

# JUMO hydroTRANS Series

Humidity and temperature transmitter with optional CO<sub>2</sub> module for HVAC applications



## The features at a glance

- Precise monitoring of environmental influences
- Variants for different installation locations
- Low maintenance requirements, easy filter cap replacement
- Easy installation via established interfaces, minimal installation requirements



## Brief overview

Devices of the JUMO hydroTRANS series are reliable humidity and temperature transmitters with an optional CO<sub>2</sub> module. They operate according to the capacitive measurement method. The device series is available with various interfaces. Moreover, it is characterized by easy installation, robustness, and reliable sensor technology. Depending on the type, the measuring range is 0 to 100 % RH and the

accuracy is 2 % RH. The variants can be used in temperature ranges between -40 and +80 °C. Variants with an optional CO<sub>2</sub> module that have a measuring range of up to 10 000 ppm are available for the precise determination of the indoor air quality. Very low response times can be achieved by placing the module in the probe head. A voltage and current output as well as Modbus are available as interfaces.

## Technical data



| Product name       | JUMO hydroTRANS S20                                                                          | JUMO hydroTRANS S30                                         | JUMO hydroTRANS S40    | JUMO hydroTRANS S10                                                                       |
|--------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------|
|                    | Humidity and temperature transmitter with CO <sub>2</sub> option                             |                                                             |                        |                                                                                           |
| Type               | 907042                                                                                       | 907043                                                      | 907044                 | 907045                                                                                    |
| Version            | Wall-mounted                                                                                 | Duct                                                        | Rod                    | Indoor                                                                                    |
| Application        | Heating – ventilation – air conditioning (HVAC), building automation                         |                                                             |                        |                                                                                           |
| Sensing element    | Capacitive humidity and temperature sensor                                                   |                                                             |                        |                                                                                           |
| Measurement medium | Air (unpressurized, non-aggressive)                                                          |                                                             |                        |                                                                                           |
| Measuring range    | Humidity: 0 to 100 % RH<br>Temperature: -40 to +80 °C<br>CO <sub>2</sub> : 400 to 10 000 ppm |                                                             |                        | Humidity: 0 to 95 % RH<br>Temperature: -5 to +55 °C<br>CO <sub>2</sub> : 400 to 5 000 ppm |
| Output             | 4 to 20 mA, 0 to 10 V, Modbus RTU (RS-485)                                                   |                                                             |                        |                                                                                           |
| Voltage supply     | 24 V DC (standard)                                                                           |                                                             |                        |                                                                                           |
| Protection type    | IP65                                                                                         |                                                             |                        | IP20                                                                                      |
| Optional           | Display, CO <sub>2</sub> sensor                                                              |                                                             | CO <sub>2</sub> sensor | Display, CO <sub>2</sub> sensor                                                           |
| Special features   | Single Pair Ethernet (SPE) interface                                                         | Suitable for railway applications according to DIN EN 50155 |                        | –                                                                                         |