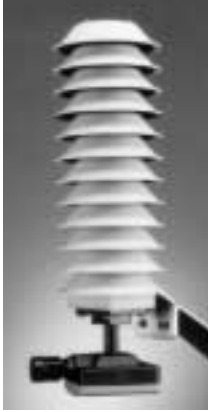


Hx-67x3 Series

Outdoor Relative Humidity Transmitter



Description

Johnson Controls Hx-67x3 Series offers a full line of outdoor relative humidity (RH) transmitters for measuring and transmitting RH levels from 0 to 100% .

The RH transmitters provide excellent reliability, long-term stability, and fast accurate response to changes in humidity. Certain models come equipped with a temperature transmitter.

The humidity sensor is impervious to dust and most chemicals and is not damaged by condensation. The weather shield protects the sensors from solar radiation and precipitation without affecting performance. The multiple discs have a unique profile that permits easy passage of air. The disc material is especially formulated for high reflectivity, low thermal conductivity and maximum weather resistance. This rugged enclosure will assure a long life, even under extreme weather conditions.

The sensor and shield function as one unit for optimal performance. The RH transmitter can easily be mounted on a roof, pole, or side of a building utilizing its already assembled mounting bracket. It requires no routine maintenance or recalibration.

Features

- 0 to 100% RH offers a full range of accurate RH measurement
- rugged shield construction protects sensors from solar radiation and precipitation without affecting performance
- multiplate shield design allows for maximum airflow for precise RH and temperature readings
- excellent long-term stability provides accurate RH measurement over long periods of time without degeneration
- no routine maintenance or calibration saves on cost
- two wire loop powered connection 4 to 20 mA or four wire 0 to 10 VDC looped power-output is easy to install
- polymer thin film sensor is not affected by dust, water vapor, harsh environments or most chemicals
- negligible temperature coefficient means that temperature changes are immaterial to accurate RH measurement
- three-year warranty

Applications

Humidity is an important aspect of any climate control system. The significance of indoor air quality to our health has become evident. Humans are best suited to and feel most comfortable at certain humidities and temperatures; whereas, excessively high or low humidities or temperatures cause discomfort. Accurate outdoor humidity measurement allows the necessary steps to be taken indoors to ensure a quality building environment.

The right humidity makes it possible to optimize energy consumption. In energy management projects with hundreds of setpoints, it is normal to have only one outdoor humidity sensor. If that sensor is not accurate, then energy costs may rise, and building comfort may suffer. The maintenance free, accurate, year after year service of our transmitters will keep energy costs low and building comfort high. Sensors are compatible with most energy management systems.

To Order

Specify the code number in the following selection chart.

Selection Chart

Code Number	Description
HE-6703-0N0GO	Outdoor RH Transmitter 10 VDC Output
HT-6703-0N0GO	Outdoor RH Transmitter, 4 to 20 mADC Output
HE-67P3-0N0GO	Outdoor RH Transmitter with Temperature Sensor, 10 VDC Output
HT-67P3-0N0GO	Outdoor RH Transmitter with Temperature Sensor, 4 to 20 mADC Output

Specifications

HE-6703, HT-6703, HE-67P3, and HT-67P3 Outdoor Humidity Transmitters	
Relative Humidity	Analog Output HE-67x3: 0 to 10 VDC and 0 to 1 VDC for 0 to 100% RH HT-67x3: 4 to 20 mA (DC) for 0 to 100% RH
	Measuring Range 10 to 90% RH
	Accuracy at 68 F (20 C) ±3% RH
	Temperature Dependence <±1.5% RH from 14 to 140°F (-10 to 60°C)
	Operating Temperature Range -4 to 140°F (-20 to 60°C)
	Output Resolution 0.1% RH
Temperature (for HE-67P3 and HT-67P3 models only)	Sensor Type Platinum 1000, IEC751, Class B
	Analog Output HE-67P3: 0 to 10 VDC for -40 to 140°F (-40 to 60°C) HT-67P3: 4 to 20 mA (DC) for -40 to 140°F (-40 to 60°C)
	Measuring Range 14 to 140°F (-10 to 60°C)
	Operating Temperature Range -40 to 140°F (-40 to 60°C)
	Accuracy at 77 F (25 C) ±0.55°F (±0.3°C)
	Linearity Better than 0.1°C
	Temperature Dependence 0.01°C/°C
	Output Resolution 0.1°C
Stability	±2% RH over 2 years
Storage Temperature Range	-40 to 140°F (-40 to 60°C)
Humidity Range	0 to 100% RH (Non-condensing)
Power Requirements	HE-67x3: 20 to 30 VAC, or 18 to 30 VDC, Class 2 HT-67x3: 18 to 28 VDC, Class 2
Current Consumption	HE-67x3: 10 mA with DC Supply and 23 mA with AC Supply HT-67x3: 27 mA (DC) Maximum Per Output
Maximum Output	HE-67x3: 13 VDC HT-67x3: 27 mA (DC) per Output
Load Resistance	HE-67x3: > 20k ohm HT-67x3: 50 ohms + ((Power Supply Voltage - 8)/0.02)
Warm-Up Time	Instantaneous
Housing Material	ABS plastic
Housing Classification	IP65 NEMA 4 Housing
Shipping Weight	4.2 lb (1.9 kg)