

#### TRD

# NI1000b ±0,35°C 0...100°C

#### **Technical Data**

Accuracy NTC

PT100b

PT1000b

**Connection:** 2-wire screened cable

±0,20°C

±0,35°C

±0,35°C

screw terminals 0,5 till 2,5mm2

0...70°C

0...100°C

0...100°C

Ambient range temp.: -10...+60°C

Ambient range hum.: 5-95% RH

Housing: IP30, ABS (flame reterdant)

**Dimensions:** 77 x 77 x 27mm

## **Features**

- Polarity independent
- Low-cost temperature measurement
- High quality sensing element
- Good airflow over sensing elements
- Simple 2-wire connection
- Economical way to measure temperature
- Attractive housing
- Other sensing elements on request
- Pt100 and Pt1000 Class B accuracy

# **Application**

The room temperature transmitter TRD is used to sense temperature in HVAC systems and are intended for direct interfacing to any Energy Management System.

#### **Function**

The sensing elements change their resistance value with respect to temperature:

 $\mbox{PT1000},\,\mbox{PT1000},\,\mbox{NI1000}$  - increasing resistance by increasing temperature.

NTC - increasing resistance by decreasing temperature.

#### **Design Features**

The room sensor is designed for wall mounting.

They are suitable for use with most commercially available recessed conduit boxes.

Connections are made via a terminal block.

The connections for a thermistor or an RTD element are polarity independent.

The cables can be introduced from the rear or the housing can be mounted onto a sinking box.

Casing and baseplate are made of plastic.

# **Ordering Codes**

TRDNTC Unitron, Trend, Honeywell Aquatrol,

Elesta, Seachange

TRD PT100 Inu, Serck, IVT, ABB, HoneywellTRD PT1000 Unitron, Johnson, Saia, Cylon

Exomatic, Honeywell, Serck

TRDTA TAC

TRD NI1000 Sauter

# **TRD**

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# **Mounting Notes**

- The sensor is suited for a wall mounting on a recessed conduit box.
- It may not be mounted in recesses or shelves, not behind curtains or doors and not near heat sources.
- · Direct solar radiation and draughts must be avoided.
- The permissible ambient climatic conditions must be observed.
- The end of the conduit at the room unit must be sealed to prevent false measurement due to draughts through the conduit.
- The room sensor should be mounted approximately 1,8 m above floor level.

## **Installation and Connection Details**

All connections to DDC controllers, data recorders etc. should be made using screened cable.

Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise.

Low voltage signal and supply cables should be routed separately from high voltage or mains cabling.

Separate conduit or cable trays should be used.

Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth.

This will provide better immunity to high frequency noise.

Most modern buildings have a separate earth for this purpose.

#### Connection

