



More than **sensors + automation**

JUMO hydroTRANS Series

Humidity and temperature transmitter with optional CO₂ module for railway applications



The features at a glance

- Compliance with railway standards according to DIN EN 50155
- Precise climate monitoring including CO₂ option
- Low maintenance requirements
- Easy installation via established interfaces, minimal installation requirements



Type 907043, 907044



Brief overview

Devices of the JUMO hydroTRANS series are reliable humidity and temperature transmitters with an optional CO₂ module, which operate according to the capacitive measurement method. The device series is available with various interfaces. It is characterized by easy installation, robustness, and reliable sensor technology.

JUMO hydroTRANS for railway application according to DIN EN 50155 is available in 2 variants: as a duct or as a rod version. The various versions with IP65 protection type make the devices suitable for a wide range of application areas in climate monitoring for railway applications.

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 CO₂ module with 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.

Temperature monitoring

To ensure that the air conditioning system can regulate the temperature in the train, reliable temperature measurement and control is essential. The temperature probes and thermostats must withstand the conditions which arise due to movement. They must also be vibration proof.

Technical data

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| Product name | JUMO hydroTRANS S30 JUMO hydroTRANS S40 |
| Type | 907043, 907044 |
| Humidity measuring range | 0 to 100 % RH |
| Temperature measuring range | -40 to +80 °C |
| CO ₂ measuring range | 400 to 10 000 ppm |
| Analog outputs | 4 to 20 mA, 0 to 10 V |
| Digital output | Modbus RS485 |
| Protection type | IP65 |
| Application area | Air conditioning and ventilation monitoring |

