Intelligent Indoor Humidity Transmitter

HRV HRVC

Jan.08

HRV/HRVC

Features

- **Programmable humidity range**
- **Minimum and maximum humidity memory**
- **0-10Vdc or 0-20mA measuring signals**
- **Excellent accuracy and stability**
- **Selectable averaging signal**
- **Different colours with RAL9003 as option**
- **Aesthetically appropriate housing**

Technical Data

Accuracy :

RH +/-3% at 25C 20-80%

Range:

RH 0-100% RH

Ambient range: 0-+50C

Stability: +/-0,5%/year if used within 0-+50C

Protection Class: IP30

Output Ranges:

RH 0-100% 2-10Vdc
2-10Vdc/4-20mA
0-10Vdc/0-20mA
Special (Specify)

Power Supply: 24Vac +/-10% 50-60Hz
24Vdc +/-10%

Power Consumption: Max.2VA

Maximum Load: 20mA, 500c

Dimensions: 21 x88 x88 (H x W x D)

Weight: 105 g

Connections: 2,5 mm2

Housing: Fire Proof ABS plastic

These products meets the requirements of CE-approval

Application

- Ventilation **- Air Condtioning**

- Clean Rooms **- Pharmaceutical Processes**

- Green Houses **- Archives Rooms**

- Swimming Halls **- Museums**

- Supervision of critical humidity

- Recording of minimum and maximum values for critical environments

Descriptions

The transmitter measures the humidity by the use of a capacitive sensing element.

The microprocessor samples the humidity once per second.

It calculates an avering signal over a preset number of seconds and generates an output signal based on minimum and maximum humidity values.

Standard range is 0...100%rH and 10 seconds average.

The range and avering samples may be cusomized

Ordering

HRV	Humidity Transmitter 2-10Vdc
HRVC 24	Humidity Transmitter 2-10Vdc/4-20mA
HRVC 00	Humidity Transmitter 0-10Vdc/0-20mA
HRVC xxx	Humidity Transmitter Special (Specify)
OP THP	Operation Terminal for Temp, Hum, Pressure
Colour	Different Colours as RAL9003 on request

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Configuration parameters

The HRV/HRVC is an intelligent sensor and can be adapted to fit perfect into your application.
The preparation of the sensing signal is defined by parameters.
The parameters are set by using the operation terminal OP THP.
The operation terminal can be used as remote indicator of the measured values.
On request your dealer can preset the configuration values.
Refer to user manual on operation terminal OP THP for detailed instruction on how to program configuration parameters.

Temperature Input Configuration

Parameter	Description	Range	Standard
IP 00	H1: Show Percent	ON, OFF	ON
IP 01	H1: Samples taken for averaging control signal	1…255	10
IP 02	H1: Calibration	-10…10%	0

Analogue Output Configuration

Parameter	Description	Range	Standard
OP 00	AO1: Configuration Output Signal 0 = Feedback humidity input, 1 = Feedback humidity minimum value 2 = Feedback humidity maximum value	0 - 2	0
OP 01	AO1: Minimum limitation of output signal	0 – Max %	20%
OP 02	AO1: Maximum limitation of output signal	Min – 100%	100%

Technical Connections

1: Power 0V AC, GND
2: Power 24V AC/D
3: Analog Output 1

Analog Output Configuration

The analog output may be configured with a jumper for 0-10Vdc or 0-20mA controls signals

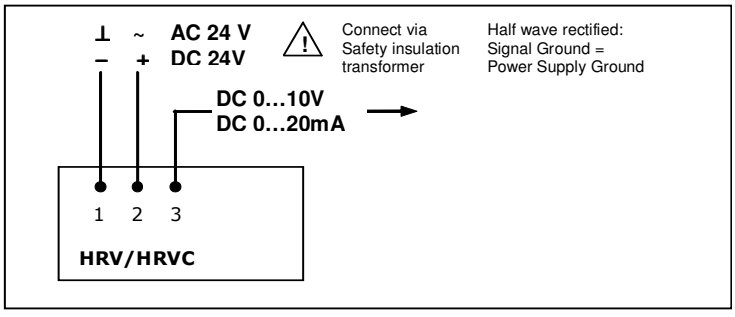
The jumper is located behind the terminal connector of

See table below for jumper placement.

The factory setting is to 0-10Vdc

Signal Type	Jumper selection
0 – 10Vdc	(1-2)
0 – 20mA	(2-3)

Wiring Diagram



Measuring Signal Humidity.Select Signal type with JP1
The signal range is adjustable with OP THP.
See package sheet or configuration sticker for valid range.

Construction

This sensor is constructed to high quality standards. The unobtrusive design and size will blend into any interior decoration.
A metal mounting plate that fits on most commercially available recessed conduit boxes guarantees a save installation.

Installation

Mount the temperature sensor on a flat interior wall of the room to be controlled.

Do avoid obstructions such as shelves, curtains and recesses.

Do not place near heat sources, draft channels.

Do not expose to direct sunlight.

- When installing the unit, fix the base plate first, connect the electrical connections then hook on the cover and secure it.
- The end of the conduit at the sensor must be sealed to prevent false measurements due to draughts through the conduit.