

## Compressed air RH+T+Tdp sensor with 4-20mA output, cable 4 meters

code: T3111P-4



Humidity, temperature transmitter. T+RH probe from hard anodized duralumin for compressed air up to 25 bars on the cable. Outdoor, indoor use.

Relative humidity, temperature sensors at probe on the cable. Measured values are also converted to other humidity interpretation: dew point temperature, absolute humidity, specific humidity, mixing ratio, specific enthalpy.

The device is supplied with T+RH probe with 4 meters cable.

### Technical data

|                                                   |                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TEMPERATURE SENSOR                                |                                                                                                                                                                                                                                                                                                   |
| Measuring range                                   | -30 to +105 °C                                                                                                                                                                                                                                                                                    |
| Accuracy                                          | ±0.4 °C                                                                                                                                                                                                                                                                                           |
| Resolution                                        | 0.1 °C                                                                                                                                                                                                                                                                                            |
| HUMIDITY SENSOR                                   |                                                                                                                                                                                                                                                                                                   |
| Measuring range                                   | 0 to 100 % RH                                                                                                                                                                                                                                                                                     |
| Accuracy                                          | ±2.5 % RH from 5 to 95 % at 23 °C                                                                                                                                                                                                                                                                 |
| Resolution                                        | 0.1% RH                                                                                                                                                                                                                                                                                           |
| DEW POINT                                         |                                                                                                                                                                                                                                                                                                   |
| Measuring range                                   | -60 to +80 °C                                                                                                                                                                                                                                                                                     |
| Accuracy                                          | ±1.5°C for dew point temperature +10°C and higher at ambient temperature +25°C<br>±2.0°C for dew point temperature 0°C at ambient temperature +25°C<br>±3.0°C for dew point temperature -10°C at ambient temperature +25°C<br>±6.0°C for dew point temperature -20°C at ambient temperature +25°C |
| Resolution                                        | 0.1 °C                                                                                                                                                                                                                                                                                            |
| MEASURING THE MOISTURE OF COMPRESSED AIR          |                                                                                                                                                                                                                                                                                                   |
| Measuring range                                   | up to 25 bars                                                                                                                                                                                                                                                                                     |
| Air flow velocity                                 | up to 25 m/s at a pressure of 1 bar (1m/s at a pressure of 25 bar)                                                                                                                                                                                                                                |
| GENERAL TECHNICAL DATA                            |                                                                                                                                                                                                                                                                                                   |
| Operating temperature                             | -30 to +80 °C                                                                                                                                                                                                                                                                                     |
| Channels                                          | 1x connectable temperature+humidity probe                                                                                                                                                                                                                                                         |
| Counted values                                    | dew point, absolute humidity, specific humidity, mixing ratio, specific enthalpy                                                                                                                                                                                                                  |
| Output                                            | 4-20 mA, galvanic isolated                                                                                                                                                                                                                                                                        |
| Range of humidity sensor temperature compensation | all temperature range                                                                                                                                                                                                                                                                             |

|                             |                                                                  |
|-----------------------------|------------------------------------------------------------------|
| Configuration of output     | user adjustable from PC; measured range + value                  |
| Power                       | 9-30 Vdc                                                         |
| Protection class            | IP65 electronics; IP40 sensors                                   |
| Dimensions                  | 88,5 x 114 x 39,5 mm; length/diameter of external probe 88/18 mm |
| External probe cable length | 4 meters                                                         |
| Weight                      | approx. 210 g                                                    |
| Warranty                    | 3 years                                                          |