

Transducer

HTH

HTH-6xx1



HTH-6xx2

**AutomatikCentret**

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HVAC CONTROLS AND POWER

Humidity controlled ventilation

HTH is a series of humidity transducers which are particularly suitable for measuring air humidity in rooms and ventilation systems.

HTH transducers are ideal for measuring actual air humidity in demand-controlled ventilation systems.

The sensor element is suitable for installation in livestock housing facilities, swimming baths and other locations with aggressive atmospheres where more expensive, industrial transducers have previously been necessary.

HTH transducers are designed to provide our customers with an advantageous combination of high quality, precise control and low life-cycle costs.

HTH FUNCTIONS

Wide measurement range

HTH transducers accurately measure air humidity over the entire range from 0 to 100% RH. Thanks to their optimum accuracy from 25 to 75% RH, HTH transducers are ideal for HVAC systems.

Stable measurement

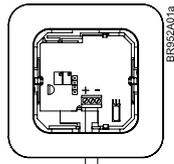
HTH transducers have extremely low measurement drift. Within just 15 minutes from activation, the signal remains stable throughout the measurement period.

Aggressive environments

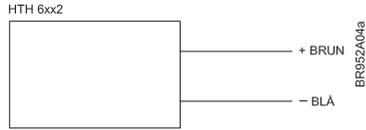
HTH transducers can even be used in such highly aggressive environments as pig housing facilities and swimming baths. HTH rod sensors are also ideal for outdoor applications if suitable shielding is provided.

Standard output signal

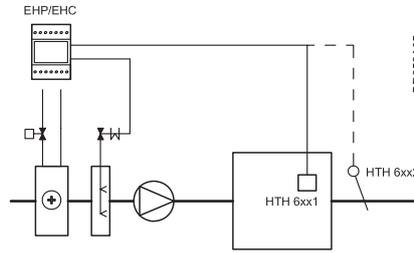
HTH transducers deliver a 4-20 mA output signal and can thus be used with all existing OJ hygrometers and most other controllers currently available.



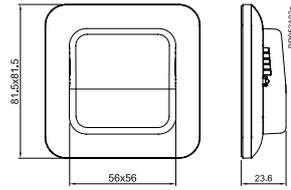
Connection , HTH-6xx1



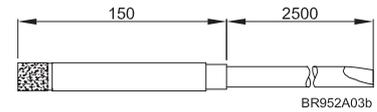
Connection , HTH-6xx2



Application example



Dimensions, HTH-6xx1



Dimensions, HTH-6xx2

TECHNICAL DATA

Supply voltage	8-24V DC
Transducer output	4-20 mA
Measurement range	0-100% RH
Ambient temperature	Sensor: -40/+85°C Transducer: -20/+60°C
Ambient humidity	0-100% RH
Accuracy at 20°C	10-25% RH = ±5% 25-75% RH = ±4% 75-100% RH = ±5%
Temperature stability	true RH = (sensorRH)/(1.0546-0.00216T), T i °C
Dimensions - enclosure (HTH-6xx1)	82 x 82 x 24
(HTH-6xx2)	Ø12 x 150
Cable dimension	2 x max. 1,5mm2
Enclosure (HTH-6xx1)	IP21
(HTH-6xx2)	IP65
Weight (HTH-6xx1)	70 g
(HTH-6xx2)	170 g

CE MARKING

HTH transducers meet the requirements contained in the following standards:

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

INSTALLATION

HTH-6xx1 installation

HTH-6xx1 is screwed into position through the baseplate. The frame is then placed over the housing and clicked into position. HTH-6xx1 must not be used in very dusty locations.

HTH-6xx2 installation

HTH-6xx2 can be either suspended by the cable or wall mounted in a bracket. In outdoor use the sensor must be screened against direct rain and spray. Otherwise the filter may ice up.

Transducer cable installation

The transducer cable may be up to 50 m in length. The transducer cable must be kept separate from mains-carrying cables as voltages may otherwise be produced that can interfere with transducer function.

PRODUCT PROGRAMME

TYPE	PRODUCT
HTH-6121	Humidity transducer for wall mounting in rooms with dust-free air, 4-20 mA
HTH-6122	Humidity transducer for suspension or wall mounting in aggressive environments, 4-20 mA, 150 mm

ACCESSORIES

TYPE	PRODUCT
EHC-53-11	Hygrostat for installation on cabinet door, 4-20 mA, 230V AC
EHC-53-31	Hygrostat for installation on cabinet door, 4-20 mA, 24V AC
EHP-15	Hygrostat for mounting on DIN rail, 4-20 mA, 230V AC
EHC-51-11	Digital hygrometer, 4-20 mA, 230V AC
HTHB-1	Air duct lead-in