

Series QAA2200 Room Temperature Sensors & Series QFA3200 Room Humidity Sensors



QxAx2xx.EWSN
Sensing Only



QxAx2xx.FWSN
Full HMI

Description

Series QAA2200 Room Temperature and Series QFA3200 Room Humidity + Temperature sensors are engineered to enable accurate and efficient control of room comfort. A wide variety of output signals is available for compatibility with nearly any control system. The patented housing design seamlessly blends into any décor and features strategically placed ventilation slots to maximize airflow and optimize accuracy.

The QFA3200 units combine a temperature sensor with a relative humidity sensor in a single housing to reduce installation time and improve overall room aesthetics.

Installation is quick and straightforward with all hardware included for mounting on a standard 2" x 4" electrical box. Screws and anchors are provided for mounting the sensor directly to a wall. Matching gaskets and trim rings are also available.

The "E" versions have a blank front to prevent unauthorized adjustments and are ideal for high traffic areas or remote spaces that are not supervised.

The "F" versions feature a full HMI that can display room conditions and temperature setpoint. The display is easily configured to limit the information that is available to the occupant. Temperature setpoint can be adjusted using soft touch plus (+) and minus (-) keys, and an override key enables the user to manually signal to the controller that the space is occupied.

Specifications

Temperature	
Measuring range	32°F to 122°F (0°C to 50°C)
Accuracy	
1K Ω Pt	$\pm 0.54^\circ\text{F}$ (0.3°C) @ 32°F (0°C)
1K Ω (32°F) Ni	$\pm 0.72^\circ\text{F}$ (0.4°C) @ 32°F (0°C)
1K Ω (70°F) Ni	$\pm 0.75^\circ\text{F}$ (0.4°C) @ 75°F (24°C)
10K Ω Type II	$\pm 0.4^\circ\text{F}$ (0.22°C) @ 77°F (25°C)
10K Ω Type III	$\pm 0.4^\circ\text{F}$ (0.22°C) @ 77°F (25°C)
100K Ω Type II	$\pm 0.36^\circ\text{F}$ (0.2°C) @ 77°F (25°C)
4 to 20 mA/0 to 10V	$\pm 0.9^\circ\text{F}$ (0.5°C)
Humidity (QFA32xx only)	
Measuring Range	0 to 100% rh
Accuracy	$\pm 2\%$ between 10 to 90%
Long-Term Stability	<0.5% rh/year
Resolution	0.03% rh
Repeatability	+/-0.1% rh
Setpoint/Override ("F" versions only)	
Setpoint Signal	
QxAx2SS.FWSN	4 to 20 mA or 0 to 10V/0 to 5V
All others	0 to 10V/0 to 5V
Setpoint Range	55°F to 95°F (13°C to 35°C)
Override Contact	Momentary, 1A @ 24 Vac max.
Input Power	18 to 36 Vdc or 24 Vac $\pm 20\%$
VA Rating	1.5 VA, max.
Agency Listing	UL 916
Color	White
Dimensions	4.5" x 2.75" x 1.18" (115 mm x 70 mm x 30 mm)
Shipping Weight	6 oz. (170 g)

Product Ordering Information

Part Number ¹	Temperature Output	Humidity Output	Display	Setpoint Adjustment
QAA2212.EWSN	Pt 1K Ω (385a) RTD	—	—	—
QAA2212.FWSN			•	•
QAA2220.EWSN	Ni 1K Ω @ 32°F RTD		—	—
QAA2220.FWSN			•	•
QAA2221.EWSN	Ni 1K Ω @ 70°F RTD		—	—
QAA2221.FWSN			•	•
QAA2230.EWSC ²	10K Ω Type II Thermistor		—	—
QAA2230.EWSN			•	•
QAA2230.FWSC ²				
QAA2230.FWSN				
QAA2232.EWSN	10K Ω Type III Thermistor		—	—
QAA2232.FWSN			•	•
QAA2235.EWSN	100K Ω Type 2 Thermistor		—	—
QAA22SS.EWSN	0 to 10V/4 to 20 mA (Selectable)		•	•
QAA22SS.FWSN				
QFA3212.EWSN	Pt 1K Ω (385a) RTD	4 - 20 mA or 0 - 10V/ 0 - 5V (Selectable)	—	—
QFA3212.FWSN			•	•
QFA3230.FWSN	10K Ω Type II Thermistor			
QFA3232.FWSN	10K Ω Type III Thermistor		—	—
QFA32SS.EWSN	0 to 10V/4 to 20mA			
QFA32SS.FWSN			•	•

¹For no-logo version, change "S" to "N" in Part Number position 10.

²For use with TALON[®] LON controllers.

Accessories Ordering Information

Description	Part Number
Room Unit Back Plate (10-pack)*	AQA2200-INTL
Room Unit Back Plate (Single)*	AQA2200-2X4
Room Sensor Insulating Gasket (10-pack) (Recommended for hollow wall installations.)	563-102 GSKT KIT
Replacement QFA Sensing Element	AQF3060

* For use when installing Series 2200/3200 Sensors on conduit boxes other than U.S. style 2" x 4". Back plate measures 3-1/4" x 5" (82.55 mm x 127 mm).

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