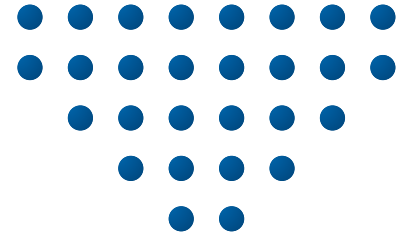


Humidity and temperature sensor

HTH-6200



OJ Air2
compatible

HVAC CONTROLS AND POWER

Humidity and temperature sensor with Modbus

HTH-6200 is a series of combined humidity and temperature sensors which feature Modbus communication and are ideal for measuring relative air humidity and temperature in ventilation systems.

HTH-6200 sensors are designed to be installed direct in the ventilation system ducts. Thanks to their adjustable length, the sensors are equally suitable for large and small ducting systems.

HTH-6200 is designed to provide a beneficial combination of high quality and minimum installation costs.

Minimum installation costs

With HTH-6200, air humidity and temperature can be measured and monitored by a single sensor. All data is transferred from HTH-6200 to the controller as digital values via an RS485 RTU Modbus protocol.

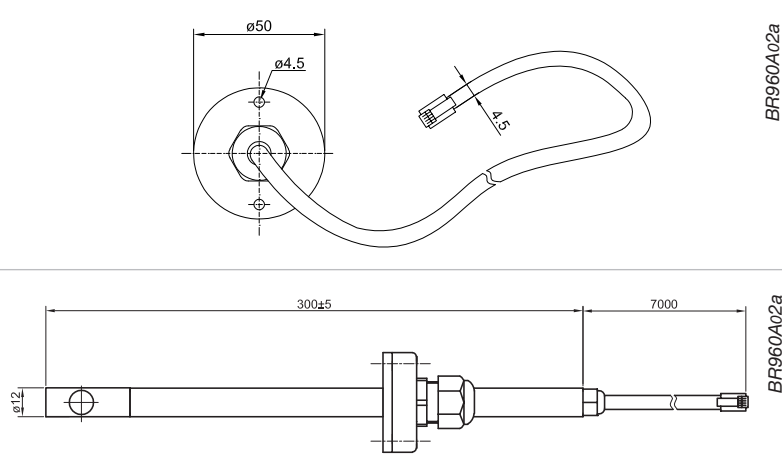
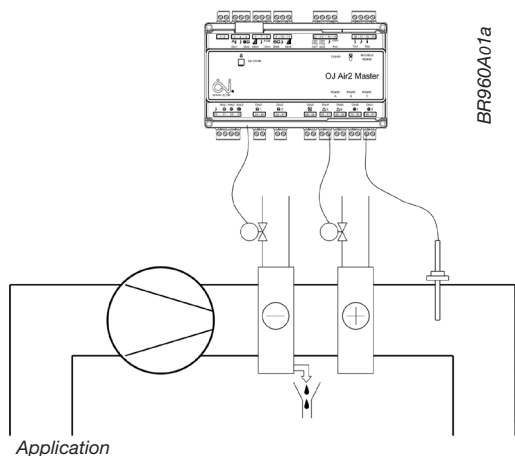
The built-in Modbus communication makes HTH-6200 an extremely attractive solution for integration with PLC, BMS and SCADA systems because of lower installation costs.

Telescopic sensor

To ensure correct sensor positioning within the air flow, insertion depth can be adjusted from 50 to 250 mm.

Large measuring range with uniform accuracy

HTH-6200 accurately measures air humidity over the entire range from 0 to 100% RH. With maximum accuracy between 10 and 90% RH, HTH-6200 is ideal for HVAC systems.



INTRODUCTION

HTH-6200 is a combined humidity and temperature sensor for use in systems where measurement and/or control of air humidity and air temperature is required.

HTH-6200 contains a humidity sensor, which can also measure temperature. It is supplied with a 7 m cable for bus communication and is connected via an RJ12 modular connector.

Besides transferring signals, the communication cable also supplies the required power voltage.

DESCRIPTION

HTH-6200 is available in three variants. The physical design of the three is identical, the only difference being the way in which the products are Modbus addressed.

INSTALLATION

HTH-6200 sensors are installed in the ventilation duct using the accompanying bracket, which must be attached to a firm, level surface by means of two screws. The 18-30 V DC supply voltage (24 V DC nominal voltage) is provided via the Modbus connection.

The sensor should be installed in such a way that the air flow in the duct can pass unhindered through the measuring hole at the end of the sensor, which should be aligned parallel to the air flow.

Although HTH-6200 is not affected by the position in which it is installed, it is advisable not to install the sensor in an upright position with the cable downwards as this may cause moisture to accumulate in the sensor.

It is important that HTH-6200 is installed in such a way that the measuring hole is positioned at the centre of the duct.

TECHNICAL DATA

Supply voltage	18-30 V DC, nominal 24 V DC, via Modbus
Modbus	RS-485, 38.4 kbaud, 24 V DC, RJ12 connector (6P6C)
Modbus address HTH-6202	Hex=7A / Dec=122
Modbus address HTH-6203	Hex=7B / Dec=123
Modbus address HTH-6204	Hex=7C / Dec=124
Modbus connection	1 x RJ12 6/6 connector
Cable length, pre-fitted	7000 mm
Max. cable length	50 m (in low EMC environment)
Measuring range, humidity	0 to 100% rH
Measuring range, temperature	-40 to 120°C
Measuring accuracy, humidity (10-90% rH)	<2% rH
Measuring accuracy, humidity (0-10% rH / 90-100% rH)	<5% rH
Measuring accuracy, temperature (15-40°C)	<+/-0.25°C
Resolution, humidity	0.03%
Resolution, temperature	0.01°C
Long-term stability, humidity	<0.5% rH/year
Enclosure rating, in duct	IP32 (EN 60529)
Enclosure rating, outside duct	IP54 (EN 60529)
Dimensions	see dimensioned drawing above
Weight	250 g

PRODUCT PROGRAMME

TYPE	PRODUCT
HTH-6202	Temperature and humidity sensor with Modbus
HTH-6203	Temperature and humidity sensor with Modbus
HTH-6204	Temperature and humidity sensor with Modbus

CE MARKING

HTH-620X meets the requirements contained in the following standards:

EMC DIRECTIVE
EN 61000-6-2
EN 61000-6-3