

Room Unit for ATEC



Figure 1. QAA1181.FWSC Temperature Room Unit.

The Room Unit for ATEC offers a range of features and functionality that work in connect with ATEC to deliver comfort in the demanding application environments. The product includes a segment Liquid Crystal Display (LCD) display and 4 buttons for interactive operation. The room unit incorporates precision temperature sensing elements to measure room temperature accurately and reliably. The compact, slim, low profiles design results in an attractive appearance and harmonious sense with other square switch on the wall.

This unit can only be used with Actuator Terminal Equipment Controllers (ATEC) 550-44X serials.

Applications

The room unit with RJ11 Jack can be connected to the ATEC controller via a six-wire cable, to enable it work automatically. The cable transmits the temperature, the communication with the HMI, optional setpoint and override signals.

A micro USB-like HMI (WCIS) port located on the bottom of the cover can be used by WCIS tools with a special cable (part no. 540-143U, DB9 connector to Micro USB).

ATEC controller can also be setup directly by WCIS tools without going through room unit, in this case, 540-143 cable is needed.

Available Features

- Large LCD Display: the display allows simultaneous digital display of room temperature.
 - Standard Display Features:
 - Display of operating mode: Icon symbols are displayed to indicate the controller's operating mode. A person in the house indicates occupied mode operation. No icon indicates unoccupied operation.
 - Easy-to-read digital display.
 - Room temperature value to 1 decimal place.
 - Configurable Display Features:
 - Degrees Fahrenheit or Celsius.
 - Room temperature display on or off.
 - Occupancy status display on or off.
- Digital setpoint adjustment: The room unit's keypad allows error-free digital setpoint adjustments in 1°F or 0.5°C increment. Setpoint values display momentarily as changes are made.
- Override button: The override button allows an occupant to change to an occupied control schedule during the unoccupied cycle for a predetermined time period as defined by the controller. Occupancy icon is shown on the display during occupied time periods.
- Maintenance-free: The room unit draws a small amount of power directly from the controller.
- Compatibility: The room unit is compatible with ATEC controller 550-440, 550-441, 550-445 and 550-446 of the APOGEE building system.
- The room unit is wired with six-conductor phone cables and standard RJ-11 connectors to connect ATEC.
- HMI port: Micro USB-like connection port allows laptop connection for commissioning and servicing the controller.

Specifications

Temperature Range	
Setpoint	12.5°C to 35°C (55°F to 95°F)
Operating Ambient	0°C to 50°C (32°F to 122°F)
Output Signals	Proprietary digital protocol p1
Sensing Element Type	NTC 10k Ω at 25°C Thermistor
Accuracy	
0°C to 50°C (32°F to 122°F)	$\pm 1^\circ\text{C}$ ($\pm 2^\circ\text{F}$)
Field Temperature Offset	Adjustable to $\pm 3^\circ\text{C}$ ($\pm 5^\circ\text{F}$)
Installation ATEC	100 ft. Maximum cable length 6C #24 AWG, Belden 1228 A or equal, NEC Class 2
Installation Adjustments	None required
Cover	
Dimensions	86 mm X 86 mm X 16 mm
Color	White
Power Supply	Supplied by ATEC

Product Ordering Information

Product Number	Comm Type	Comm Type	Logo	Display	Setpoint/ Occupancy	Temp	SSN
QAA1181.FWSC	Digital	P1	SIEMENS	Y	Y	Y	S55622-107

Accessories Ordering Information

Description	Product Part Number
7.6 m cable with connections	588-100A
15.2 m cable with connections	588-100B
30.5 m cable with connections	588-100C
HMI connection cable (DB9 connector to Micro USB)	540-143U
HMI connection cable (DB9 connector to RJ11)	540-143

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