Distributed Processing Units Remote Analogue input (RAi-10tcxe)





Description

This unit has 10 analogue input channels. It is used for temperature measurements with Thermo Coupler (TC) elements of different types. It is particularly suited to monitor engine exhaust temperatures.

A large variety of temperature elements can be connected, with ranges \pm 50, \pm 200, 0 to + 600 °C. A Cold Junction Compensation function is included.

A large variety of different elements can be connected.

The module requires 24VDC input power and provides over redundant CAN Open 4.0 high speed field bus, sensor data processed and time stamped.

Functions

- Temperature element types: J/K/T/E/R/S/B/N
- CJC
- 10 analog input channels
- Scaled in technical units
- Limit checking
- Alarm block
- Trend
- Time stamping of alarms and events
- Self checking

Features

- All parameters are stored in the module
- Remote configuration
- No trimmers or jumpers
- No serviceable parts
- All connections are plugable
- Suitable for direct installation on the main engine
- Type approved



Supply voltage

• 18-32 VDC

Power consumption

- Nominal 6 W
- Maximum 7.5 W

Operating temperature

• -15°C to +70°C

Storage temperature

• -25°C to +70°C

Max rel. humidity

• 96% non-condensing

IP Code

• IP20

ENV properties

- IACS E10
- IEC 60945

Vibration

• 4 G

Weight of module

• 1.6 kg

Mounting

• Screws, 4 pcs M5

Connections, pluggable screw terminals

- I/O 2 terminals 2.5 mm2
- Power 4 terminals 2.5 mm2
- CAN bus 4 terminals 2.5 mm2

Signal types

- Thermocouples with CJC = Cold Junction compensation According to IEC 584
- Element: R/S/J/E/N 0-200, 0-600°C
- Element: B 0-600°C
- Element: T 0-200°C
- Element: K 0-200, 0-600, 0-1200°C
- Input: Differential CMV 10 [V] Accuracy
- ± 0.5 [%] (Calibration required)

Communication Interfaces

• 2 CAN ports for communication with host.

Isolation

- Power: Complete isolated (DC/DC converter)
- I/O: No isolation between channels. Chassis used as 0 Volt reference.
- CAN: Complete isolated (opto coupler).

BIST (Built In Self Test)

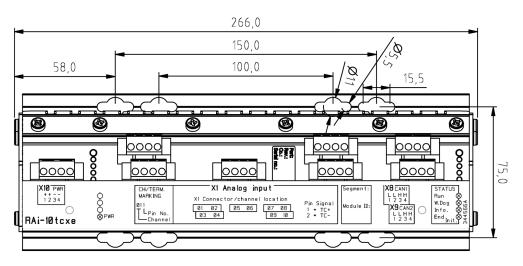
• Module temperature and power

Type approval

 DNV, LRS, BV, GL, RINA, NK, ABS, KR, PRS, RMR, CCS (allows direct mounting on engines, compressors, etc. in suitable cabinets)

Part number

• 334895



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