

# THERMOSTATS & CONTROLLERS

70°

## ZONE THERMOSTAT AND FCU THERMOSTAT

### VT7200, VT7300 SERIES

#### DESCRIPTION

The Viconics VT7200 Series 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 Series Fan Coil Unit (FCU) thermostats are digital-display, heating / cooling, with outputs for two-position, floating, or proportional control. In addition, they include multispeed 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.



VT7305C50xx  
FCU Thermostat



VT7200C50xx  
Zone Thermostat



#### FEATURES

- Zone or FCU control models
- Two-position, floating, or proportional models
- Remote room sensor option
- Adjustable deadband
- Setpoint range limits (heating and cooling)
- Three configurable inputs for any of: 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)

#### SPECIFICATIONS

<b>Supply Voltage</b>	19-30 VAC, 50/60 Hz	<b>Control Type</b>	Proportional plus integral (PI)
<b>Supply Current</b>	2 VA	<b>Proportional Band</b>	Heating and cooling, 2°F (1.1°C)
<b>Display</b>	Two-line backlit LCD, ±0.2°F (0.1°C)	<b>Floating Time Base</b>	Adjustable, 0.5 to 9 minutes
<b>Control Accuracy</b>	Temperature, ±0.9°F (±0.5°C)	<b>Cycles Per Hour</b>	Adjustable 3 to 8
<b>VT7355C50xx, VT7355F50xx</b>	Dehumidification, ±5% RH from 20 to 80%	<b>Override Timer</b>	0 to 24 hours, 1-hour increments, pushbutton reset
<b>Thermostat Type</b>	Zone (VT7200) or FCU (VT7300)	<b>Sensor Offset</b>	Adjustable ±5°F (±2.5°C), ±15% RH (humidity models)
<b>Cover Controls</b>		<b>Deadband Setpoint</b>	Adjustable 2° to 5°F (1° to 2.5°C)
<b>Zone Models</b>	Up/down/override buttons Heat/Cool "on" LEDs	<b>Cooling Limits</b>	54° to 100°F (12° to 37.7°C)
<b>FCU Models</b>	Up/down/°C-or-°F/fan/mode buttons Fan/Heat/Cool "on" LEDs	<b>Heating Limits</b>	40° to 90°F (4.5° to 32°C)
<b>Control Outputs</b>	See terminal designation table	<b>Keypad Lockout</b>	Selectable system/fan/unoccupied
<b>VT7200C50xx</b>	5 triacs (H/C, 2-position or floating)	<b>System Setting</b>	O=off, H=heating, C=cooling, A=automatic changeover
<b>VT7200F50xx</b>	1 triac, 2 analog outputs (H/C proportional 0 to 10 VDC)	<b>FCU Models</b>	O/C, O/H, O/A/H/C, H/O/C
<b>VT73(05,55)C50xx</b>	3 relays (fan), 5 triacs (H/C, 2-position or floating control)	<b>Fan Setting</b>	L=low, M=medium, H=high, A=auto
<b>VT73(05, 55)F50xx</b>	3 relays (fan), 1 triac, 2 analog outputs (H/C proportional 0 to 10 VDC)	<b>FCU Models</b>	L/M/H, L/H, L/M/H/A, L/H/A, On/A
<b>Triacs and Relays</b>	30 VAC, 1A, 3A inrush	<b>Enclosure</b>	UL FR1, flame retardant plastic
<b>Analog Outputs</b>	0-10 VDC, 2K minimum impedance, direct or reverse acting	<b>Mounting</b>	Standard vertical, 2" x 4" box
<b>Auxiliary Inputs</b>	2 digital inputs, 1 universal input, 1 remote sensor	<b>Wiring</b>	18 AWG maximum, 22 AWG recommended
<b>Configurable as</b>	Service/status reminders	<b>Color</b>	White
	Door/window/motion sensor switch	<b>Operating Temperature</b>	32° to 122°F (-30° to 50°C)
	Filter alarm	<b>Operating Humidity</b>	0–95% RH non-condensing
	Central night setback clock	<b>Dimensions</b>	4.94"H x 3.38"W x 1.13"D (12.5 x 8.6 x 2.9 cm)
	Remote occupied override switch	<b>Weight</b>	0.75 lb (0.34 Kg)
	Heat/Cool changeover, contact or sensor	<b>Approvals</b>	UL, cUL, File #E234137, CE
<b>Digital Inputs</b>	Dry contact	<b>RoHS Statement</b>	Yes
<b>Universal Input</b>	Dry contact or 10K Type 2 Model 24 thermistor	<b>Warranty</b>	1 year
<b>Remote Sensor</b>	Thermistor, 10K Type 2 Model 24		

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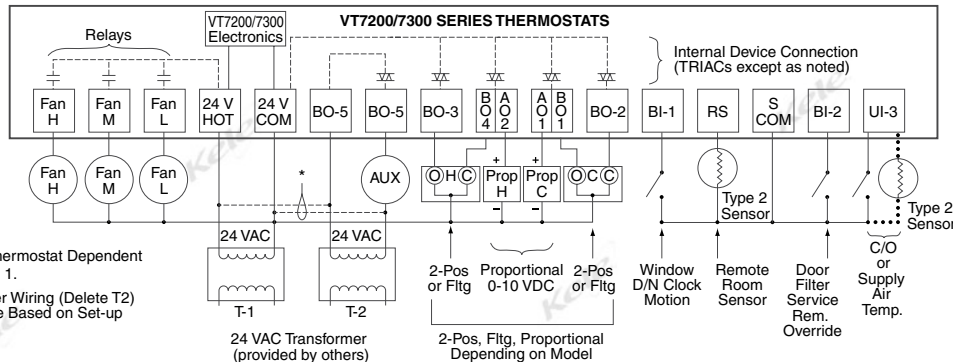
## ZONE THERMOSTAT AND FCU THERMOSTAT VT7200, VT7300 SERIES



### WIRING

TABLE 1. TERMINAL DESIGNATIONS BY THERMOSTAT MODEL

ZONE THERMOSTATS		FAN COIL UNIT (FCU) THERMOSTATS				** Terminals and functions are not present on every thermostat	
VT7200C5031 2-Position or Floating	VT7200F5031 Proportional	VT7305C5031 2-Position or Floating	VT7355C5031 2-Position or Floating/RH	VT7305F5031 Proportional	VT7355F5031 Proportional/RH	Terminal**	Thermostat Function**
		X	X	X	X	1	High speed fan
		X	X	X	X	2	Medium speed fan
		X	X	X	X	3	Low speed fan
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	5	24 VAC common for thermostat, fan and BO-(1, 2, 3, 4), AO-(1, 2)
X	X	X	X	X	X	6	BO-5, auxiliary output, configurable (reheat, occupied, or unoccupied)
X	X	X	X	X	X	7	BO-5, auxiliary output, configurable (reheat, occupied, or unoccupied)
X		X	X			8	BO-3, open heating, (VT7200C5031, VT7355C5031)
X		X	X			9	BO-4, close heating (VT7200C5031, VT7355C5031)
	X			X	X	9	AO-2, heating (VT7305F5031, VT7355F5031)
X		X	X			10	BO-1, open cooling (VT7200C5031)
	X			X	X	10	AO-1, cooling (VT7305F5031, VT7355F5031)
X		X	X			11	BO-2, close cooling, (VT7200C5031, VT7355C5031)
X	X	X	X	X	X	12	BI-1, configurable (night setback clock, motion detector, window switch)
X	X	X	X	X	X	13	RS, remote sensor, 10 kΩ thermistor
X	X	X	X	X	X	14	SCOM, common for remote sensor, BI-(1, 2) and UI-1
X	X	X	X	X	X	15	BI-2, configurable (door, filter, service, remote override)
X	X	X	X	X	X	16	UI-3, configurable (changeover contact or sensor, supply air sensor)



### ORDERING INFORMATION

MODEL	THERMOSTAT TYPE
VT7200	Zone Controller
VT7300	Fancoil Controller Commercial (Override Occupancy)
VT7305	Fancoil Controller Hospitality (Hotel/Lodging w/ Temp Scale)
VT7350	Fancoil Controller Commercial (Override Occupancy) w/ Humidity Sensor
VT7355	Fancoil Controller Hospitality (Hotel/Lodging w/Temp Scale) w/ 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 w/ Viconics logo
5531	PIR Cover Blank (no logo)

VT7305 [C] 5031 Example: VT7305C5031 Hospitality fancoil controller with 2 floating and 1 auxiliary outputs with a blank cover

### RELATED PRODUCTS

680-243-6  
COV-FCU-L  
COV-ZN  
KTR24  
KTR24-LED-MB  
ST-D24  
ST-R24SC

Changeover thermostat with conduit fitting  
Blank cover for fan coil thermostats  
Blank cover for zone thermostats  
Remote room thermistor sensor  
Remote room sensor with override button and LED  
10K Type 2 duct temperature thermistor  
Strap-on pipe thermistor