

THERMOSTATS & CONTROLLERS



ZONE AND FCU COMMUNICATING THERMOSTAT (BACNET, LON)

VT7200, VT7300 COMMUNICATING



VT7200C5031B
BACnet Zone
Thermostat



VT7305C5031B
BACnet FCU
Thermostat

DESCRIPTION

The **Viconics VT7200 Zone thermostats** are digital-display, heating / cooling, with outputs for two-position, floating, and proportional terminal unit control. They are ideal for baseboard heat, unit heaters, radiant panels, reheat, or VAV box (pressure-dependent) control.

VT7300 Fan Coil Unit (FCU) thermostats are digital-display, heating / cooling, with outputs for two-position, floating, or proportional control. In addition, they include multi-speed fan relays for high, medium, and low fan speed control. Both thermostats offer remote temperature sensor and remote digital inputs configured for night setback, filter alarm, motion sensor, door/window switch, or service indication. All models offer standard BACnet or LON open-protocol communications.

FEATURES

- **BACnet or LON communication models**
- **Stand-alone operation on communication loss**
- **Two-position, floating, or proportional models**
- **Remote room sensor option**
- **Adjustable deadband**
- **Single setpoint adjustment**
- **Setpoint range limits (heating and cooling)**
- **Three configurable inputs for night setback, setback override, motion sensor, door or window switch, filter alarm, service advisory, heat/cool changeover °F/°C (configurable)**
- **Display offset**
- **Adjustable temporary occupied time**
- **Heat, cool, and reheat time base outputs are configurable**
- **Direct or reverse acting (proportional models)**
- **Keypad lockout functions**
- **Dehumidification control models**
- **Three-speed fan control (FCU model)**
- **Selectable system control (FCU model)**
- **PIR cover sensor (Optional)**

SPECIFICATIONS	
Supply Voltage	19-30 VAC, 50/60 Hz
Supply VA	2 VA
Display	Two line backlit LCD, ±0.2°F (±0.1°C)
Control Accuracy	Temperature, ±0.9°F (±0.5°C)
VT7350C50xx, VT7350F50x	Dehumidification, ±5% RH from 20% to 80% RH
Thermostat Type	Zone (VT7200) or FCU (VT7300)
Cover Controls	
Zone Models	Up/down/override buttons Heat/Cool "on" LEDs
FCU Models	Up/down/°C-or-°F/fan/mode buttons Fan/Heat/Cool "on" LEDs
Control Outputs	See terminal designation table
VT7200C50xx	5 triacs (H/C, 2-position or floating control)
VT7200F50xx	1 triac, 2 analog outputs (H/C proportional 0 to 10 VDC)
VT7300C50xx, VT7350C50xx	3 relays (fan), 5 triacs (H/C, 2-position or floating control)
VT7300F50xx, VT7350F50xx	3 relays (fan), 1 triac, 2 analog outputs (H/C proportional 0 to 10 VDC)
Triacs and relays	30 VAC, 1A, 3A inrush
Analog outputs	0-10 VDC, 2KΩ minimum impedance, direct or reverse acting
Auxiliary Inputs	2 digital inputs, 1 universal input, 1 remote sensor
Configurable as	Service/status reminders Door/window/motion sensor switch Filter alarm Central night setback clock Remote occupied override switch Heat/Cool changeover, contact or sensor
Digital Inputs	Dry contact
Universal Input	Dry contact or 10K Type 2 Model 24 thermistor
Remote Sensor	Thermistor, 10K Type 2 Model 24
Control Type	Proportional plus integral (PI)
Proportional Band	Heating and cooling, 2°F (1.1°C)
Floating Time Base	Adjustable, 0.5 to 9 minutes
Cycles Per Hour	Adjustable 3 to 8
Override Timer	0 to 24 hours, 1-hour increments, pushbutton reset
Sensor Offset	Adjustable ±5°F (±2.5°C), ±15% RH (humidity models)
Deadband	Adjustable 2° to 5°F (1° to 2.5°C)
Setpoint	Adjusted depending on heating or cooling mode, heating and cooling setpoints are changed simultaneously with respect to the deadband
Cooling limits	54° to 100°F (12°C to 37.7°C)
Heating limits	40° to 90°F (4.5° to 32°C)
Keypad Lockout	Selectable system/fan/unoccupied
System Setting	O=off, H=heating, C=cooling, A=automatic changeover
(FCU models) Fan Setting	O/C, O/H, O/A/H/C, H/O/C
(FCU models) Wiring	L=low, M=medium, H=high, A=auto L/M/H, L/H, L/M/H/A, L/H/A, On/A
Enclosure	18 AWG maximum, 22 AWG recommended
Color	UL FR1, flame retardant plastic
Mounting	White
Operating Temperature	Standard vertical, 2" x 4" box
Operating Humidity	32° to 122°F (0° to 50°C)
Dimensions	0 to 95% RH (non-condensing)
Weight	4.94"H x 3.38"W x 1.13"D (12.5 x 8.6 x 2.9 cm)
Approvals	0.75 lb (0.34 Kg)
RoHS Statement	UL Listed File #E234137, cULus, CE, LonMark
Warranty	Yes
	1 year

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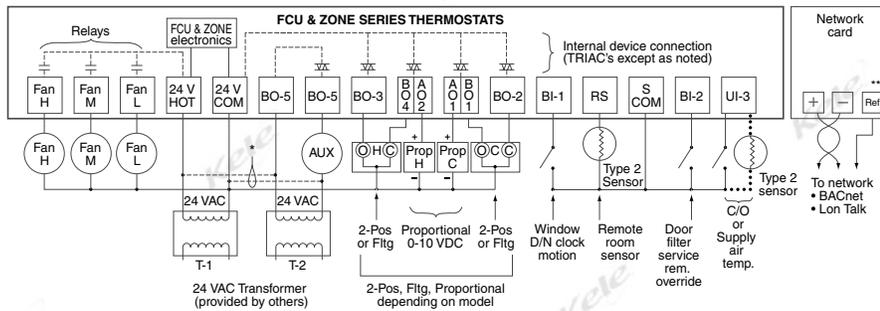
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VT7200, VT7300 COMMUNICATING

WIRING

ZONE THERMOSTATS		FAN COIL UNIT (FCU) THERMOSTATS					** Terminals and function are not present on every thermostat	
VT7200C-E VT7200C-B 2-position/ floating	VT7200F-E VT7200F-B Proportional	VT7300A-E VT7300A-B 2-position	VT7300C-E VT7300C-B 2 position/ floating	VT7350C-E VT7350C-B 2 position/ floating/RH	VT7300F-E VT7300F-B Proportional	VT7350F-E VT7350F-B Proportional/ RH	< LON < BACnet Terminal**	Thermostat Function**
		X	X	X	X	X	1	High speed fan (FCU)
		X	X	X	X	X	2	Medium speed fan (FCU)
		X	X	X	X	X	3	Low speed fan (FCU)
X	X	X	X	X	X	X	4	24 VAC power for thermostat, fan and BO-(1,2,3,4) AO-(1,2)
X	X	X	X	X	X	X	5	24 VAC power for thermostat, fan and BO-(1,2,3,4) AO-(1,2)
X	X	X	X	X	X	X	6	BO-5, aux output, configurable (reheat, occupied/un-occupied)
X	X	X	X	X	X	X	7	BO-5, aux output, configurable (reheat, occupied/un-occupied)
X		X	X	X			8	BO-3, open heating
X			X	X			9	BO-4, close heating
	X				X	X	9	AO-2, heating
X			X	X			10	BO-1, open cooling
	X				X	X	10	AO-1, cooling
X		X	X	X			11	BO-2, close cooling
X	X	X	X	X	X	X	12	BI-1, configurable (night set back clock, motion detector, window switch)
X	X	X	X	X	X	X	13	RS, remote sensor, 10 KΩ thermistor
X	X	X	X	X	X	X	14	Scsm, common for remote sensor, BI-(1,2), and UI-1
X	X	X	X	X	X	X	15	BI-2, configurable (door, filter, service, remote override)
X	X	X	X	X	X	X	16	UI-3, configurable (change over contact or sensor, supply air sensor)



Note: Terminals are Thermostat Dependent See Table 1.

** Common device reference on BACnet networks as needed.

*One Transformer Wiring (Delete T2)
... Alternate Device Based on Set-up

ORDERING INFORMATION

MODEL	THERMOSTAT TYPE
VT7200	Zone controller
VT7300	Fancoil controller commercial (override occupancy)
VT7305	Fancoil controller hospitality (hotel/lodging with temp scale)
VT7350	Fancoil controller commercial (override occupancy) with humidity sensor
VT7355	Fancoil controller hospitality (hotel/lodging with temp scale) with humidity sensor
OUTPUTS	
C	2 floating + 1 digital (for VT7200), 2 floating + 1 auxiliary (for VT73xx)
F	2 analog + 1 digital (for VT7200), 2 analog + 1 auxiliary (for VT73xx)
COVER	
5000	Viconics logo
5031	Blank cover (no logo)
5500	PIR cover with Viconics logo
5531	PIR cover blank (no logo)
COMMUNICATION PROTOCOL	
E	Echelon/LONworks
B	BACnet
P	Wireless/Zigbee Pro
W	Wireless

VT7305 | C | 5031 | W Example: VT7305C5031W Hospitality fancoil controller with 2 floating + 1 auxiliary outputs in a blank cover case with wireless communication protocol

ACCESSORIES

COV-PIR-FCU-C-5031
COV-PIR-ZN-5031
TG511A1000

PIR cover for FCU thermostat
PIR cover for Zone thermostat
Thermostat guard- clear-medium size