

Series 2200 Temperature Room Units for TEC Aux and Primary Controllers



Figure 1. QAA22xx.EWSN and QAA22xx.FWSN Temperature Room Units.

The Series 2200 Temperature Room Units from Siemens Industry, Inc. offer a wide range of features and functionality that work in concert with the APOGEE® Automation System to deliver exceptional occupant comfort in even the most demanding application environments. All room units incorporate precision temperature sensing elements to accurately and reliably measure room temperature. Their compact, low profile design results in an attractive, inconspicuous installation. Strategically placed ventilation slots in the housing optimize airflow through the cover for fast measurement response and superior control.

These room units provide accurate, reliable sensing of room temperature. Various models can be used with either the Terminal Equipment Controllers (TECs) or with APOGEE field panels for primary control.

Applications

These room units connect to the controllers input points via free wire cabling, which is terminated on the controllers' terminal block connector.

Specifications

Temperature Specifications	
Signal Selectable Models:	
Operating Range, Selectable*	32°F to 122°F (0°C to 50°C) 55°F to 95°F (13°C to 35°C) 40°F to 90°F (4°C to 32°C)
Output Signal	Select 0-5V, 0-10V, 4-20 mA
Setpoint Output Range	55°F to 95°F (13°C to 35°C) selectable, 0-10V or 0-5V 4-20 mA
Sensing Element Type	Digital Sensor IC (band gap) (QAA22SS types)
Sensing Element Accuracy	± 0.9°F (± 0.5°C)
Override Signal	Relay/dry contact (1 amp @ 30 Vdc max.)
* Selectable operating range is only possible on display versions (QAA2212.FWSN and QAA22SS.FWSN). Sensing only versions (QAAxxSS.E types) measure a fixed range of 32°F to 122°F (0°C to 50°C) over the selected output signal.	
Resistive Output Models:	
Operating Range	32°F to 122°F (0°C to 50°C)
Output Signal	Changing resistance
Setpoint Output Range	55°F to 95°F (13°C to 35°C) 0-10V
Sensing Element Type	1K ohm Platinum RTD (QAA2212 types) 10K ohm NTC Type II thermistor (QAA2230 types) 100K ohm NTC thermistor (QAA2235 types)
Sensing Element Accuracy	100K Ω NTC, 10K Ω Thermistor
55°F to 80.6°F (13°C to 27°C)	±0.5°F (±0.3°C)
80.6°F to 95°F (27°C to 35°C)	±1.0°F (±0.5°C)
1K ohm RTD mid-range	
75°F (24°C)	±0.75°F (± 0.4°C)

Specifications, Continued

Override Signal	Relay/dry contact (1 amp @ 30 Vdc max.)
Installation	
TEC, AUX Input (AI3)	100 ft. Maximum cable length.
10K for BACnet TEC	6C #24 AWG, Belden
100K for P1, LON TEC	DFLEX3 or equal, NEC Class 2
PXC/MEC	300 to 750 ft Maximum cable length 18 to 22 AWG twisted pair NEC Class 2

Installation Adjustments	None required
Cover	
Dimensions	4.5" × 2.75" × 1.18" (115 mm × 70 mm × 30 mm)
Color	White
Weight	4 oz (0.11 kg)
Regulatory Agencies	UL 916
Input Power	18 to 36 Vdc or 24 Vac ± 20%
VA Rating	1.5 VA, max.

Product Ordering Information

Description	Product Part Number
Temperature Room Unit, 1K Ohm Platinum RTD, 385 Alpha, No Logo	QAA2212.EWNN
Temperature Room Unit, K Ohm Platinum RTD, 385 Alpha, Siemens Logo	QAA2212.EWSN
Temperature Room Unit, 1K Ohm Platinum RTD, 385 Alpha, Digital Display, Temperature Setpoint, Override, Siemens Logo	QAA2212.FWSN
Temperature Room Unit, 10K Ohm NTC Type II Thermistor, No Logo	QAA2230.EWNN
Temperature Room Unit, 10K Ohm NTC Type II Thermistor, Siemens Logo	QAA2230.EWSN
Temperature Room Unit, 100K Ohm NTC Thermistor, No Logo	QAA2235.EWNN
Temperature Room Unit, 100K Ohm NTC Thermistor, Siemens Logo	QAA2235.EWSN
Temperature Room Unit, Sensing, 0-10V/0-5V, 4-20 mA Selectable Temperature, Siemens Logo	QAA22SS.EWSN
Temperature Room Unit, Sensing, 0-10V/0-5V/4-20 mA Selectable Temperature, Digital Display, Temperature Setpoint, Override, Siemens Logo	QAA22SS.FWSN

Accessories Ordering Information

Description	Product 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

* For use when installing Series 2200 Sensors on conduit boxes **other than** U.S. style 2" × 4".

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