

# Communicating Thermostats: Rooftop Control

BACnet, Echelon, & Wireless  
Models Available



VT7600A5000

## DESCRIPTION

The VT76xxA and VT76xxB Series PI thermostat family provides single stage and multi-stage control of heating/cooling equipment, including rooftop and self-contained units. The product features an intuitive, menu-driven, back-lit LCD display that walks users through the simple programming procedure, making installation extremely simple.

All models contain two user-controlled digital inputs that monitor filter status, change the occupancy status, and/or provide general purpose service indication. Some models offer up to three remote sensor inputs. All models contain a discharge air sensor input and SPST auxiliary switch, which can be used to control lighting or disable the economizer function. All devices are available with Echelon, BACnet, or wireless adapters.

## APPLICATIONS

- Single speed fans
- Supply air temperature sensor
- Outdoor air temperature sensor
- Differential pressure switch

## FEATURES

- PI time proportioning algorithm...increased comfort, accuracy, and energy savings
- 2 digital inputs...adds functionality
- Smart fan...saves energy during night mode
- Unique local configuration utility...minimizes parameter tampering
- Lockable keypad...tamper proof, no need for thermostat guards
- Freeze protection...prevents costly freeze damage
- EEPROM memory...no loss of program
- 6 hour reserve time for clock...no need to reprogram day or time after power outage
- Remote room and outdoor temperature sensor...increased flexibility and functionality
- Auxiliary output...can be used for lighting and/or economizer override
- Discharge air sensor...can be used to monitor unit efficiency
- Intuitive, menu-driven programming...can be used for all types of establishments

## SPECIFICATIONS



Thermostat Power Requirements	19-30VAC; 50 or 60 Hz; 2 VA Class 2
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 10 K NTC thermistor
Resolution	± 0.1°C (± 0.2°F)
Control Accuracy	Temp: ±0.5°C (±0.9°F) @ 21°C (70°F) typical, calibrated
Occupied and Unoccupied Setpoint Range Cooling	12° to 38°C (54° to 100°F)
Occupied and Unoccupied Setpoint Range Heating	4.5° 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 & UI3 to Scm
Outputs Rating	Triac output: 30VAC, 1A max., 3A in-rush; Analog: 0 to 10VDC into 2kΩ resistance min.
Economizer Analog Output Rating	0 to 10VDC into 2kΩ resistance min.
Economizer Analog Output Accuracy	±3% typical
Wire Gauge	18 gauge maximum, 22 gauge recommended
Dimensions	4.94" x 3.38" x 1.13"
Approximate Shipping Weight	0.75 lb (0.34 kg)

UL: 873 (US) and CSA C22.2 No. 24 (Canada), File E27734 with CCN, XAPX (US) and XAPX7 (Canada)

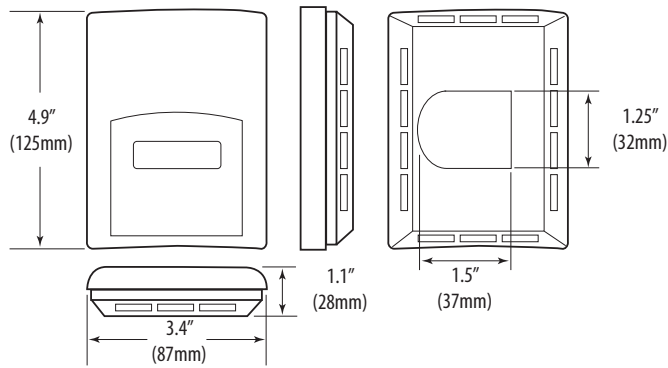
FCC: Compliant to CFR 47, Part 15, Subpart B, Class A (US)

Industry Canada: ICES-003 (Canada)

CE: EMC Directive 89/336/EEC (European Union)

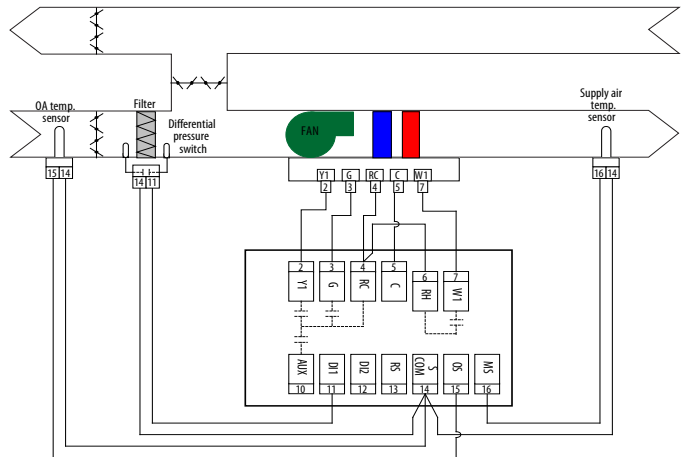
C-Tick: AS/NZS CISPR 22 Compliant (Australia / New Zealand); Supplier Code Number N10696

### DIMENSIONAL DRAWING



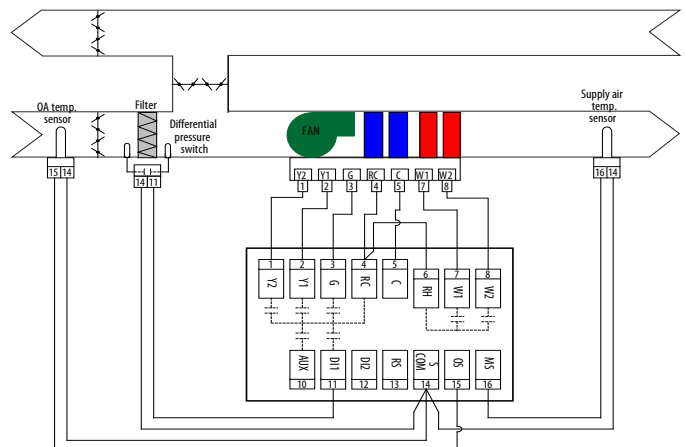
### APPLICATION/WIRING EXAMPLES

*Typical 1H/1C Application*



\* Use for single speed fans, supply air temperature sensors, outdoor air temperature sensors, and differential pressure switches.

*Typical 2H/2C Application*



\* Use for single speed fans, supply air temperature sensors, outdoor air temperature sensors, and differential pressure switches.

### ORDERING INFORMATION



MANUF. PART #	ORDERING #	DESCRIPTION	COMM.
VT7600A5000	U010-0001	1H/1C thermostat, non-programmable; PIR Ready (PIR cover not included)	Stand alone
VT7600A5000B	U010-0002		BACnet (MS/TP)
VT7600A5000E	U010-0003		Echelon
VT7600A5000W	U010-0004		Wireless (Zigbee)
VT7600B5000	U010-0005	2H/2C thermostat, non-programmable; PIR Ready (PIR cover not included)	Stand alone
VT7600B5000B	U010-0006		BACnet (MS/TP)
VT7600B5000E	U010-0007		Echelon
VT7600B5000W	U010-0008		Wireless (Zigbee)
VT7652A5000	U010-0009	1H/1C thermostat, programmable; PIR Ready (PIR cover not included)	Stand alone
VT7652A5000B	U010-0010		BACnet (MS/TP)
VT7652A5000E	U010-0011		Echelon
VT7652A5000W	U010-0012		Wireless (Zigbee)
VT7652B5000	U010-0013	2H/2C thermostat, programmable; PIR Ready (PIR cover not included)	Stand alone
VT7652B5000B	U010-0014		BACnet (MS/TP)
VT7652B5000E	U010-0015		Echelon
VT7652B5000W	U010-0016		Wireless (Zigbee)
VT7600A5500	U010-0017	1H/1C thermostat, non-programmable; PIR factory equipped	Stand alone
VT7600A5500B	U010-0018		BACnet (MS/TP)
VT7600A5500E	U010-0019		Echelon
VT7600A5500W	U010-0020	Wireless (Zigbee)	
VT7600B5500	U010-0021	2H/2C thermostat, non-programmable; PIR factory equipped	Stand alone
VT7600B5500B	U010-0022		BACnet (MS/TP)
VT7600B5500E	U010-0023		Echelon
VT7600B5500W	U010-0024	Wireless (Zigbee)	
VT7652A5500	U010-0025	1H/1C thermostat, programmable; PIR factory equipped	Stand alone
VT7652A5500B	U010-0026		BACnet (MS/TP)
VT7652A5500E	U010-0027		Echelon
VT7652A5500W	U010-0028	Wireless (Zigbee)	
VT7652B5500	U010-0029	2H/2C thermostat, programmable; PIR factory equipped	Stand alone
VT7652B5500B	U010-0030		BACnet (MS/TP)
VT7652B5500E	U010-0031		Echelon
VT7652B5500W	U010-0032	Wireless (Zigbee)	