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Vaisala INTERCAP® Humidity and Temperature Transmitter Series HMW80

The HMW80 combines excellent stability with easy installation and reliable operation.

Features/Benefits

- Cost-efficient, dependable solution for humidity and temperature measurement for heating and ventilation
- Measurement range 0 ... 100 %RH and -5 ... +55 °C
- Stable and dependable
- Combines excellent stability with easy installation and reliable operation
- Fits EU/US/JPN junction boxes
- 2-year warranty
- No recalibration required
- UL-V0 approved materials used

The two- and three-wire Vaisala INTERCAP® Humidity and Temperature Transmitter Series HMW80 is designed for use in energy management systems in buildings. They combine excellent stability with reliable operation. The HMW80 is easy to install: wire it to the terminal block at the transmitter bottom and close the housing with a snap-on lid to cover the electronics.

Low Maintenance Costs

The HMW80 humidity transmitters use the Vaisala INTERCAP® Sensor – an interchangeable capacitive humidity sensor. The transmitters require no recalibration if the sensor is changed. This means great savings in overall maintenance costs. The sensor is also insensitive to dust as well as to most chemicals.

Measures Both Humidity and Temperature

The HMW80 transmitters are available in four models: HMW82 and HMW83 transmitters measure both humidity and temperature. They measure humidity with a ±3 %RH accuracy and with a stability of ±3 %RH over 5 years. The accuracy of the temperature measurement is ±0.5 °C. Two other models, TMW82 and TMW83, measure temperature only.

Both 2- and 3-wire transmitters are also available: HMW82 and TMW82 are 2-wire (4 … 20 mA loop powered) transmitters, and HMW83 and TMW83 are 3-wire (0 … 10 V) transmitters.

Technical Data

Performance

RELATIVE HUMIDITY	
Measurement range	0 ... 100 %RH
Accuracy	
Temperature range	10 ... 30 °C
30 ... 70 %RH	±3 %RH
	0 ... 30 %RH, 70 ... 100 %RH ±5 %RH
Temperature range	-5 ... +10 °C, +30 ... + 55 °C
0 ... 100 %RH	±7 %RH
Stability	±3 %RH / 5 years
Humidity sensor	Vaisala Intercap®
TEMPERATURE	
Measurement range	-5 ... +55 °C
Accuracy	
+10 ... +30 °C	±0.5 °C
-5 ... +10 °C, +30 ... +55 °C	±1.0 °C
Temperature sensor	Digital temperature sensor

Operating environment

Operating temperature range	-5 ... +55 °C
Storage temperature range	-40 ... +60 °C
Electromagnetic compliance	complies with EMC standard EN61326-1, Light industrial Environment

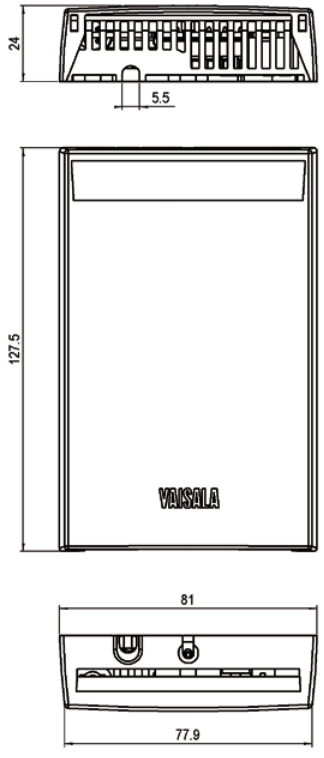
Inputs and outputs

HMW82, TMW82	
Outputs	4 ... 20mA, loop powered
Loop resistance	0 ... 500 Ohm
Supply voltage	10 ... 28 VDC
HMW83, TMW83	
Outputs	0 ... 10V
Load resistance	10 kohm min
Supply voltage	15 ... 35 VDC / 24 VAC ±20 %

Mechanics

IP class	IP30
Housing colour	RAL9003
Housing material	ABS/PC
	UL-V0 approved

Dimensions



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