VZ8250 SERIES

BACnet MS/TP and Zigbee Pro Models Available

Smart energy management has never been easier than with the VZ8250 Room Controllers for Variable Air Volume (VAV) applications. 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 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 VZ8250 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 VAV applications. Their configurable control sequences and scheduler functionalities deliver all the flexibility necessary for optimal indoor air quality applications.

SPECIFICATIONS

Thermostat Power Requirements	24 Vac ±15%, 50/60 Hz, 6 VA or 24 Vdc ± 15%
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 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	<0.25% annual drift (typical)
Occupied and Unoccupied Setpoint Range Cooling	12 to 37.5 °C (54 to 100 °F)
Occupied and Unoccupied Setpoint Range Heating	4.5 to 32 °C (40 to 90 °F)

Commercial and hospitality

Suitable for both commercial and hospitality markets and systems

7-day occupancy scheduling

2 to 4 events

Digital touch screen

Customizable color digital touch screen interface with multi-language support

Universal inputs and outputs

Including CO_2 sensor and fresh air station input

Highly configurable

LUA custom programming available

Humidity sensor

Humidity sensor with onboard humidification strategy

APPLICATIONS

- Single-speed fans
- Outdoor air temperature sensor
- Supply air temperature sensor
- Differential pressure switch
- Pressure dependent VAV zones
- Pressure independent VAV zones
- Fan-powered (binary or ECM)
- Heat and reheat options

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)
Analog Inputs	Modulating 0-10 Vdc across UI18, UI24 to common
Binary Inputs	Dry contact across terminal UI16, UI17 to common
Remote Temperature Sensor	10K T2 thermistor UI20, UI22, UI23
Wire Gauge	18 gauge maximum, 22 gauge recommended

WARRANTY

Limited Warranty	18 months

AGENCY APPROVALS

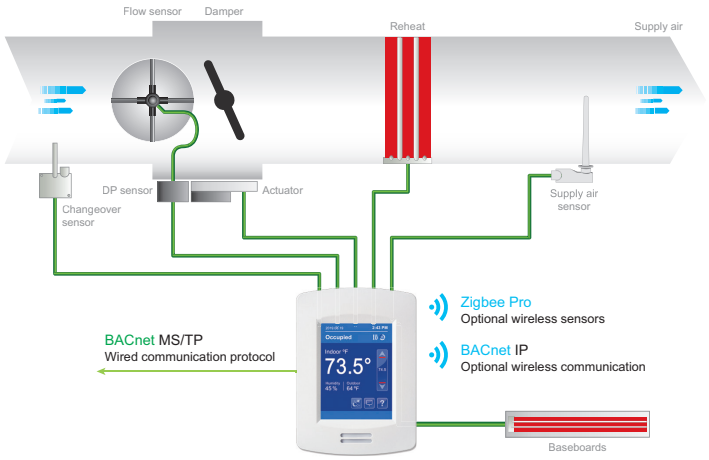
c UL us LISTED

UL: UL 60730-1, UL 60730-2-9, UL 60730-2-13
CAN/CSA: E60730-1, E60730-2-9

Models with Zigbee Radio
RED 2014/53/EU
ETSI: EN 300 328, EN 301 489-1, EN 301 489-17
FCC Part 15C
RSS-247

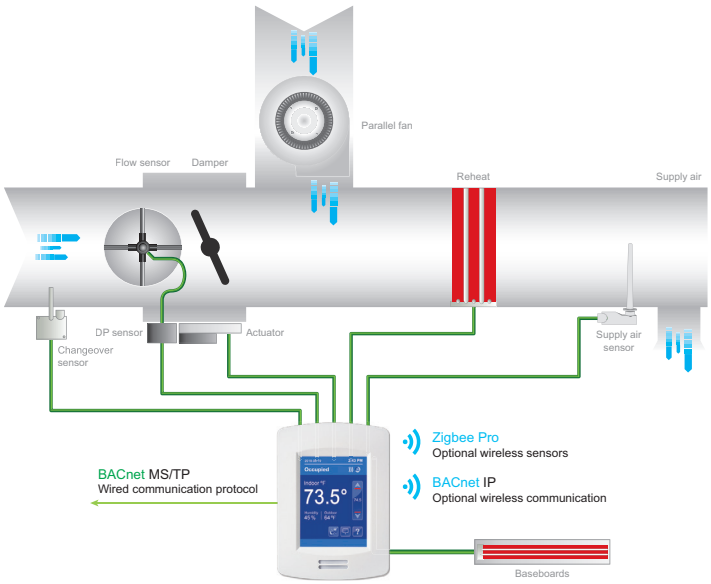
TYPICAL PRESSURE INDEPENDENT APPLICATION (NO FAN)

Wiring Example



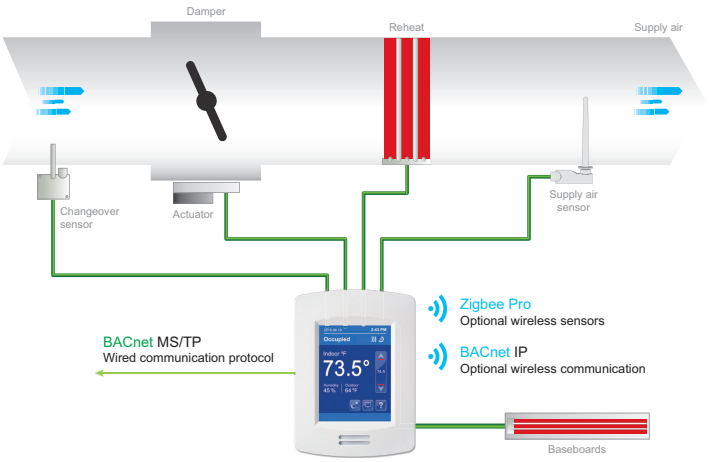
TYPICAL PRESSURE INDEPENDENT APPLICATION (PARALLEL FAN)

Wiring Example

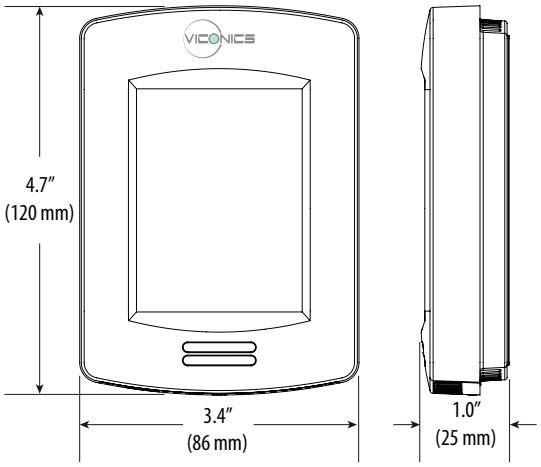


TYPICAL PRESSURE DEPENDENT APPLICATION (NO FAN)

Wiring Example



DIMENSIONAL DRAWING



SELECTABLE COLOR SCHEMES

ORDERING INFORMATION

PART NUMBER	DESCRIPTION	COMM.
VZ8250U5000B	VAV PD/PI RH	BACnet MS/TP
VZ8250U5500B	VAV PD/PI RH, PIR	BACnet MS/TP
VZ8250U5500BP	VAV PD/PI RH, PIR, ZB IP Ready	WRLS

Note: This application uses an external damper actuator, discharge air sensor and an external velocity pressure sensor to complete the VAV solution (MS41-6043 - actuator, EPP301 - velocity pressure sensor, TDBDR00 - discharge air sensor). For a bundled solution, reference part number: VZ8250VAVKIT1.