



The HRT250 series is a humidity- or a humidity/temperature- transmitter for wall/room mounting.

- \* Supply voltage 24 V AC or 20-35 V DC
- \* Accuracy +/- 2% RH
- \* Output signal 0-10 V DC or 4-20mA
- \* IP65
- \* Excellent long term stability
- \* Resistant to contamination

## Function

HRT250 humidity transmitter is intended for wall/room-mounting in HVAC-applications, swimming baths, greenhouses, stables etc.

The humidity transmitter has a capacitive thin-film element which gives a signal that is proportional to the relative humidity. The measuring signal is converted by the built-in electronics to output signals, 0 - 10 V or 4-20mA

### Measuring element

The transmitter has an accuracy of +/- 2%RH (0...90%RH), +/-3% (90...100%RH).

The measuring element has rapid response to changes in humidity. It can withstand saturation without negative effects on the accuracy. The sensor element can be subjected to 100 %RH without being damaged and has excellent long-term stability. The element also has good durability in contaminated environments.

### Combination sensor

The HTRT transmitter has, apart from the functions included in HRT, a temperature sensor, which, via the built-in electronics, gives output signals 0 - 10 V DC or 4-20mA.

### Supply voltage

The transmitter can be supplied by either 24 V AC or 20 - 35 V DC. The transmitter has automatic adaptation to the connected voltage.

Transmitters with output 4-20mA is to be supplied with 20-35 V DC

## Models

HRT250	Humidity transmitter for wall/room mounting, 0-10V
HRT250-420	Humidity transmitter for wall/room mounting, 4-20mA
HTRT250	Humidity and temperature transmitter for wall/room mounting, 0-10V
HTRT250-420	Humidity and temperature transmitter for wall/room mounting, 4-20mA

## Technical data

Supply voltage	24 V AC +/-20% (only 0-10V versions) or 20-35 V DC
Ambient temperature electronics	-20...+50 C°
Ambient temperature probe	-20...+80 C°
Cabel connection	Screw terminals max 1,5mm
Protection class	IP65
CE	These products conform with the requirements of European EMC standards CENELEC EN 50081-1 and EN 50082-1 and carry the CEMark.

## Humidity

Sensor element	Capacitive thin-film element The sensor element can be subjected to 100 %RH without being damaged.
Working range	0...100 %RH
Accuracy at 20° C	+/-2 % RH (0...90% RH), +/-3% RH (90...100%RH)
Hysteresis 10% - 80% - 10%	<2% RH
Temperature dependance at 60% RH	Typical - 0,05% RH/° C
Outputs	0 - 10 V DC <1,0mA, 4-20mA <500 Ohm for 0-100% RH
Sensor protection	Membrane filter, sintered brass on request.

## Temperature (only HTRT250 and HTRT250-420)

Sensor element	KF6544 Class DIN A IEC 751
Working range	-20...+80 C°
Output signals	0 - 10 V DC or 4-20mA for -20...+80° C
Accuracy at 20° C	+/- 0,2° C
Temperature dependence	<+/- 0,03° C / ° C (for the electronic circuitry)

All other technical details as above.

## Dimensions and wiring

### HRT250

1	Supply voltage
2	System neutral
3	Output humidity 0-10 V DC

### HRT250-020

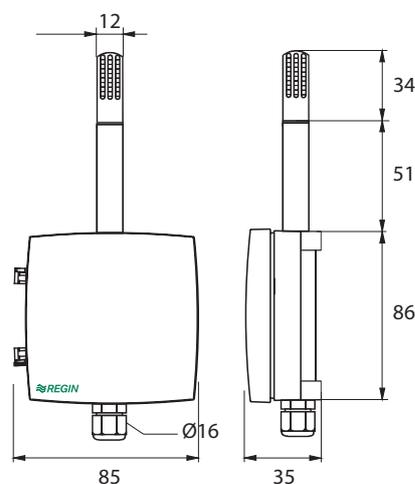
1	Supply voltage
2	Output humidity 4-20mA

### HTRT250

1	Supply voltage
2	System neutral
3	Output humidity 0-10 V DC
4	Output temperature 0-10 V DC

### HTRT250-020

1	Supply voltage
2	Output humidity 4-20mA
3	Output temperature 4-20mA



(mm)

### Head Office Sweden

Phone: +46 31 720 02 00  
Web: www.regin.se  
Mail: info@regin.se

### Sales Offices

France: +33 1 41 71 00 34  
Germany: +49 30 77 99 40  
Spain: +34 91 473 27 65  
Hong Kong: +852 24 07 02 81  
Singapore: +65 67 47 82 33

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