

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 | ± 0.54°F (0.3°C) @ 32°F (0°C) |
| 1K Ω (32°F) Ni | ± 0.72°F (0.4°C) @ 32°F (0°C) |
| 1K Ω (70°F) Ni | ± 0.75°F (0.4°C) @ 75°F (24°C) |
| 10K Ω Type II | ± 0.4°F (0.22°C) @ 77°F (25°C) |
| 10K Ω Type III | ± 0.4°F (0.22°C) @ 77°F (25°C) |
| 100K Ω Type II | ± 0.36°F (0.2°C) @ 77°F (25°C) |
| 4 to 20 mA/0 to 10V | ± 0.9°F (0.5°C) |
| Humidity (QFA32xx only) | |
| Measuring Range | 0 to 100% rh |
| Accuracy | ± 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 ± 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).

Disposal



The devices are considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

- Dispose of the devices through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

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