HUMIDITY TRANSMITTERS
RHT DUCT SERIES

5 YEAR WARRANTY

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).
- Offset feature enabling field calibration for each measurement parameter (rH, T)
- Mounting flange

RHT Duct series device options offer:
- Clear backlit display
- Modbus configuration
- 4-20 mA proportional output

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

	RHT Duct		RHT Duct with mA output	
Description	**Model**	**Product code**	**Model**	**Product code**
Relative humidity transmitter for duct	RHT Duct	302.002.001	RHT-Duct-A	302.008.005
- with display	RHT Duct-D	302.002.002	RHT Duct-A-D	302.008.006
- with Modbus configuration and display	RHT-MOD Duct-D	302.002.006		

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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: 120 x 96 x 45 mm
Probe: L=188 mm, d=12 mm
Mounting:
With flange, adjustable 40...155 mm
Weight:
150 g
Materials:
Case: ABS
Cover: PC
Probe: ABS
Protection standard:
IP54
Electrical connections:
4 spring loaded terminals
(24 V, GND, rH, T)
0.2–1.5 mm² (12–24 AWG)
A-model:
6 spring loaded terminals
(24 V, GND, Voltage_ rH, Voltage_T, mA_rH, mA_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) + 35 mA for each voltage output
Output signals:
0/2...5/10 VDC, Load R minimum 1 kΩ
Only A-model:
4...20mA, Load R maximum 500 Ω, minimum 20 Ω
Zero/Span output calibrated within ±0.08mA

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 =

RoHS 2 2011/65/EU

HOW TO GENERATE A MODEL?

Example: RHT Duct-D	**Product Series**				
	RHT	Relative humidity transmitter, analog configurations			
	RHT-MOD	Relative humidity transmitter, Modbus configuration			
		Mounting			
		Duct	Duct mount		
			Output		
				Voltage output	
			-A	Voltage and current output	
				Display	
				-D	With display
					Without display
Model	RHT	Duct		-D	