



RINGWAY

2-WIRE TECHNOLOGIES

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RINGLINE TEMPERATURE TRANSMITTER

P/N – RLTXAN_128 & RLTXAN_192

Ex ia – IECEx TSA 08.0031X

RINGLINE TEMPERATURE MONITORING ANALOG TRANSMITTER

DESCRIPTION:

Ringline temperature monitoring transmitter is encapsulated in a foot mounted plastic housing with flying leads for circuit connection. It is designed to continuously monitor the temperature of bearings and other mechanical components. It provides an 8 bit value representing the temperature of the probe. Each transmitter uses a single bit, of a possible 128 or 192 (up to 192 sensors possible) with its' address stored in an onboard EEPROM.

Each transmitter has a pair of wires (blue & white) to connect it to the Ringline field bus and an addition three wires which are plugged to the solid state sensor. There is an additional wire (green) to facilitate the programming process.

The transmitter receives operating power from the Ringline field bus and at the same time encodes the temperature value back onto the bus.

FEATURES:

- **Simple, robust and functional.**
- Ultra low power consumption.
- Signals retrieved using a 'Modbus Interface', 'Analog 4 to 20mA Receivers' or 'Ringline Displays'.
- Up to 12klms of condition monitoring on 'two wires'.
- Line powered. No additional power supply required. Solid state sensor.
- Addresses may be selected at order time, or reprogrammed with a Ringline Programmer.
- In built lightning protection.
- Custom sensor configuration possible on request

APPLICATIONS:

The transmitter is intended to monitor the temperature of bearings and other mechanical devices, where over temperature will cause self destruction or fire. Various probe configurations are available and custom configuration is possible. Lug style may be placed on the outside case for rotating shaft bearings. Probe type may be placed in a drilled hole for fixed shaft style bearings. For probe type, the temperature sensor is in the tip of the probe. These sensors are available in 128 or 192 channel models, which must be specified at time of order.

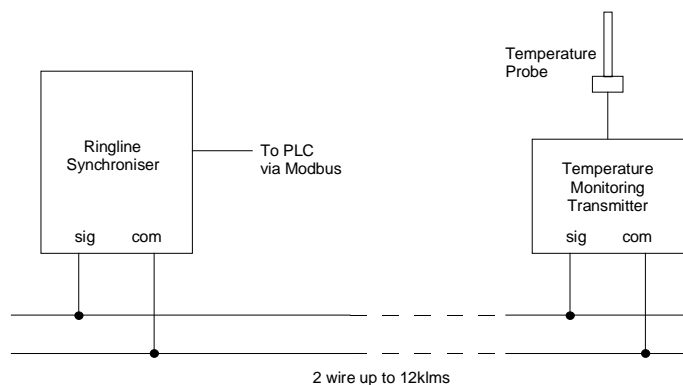
Most lubricants break down when they are above 90 degrees Celsius. By continuously monitoring and trending temperature values, the user may detect problems before there is a mechanical collapse.

The user should always check the operating temperature range of their lubricants from their lubricant manufacturer.

BRIEF TECHNICAL SPECIFICATIONS:

Power Supply:	Powered from Ringline field bus
Power Consumption:	Peak - 730 micro amps
Isolation Earth To Ringline:	Probe at 500 volts
Measurement Range:	0 to 110 degrees celcius
Resolution:	Signal - 8 bit - 0 to 255 decimal
Analog Update Rate Ringline 128:	1.64 seconds
Analog Update Rate Ringline 192:	2.408 seconds
Accuracy:	+/- 4 digital counts (sensor dependant)

Readings :	0 to 60 deg (0 to 139 cnts)	- normal bearing temperatures
	> 70 degs (> 162 cnts)	- alarm condition, over temp
	> 90 degs (>208 cnts)	- trip, collapse is immanent



Typical usage drawing