Electronics

- Output signal 4 to 20 mA
- Power Supply + 24 VDC

### Environmental

- Temperature Range Probe 0°C to 150°C (32°F to 302°F)
- Sensor 0°C to 100°C (32°F to 212°F)
- Signal Conditioner 0°C to 65°C (32°F to 149°F)

### Physical Characteristics

- Probe Tip 5.9 mm/0.2 in.
  - Extension Cable up to 6.0 m/19.7 ft
  - Probe Length Maximum 457 mm/18 in.
- Other lengths can be customized by VibroSystM.*

