

THERMOSTATS & CONTROLLERS

PROGRAMMABLE FAN COIL CONTROLLER

VT8350 SERIES

DESCRIPTION

The **Viconics VT8350 Series** are fan coil room controllers so smart energy management has never been easier. 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 Series** are specifically designed to provide exceptional temperature control of multi-speed fan coil units. All models can provide advanced occupancy routines and automatic energy savings during occupied periods without sacrificing occupant comfort. When compared to traditional building automation controllers, the **VT8350 Series** fan coil room controllers provide unmatched return on investment. For more advanced needs, custom LUA script programming available. (-LS models)



VT8350



BACnet



ZigBee



FEATURES

- Five (5) customizable colors for digital touch screens
- Supports the upload of a custom standby screen
- Supports the display of custom messages when integrated via BACnet MS/TP
- English, French, Spanish, Chinese, Russian and other selectable languages
- Interchange between °C/°F
- BACnet MS/TP (default model)
- ZigBee Pro wireless mesh network (optional)
- Suitable for both commercial and hospitality markets and systems
- Humidity sensor with on-board dehumidification strategy (model dependent)
- Configurable fan sequence of operation

SPECIFICATIONS

Supply Voltage	19-30 VAC, 50/60 Hz	Cooling limits	54° to 100°F (12°C to 37.7°C)
Supply VA	6 VA	Heating limits	40° to 90°F (4.5° to 32°C)
Accuracy	Temperature, ±0.9°F (±0.5°C)	Keypad Lockout	Selectable system/fan/unoccupied
Digital Inputs	Dry contact	System Setting	O=off, H=heating, C=cooling, A=automatic changeover
Universal Input	Dry contact or 10K Type 2 Model 24 thermistor	Fan Setting	L=low, M=medium, H=high, A=auto
Display	Two line backlit LCD, ±0.2°F (±0.1°C)	Wiring	16-24 AWG, 22 AWG recommended
Cover Controls		Color	White or Silver
Zone Models	Up/down/override buttons Heat/Cool "on" LEDs	Mounting	Standard vertical, 2" x 4" box
FCU Models	Up/down/°C-or-°F/fan/mode buttons Fan/Heat/Cool "on" LEDs	Operating Temperature	32° to 122°F (0° to 50°C)
Remote Sensor	Thermistor, 10K Type 2 Model 24	Operating Humidity	0 to 95% RH (non-condensing)
Control Type	Proportional plus integral (PI)	Enclosure Rating	UL FR1, flame retardant plastic
Cycles Per Hour	Adjustable	Dimensions	4.72"H x 3.38"W x 1.00"D (12.0 x 8.6 x 2.5 cm)
Setpoint	Adjusted depending on heating or cooling mode, heating and cooling setpoints are changed simultaneously with respect to the deadband	Weight	0.75 lb (0.34 Kg)
		Approvals	UL Listed File #E234137, cULus, CE
		Warranty	1 year

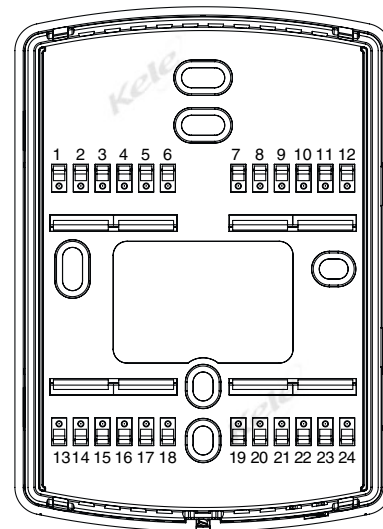
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70°

WIRING

TERMINAL DESIGNATION FOR 2-PIPE AND 4-PIPE APPLICATIONS (Not all terminals are used for all applications)		
TERMINAL NUMBER	TERMINAL LABEL	DESCRIPTION
1	BO1 - Aux	Not used
2	BO2- Y2	Fan speed Low
3	BO3- Y1	Fan speed Med
4	BO4- G	Fan speed High
5	RC/24 V~HOT	24 VAC power supply for thermostat
6	C/ 24 V~COM	24 VAC common for thermostat
7	RH	Auxiliary heat
8	BO8-W1	Auxiliary heat
9	UO9-W2	Normally Closed Cooling Valve (On/Off control); Close Cooling Valve (Floating Control); Not used for Analog Control
10	UO10	Normally Closed Heating Valve (On/Off control); Close Heating Valve (Floating Control); Not used for Analog Control
11	UO11	Normally Open Cooling Valve (On/Off control); Open Cooling Valve (Floating Control); Analog Control Heating Valve
12	UO12	Normally Open Heating Valve (On/Off control); Open Heating Valve (Floating Control); Analog Control Cooling Valve
13	RS485+	BACnet MS-TP+
14	RS485-	BACnet MS-TP-
15	RS485 REF	BACnet MS-TP Ref
16	UI16	Universal input function specified
17	UI17	Universal input function specified
18	Scom	Sensor common
19	UI19-CO2	Universal input function specified
20	UI20 - RS	Remote Room Sensor
21	Scom	Sensor common
22	UI22 - SS	Remote Supply Sensor
23	UI23 - OS	Not used
24	UI24	Not used



ORDERING INFORMATION

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MODEL	DESCRIPTION
VT8350U5000B	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet and humidity control, white casing and cover
VT8350U5500B	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet, motion (PIR) sensor, and humidity control, white casing and cover

Note: Change last 3 digits of controller model number to 31B for blank cover/no logo
Add -LS for custom LUA programming (upcharge applied)

WIRELESS ACCESSORIES	
MODEL	DESCRIPTION
SED-DOR-P-5045	Wireless remote sensor door switch
SED-WIN-P-5045	Wireless remote sensor window switch
SED-WDS-P-5045	Wireless remote sensor door or window switch
SED-WMS-P-5045	Wireless remote wall mount occupancy sensor
SED-CMS-P-5045	Wireless remote ceiling mount occupancy sensor
VCM8000V5045P*	ZigBee Pro extended profile communication module for all SE8000 series controllers

* Required for Zigbee Pro wireless communication for SED sensors.

ACCESSORIES

TG511A1000 Thermostat guard- clear-medium size

RELATED PRODUCTS

KTR24 Remote room thermistor sensor
KTR24-LED-MB Remote room sensor with override button and LED
ST-FZ24-8 Averaging duct thermistor sensor, Type 2, Model 24
ST-D24 10K Type 2 duct temperature thermistor
ST-O24 OSA thermistor sensor, Type 2, model 24, $\pm 0.36^{\circ}\text{F}$ (0.20°C)