

HUMIDITY TRANSMITTERS RHT DUCT SERIES



Duct mount relative humidity transmitters for building automation systems

RHT Duct is a relative humidity transmitter with temperature output installed in air ventilation duct. Illuminated display ensures easy readability also from a distance. The RHT has a screwless lid and an easily adjustable mounting flange that make the installation of the device easy.

RHT Duct series devices include:

- Separate output for each measurement parameter (rH, T).
- Mounting flange

RHT Duct series device options offer:

- Clear backlit display
- Modbus configuration



APPLICATIONS

RHT Duct series devices are commonly used to monitor and control:

- Relative humidity and temperature levels of incoming and return air in ventilation system

MODEL SUMMARY

Description	RHT Duct	
	Model	Product code
Relative humidity transmitter for duct	RHT Duct	302.002.001
- with display	RHT Duct-D	302.002.002
- with Modbus configuration and display	RHT-MOD Duct-D	302.002.006

HUMIDITY TRANSMITTERS

RHT DUCT SERIES

SPECIFICATIONS

Performance

Measurement ranges:

Temperature: 0...50 °C

Relative humidity: 0-100 %

Accuracy:

Temperature: <0.5 °C

Relative humidity: ±2...3 % at 0...50 °C and 10-90 % rH

Total error band includes accuracy, hysteresis and temperature effect over 5...50 °C and 10-90 % rH.

Technical Specifications

Media compatibility:

Dry air or non-aggressive gases

Measuring units:

°C and % rH

Measuring element:

Temperature: NTC10K

Relative humidity: Thermoset polymer capacitive sensing element

Environment:

Operating temperature: 0...50 °C

Storage temperature: -20...70 °C

Humidity: 0 to 95 % rH, non condensing

Physical

Dimensions:

Case: 119 x 100 x 44.7 mm

Probe: L=188 mm, d=12 mm

Mounting:

With flange, adjustable 0...188 mm

Weight:

150 g

Materials:

Case: ABS

Cover: PC

Probe: ABS

Mounting flange: LLPDP

Protection standard:

IP54

Electrical connections:

4 spring loaded terminals

(24 V, GND, rH, T)

0.2-1.5 mm² (12-24 AWG)

Electrical

Supply voltage: 24 VAC or VDC ±10 %

Current consumption: max 90 mA (at 24 V) + 10 mA for each voltage output

Output signals for every media:

0/2...5/10 VDC, Load R minimum 1 kΩ

Conformance

Meets requirements for CE marking:

EMC Directive: 2014/30/EU

RoHS Directive: 2011/65/EU

WEEE Directive: 2012/19/EU

**COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV GL**
= ISO 9001 = ISO 14001 =



HOW TO GENERATE A MODEL?

Example:	Product Series			
	RHT Duct-D	RHT	Relative humidity transmitter, analog configurations	
RHT-MOD		Relative humidity transmitter, Modbus configuration		
		Mounting		
		Wall mount		
Duct		Duct mount (not available with relay)		
		Relay (only for wall mount model)		
		-1R	With relay	
			Without relay	
		Display		
		-D	With display	
		Without display		
Model	RHT	Duct		-D