Honeywell

H7015B1060 / H7015B1080

DUCT HUMIDITY TEMPERATURE SENSOR

PRODUCT DATA

GENERAL

The H7015B1060 Humidity Temperature Duct Transmitter combines a capacitance-type relative humidity sensor and a temperature sensor in one housing, both with 0…10V output.

The Model H7015B1080 is additionally equipped with a 20kΩ NTC passive temperature sensor.

These sensors can be used

- for discharge, outside or return air control
- as high limit sensor, e.g., for steam humidification

Models

OS-No.	Temperature Sensor Type
H7015B1060	0…10V
H7015B1080	0…10V and 20kΩ NTC passive

FEATURES

- **0…10V %rh / temperature output or additional 20kΩ NTC temperature sensing element**
- **Wide sensing range**
- **Capacitance-type sensing element for relative humidity**
- **Maintenance free**

SPECIFICATION

Power supply	24 V AC, ±20% (SELV) 15…35 VDC
Current consumption	typ. 5 mA at DC supply typ. 13mA at AC supply
Ambient Limits	
Operating temperature	-15...65 °C (5...149 °F)
Transport and storage temperature	-25...+60 °C (-13...+140 °F)
Humidity	5...95% rh, non-condensing
Safety	
Protection class	III as per EN60730-1
Protection standard	
- Terminal box	IP65 as per EN60529
Housing material	Flame retardant V0 as per UL94
Terminal box	plastic (PC)
Dimensions	see Fig. 1 on pg. 2
Mounting	duct
Temperature Sensor	
Temperature sensing range of 0…10V output for	
H7015B1060/H7015B1080	0…+50°C (+32…122°F)
H7015B1080 (at NTC20K)	-30...+70 °C (-22...+158 °F)
Nominal value, NTC	20 kΩ at 25 °C
Accuracy, 0…10V output	±0.3 K at 20°C
Accuracy, NTC	±0.3 K at 25 °C
Characteristic NTC 20K	see EN0B-0476GE51
Response time for temperature at air velocity 3 m/s	
0…10V τ_{63}	< 110 s
NTC τ_{63}	< 80 s
Relative Humidity Sensor	
Humidity sensing range	0...100% rh
Output signal	0...10 Vdc ≙ 0...100% rh
Output current	-1mA < I_L < 1mA
Outputs short circuit protected	
Operating range	10…95% rh
Accuracy	±2.5%rh at 20 °C, 10…95%rh
Temperature stability:	typ. +-0.03% rh/K
Response time	$\tau_{63} \approx$ 9 s at air velocity 3 m/s

CE

WIRING

wiring run	maximum length
sensor to controller	200 m (660 ft)

NOTE: Installation of the sensor near high EMI-emitting devices may lead to faulty measurements.

Use shielded wiring in areas with high EMI.

Keep 15 cm (5.9'') min. distance between sensor lines and 230 Vac power lines.

Use two transformers: one for sensors and actuators and one for the controller.

DIMENSIONS

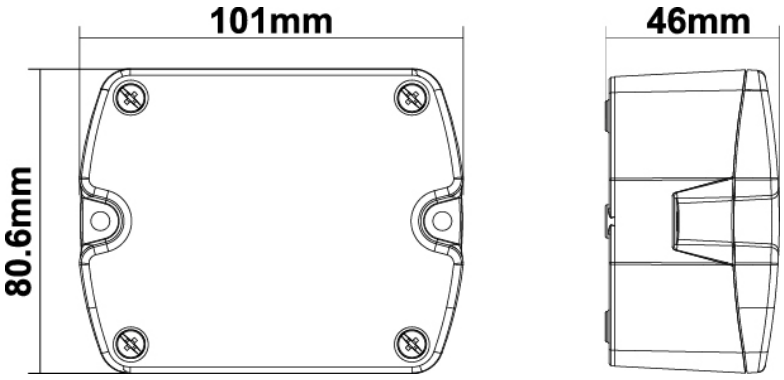

Fig. 1. Dimensions

MOUNTING

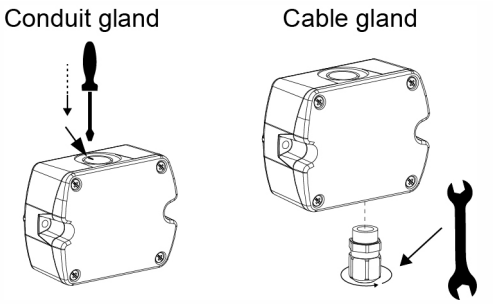

Fig. 2. Assembly of Conduit / Cable Gland

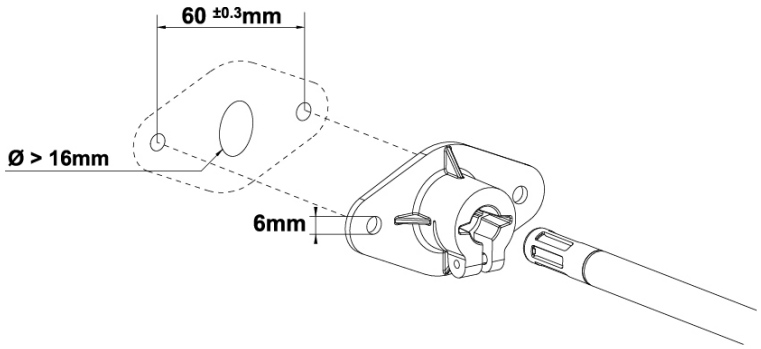

Fig. 3. Flange mounting on duct

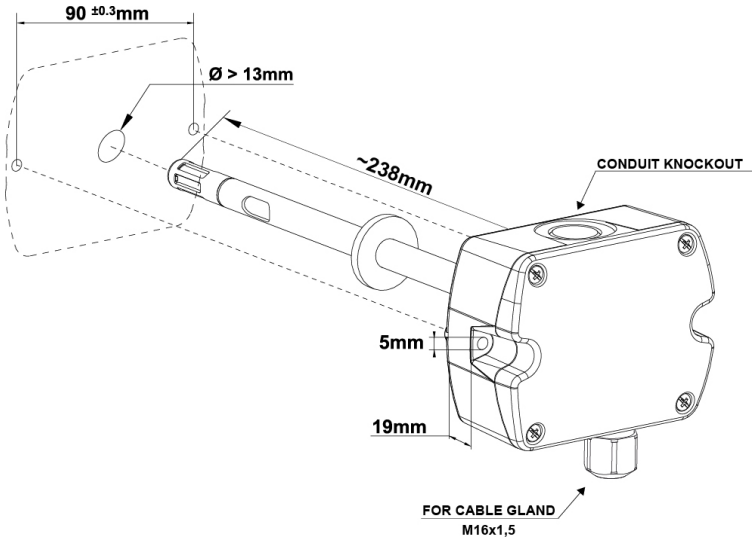

Fig. 4. Mounting on duct

TERMINAL ASSIGNMENTS

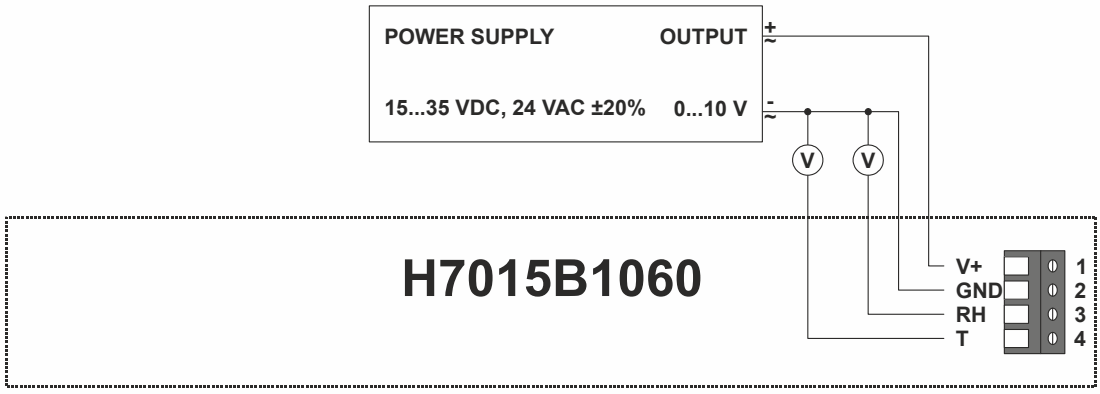

Fig. 5. Connection diagram H7015B1060

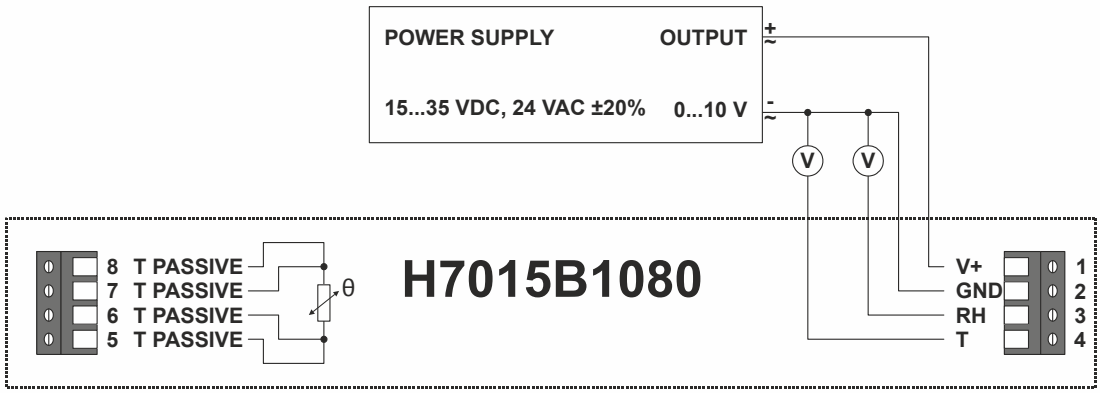

Fig. 6. Connection diagram H7015B1080

Honeywell

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