

### INDOOR HUMIDITY- AND TEMPERATURE TRANSMITTER BTHD220

- Low cost
- Temperature compensation system
- RS485 MODBUS RTU
- Output 4-20mA, 1-5V DC
- Compact design

#### **DESCRIPTION**

BTHD220 is using thin-film sensor with capacitance changing proportionally to medium relative humidity, BTHD220 measures RH and temperature of air and non-aggressive gases and converts it into standard 4...20mA or 1-5VDC signal for temperature and humidity and as option RS485 MODBUS RTU communication. A built-in temperature drift compensation system guarantees good stability of measurement of both medium relative humidity and temperature. The RH transmitter is factory calibrated and does not need custom adjustment. The device is available in 3 variants

All this, in addition to the small size, and the low price, make BTHD220 a convenient solution for many RH measurement applications.

## **TECHNICAL SPECIFICATIONS**

Casing material : ABS plastic Pt-100 : -20 - +60°C

Humidity range : 0-100% (Capacitive sensor)

**INSTALLATION** 

**Supply** : 24 VDC  $\pm$ 10% max 2,4W

Ambient temp : -20 to 60°C

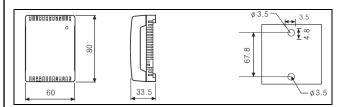
Mounting : Wall mount to IP20

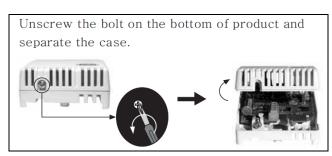
Dimension : Refer to drawing

**OUTPUT** 

Humidity: 4-20mA or 1-5VDCTemperature: 4-20mA or 1-5VDCLoad: 0 - 600Ω current outputCommunication: RS485 MODBUS RTU

#### **MECHANICAL SPECIFICATION**







#### **PERFORMANCE**

**Accuracy** :  $\pm 0.5\%$ (Temp)  $\pm 2\%$  (RH)

**Resolution** : 0,02mA/0,1°C,0,02mA/0,1% (RH)

**Isolation**: 500VAC for 1 minute

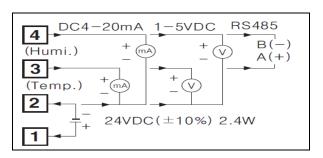
Response time : 0,5 sec

**EMC** : EN 50081-1, EN 50082-2

73/23/EEC & 89/336/EEC



## CONNECTION



# ORDER INFORMATION BTHD-220

MOUNTING OUTPUT
R Indoor C 4-20mA
V 1-5VDC

T RS485

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