

VT8350 SERIES

BACnet and Zigbee Models Available



Smart energy management has never been easier than with the VT8350 Series Fan Coil Room Controllers. Designed for new construction and retrofit projects, the Room Controllers dramatically decrease project delivery costs by reducing installation, configuration and commissioning time. No complex software or tools are required to customize functionality in order to meet your applications requirements. The Room Controllers provide all the advanced features and monitoring functions required by modern building automation systems in a simple compact enclosure.

The VT8350 Room Controllers, part of the VT8000 family, are both application-specific AND programmable. This enables the modification of pre-configured control sequences, or the creation of entirely new control sequences for fan coil applications. Their configurable control sequences, economizer and scheduler functionalities deliver all the flexibility necessary for optimal indoor air quality applications.

SPECIFICATIONS

Thermostat Power Requirements	Input: 24Vac ±15% recommended, Absolute Max 29.5VAC, 50/60Hz or 24Vdc ±15% Peak device consumption: up to 6VA with CO ₂ sensor or Wi-Fi module Plus Output Load (max total 94VA) Transformer maximum rating: 100VA, 4.17 A
Operating Conditions	0 to 50 °C (32 to 122 °F); 0 to 95% RH non-condensing
Storage Conditions	-30 to 50 °C (-22 to 122 °F); 0 to 95% RH non-condensing
Temperature Sensor	Local 10k NTC type 2 thermistor
Temp. Sensor Resolution	± 0.1 °C (± 0.2 °F)
Temp. Control Accuracy	±0.5 °C (±0.9 °F) @ 21 °C (70 °F) typical calibrated
Humidity Sensor and Calibration	Single point calibrated bulk polymer sensor
Humidity Sensor Precision	Reading range from 10 to 90% RH non-condensing 10 to 20% precision is 10%; 20 to 80% precision is 5%; 80 to 90% precision is 10%
Humidity Sensor Stability	<1.0% annual drift (typical)
Dehumidification Setpoint Range	30 to 95% RH

Commercial and hospitality

Suitable for both commercial and hospitality markets and systems

Wi-Fi option

BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Digital touch screen

Customizable color digital touch screen interface with multi-language support

APPLICATIONS

- Two-pipe fan coil
- Four-pipe fan coil
- 1, 2 or 3-speed fan
- ECM with on/off, floating or 0 to 10V valve outputs

7-day occupancy scheduling

2 to 4 events

Highly configurable

LUA custom programming available

Advanced occupancy functions

For commercial and lodging applications

Occupied and Unoccupied Setpoint Range Cooling	12 to 38 °C (54 to 100 °F)
Occupied and Unoccupied Setpoint Range Heating	5 to 32 °C (40 to 90 °F)
Room and Outdoor Air Temperature Display	-40 to 50 °C (-40 to 122 °F)
Proportional Band for Room Temperature Range Control	Cooling & Heating: 1.8 °C (3.2 °F)
Binary Inputs	Dry contact across terminal BI1, BI2 and UI3 to Scom
Economizer Analog Output Rating	0 to 10 Vdc into 2k Ω resistance min.
Economizer Analog Output Accuracy	±3% typical
Wire Gauge	18 gauge maximum, 22 gauge recommended

WARRANTY

Limited Warranty 18 months

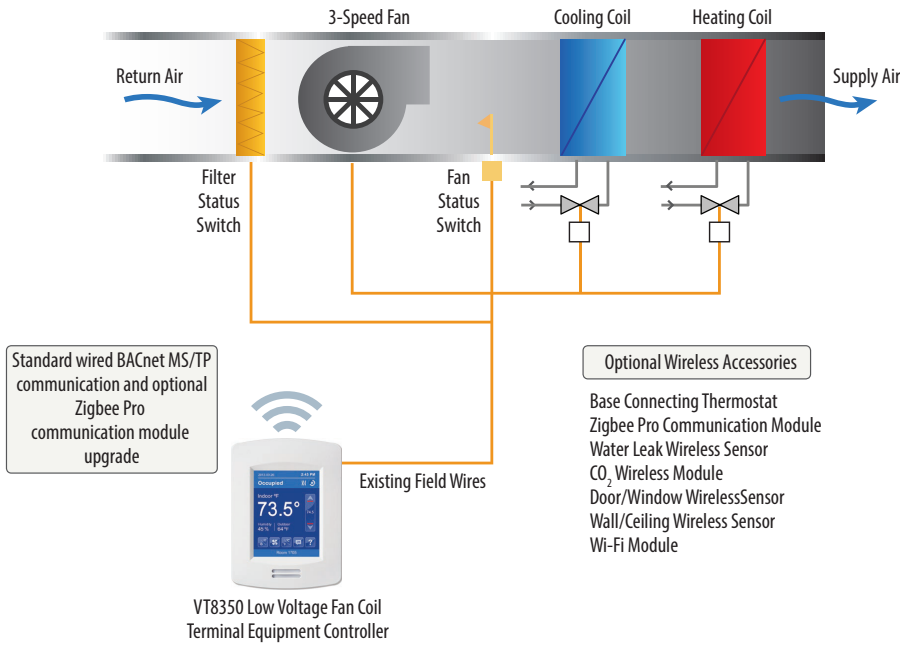
AGENCY APPROVALS



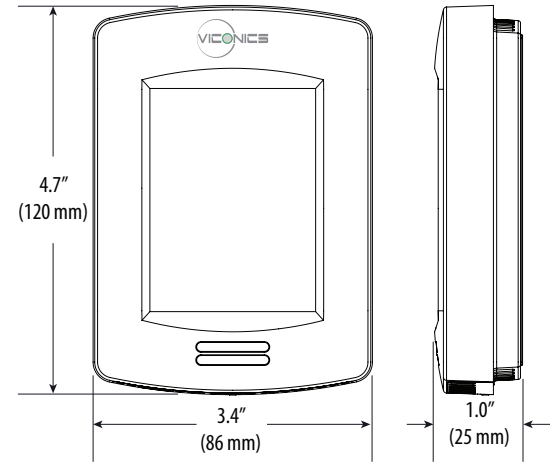
UL: 61010-1 (2nd edition); CSA: 61010-1 (3rd edition); IEC: 61010-1 (3rd edition), EN 60950-1: 2006A2: 2013, UL 873, CSA 22.2 No. 24-93; 61326-1:2005; FCC: Part 15, Subpart B

TYPICAL LOW VOLTAGE FAN COIL APPLICATION

Wiring Examples



DIMENSIONAL DRAWING



SELECTABLE COLOR SCHEMES



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
VT8350U5000B	RH, Fancoil Control, Low Voltage, BACnet MS/TP
VT8350U5500B	RH, PIR, Fancoil Control, Low Voltage, BACnet MS/TP
VT8350U5500BP	RH, PIR Room Controller, BACnet MS/TP and Zigbee