

Communicating Thermostats: Heat Pump Control

BACnet, Echelon, & Wireless
Models Available



VT7600H5000

DESCRIPTION

The VT7600H PI thermostat family is designed for multi-stage control of heating/cooling equipment such as heat pumps and self-contained units. The product features an intuitive, menu-driven, back-lit LCD display which walks users through the programming steps, making the process 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 include up to three remote sensor inputs. 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
- 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
- Auxiliary output...can be used for lighting and/or economizer override
- Discharge air sensor...can be used to monitor unit efficiency
- Low/High balance point...protect and optimize system performance
- 3 Heat/2 Cool...support single and two stages heat pump with one auxiliary heat stage

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 Scom
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)

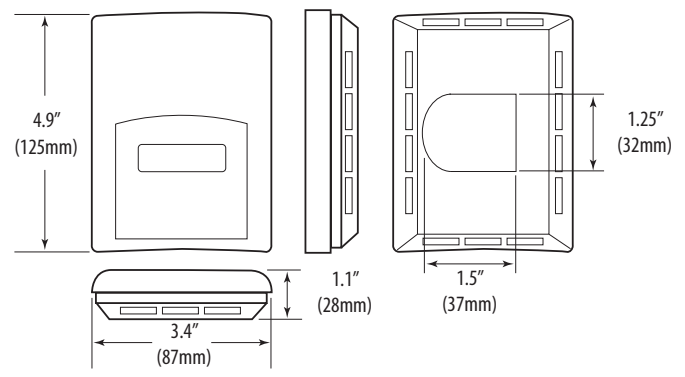
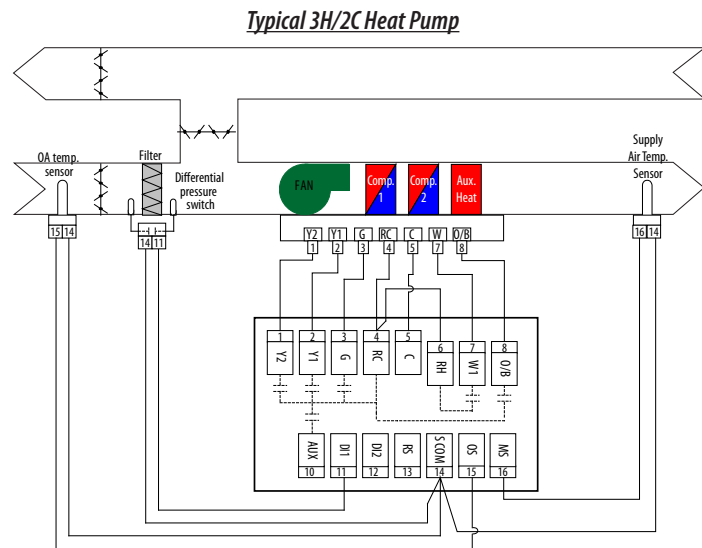
Industry Canada: ICES-003 (Canada)

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

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

APPLICATION/WIRING EXAMPLE

DIMENSIONAL DRAWING



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

ORDERING INFORMATION



MANUF. PART #	ORDERING #	DESCRIPTION	COMM.
VT7600H5000	U010-0065	3H/2C heat pump thermostat,	Stand alone
VT7600H5000B	U010-0066	non-programmable;	BACnet (MS/TP)
VT7600H5000E	U010-0067	PIR Ready (PIR cover not	Echelon
VT7600H5000W	U010-0068	included)	Wireless (Zigbee)
VT7652H5000	U010-0069	3H/2C heat pump thermostat,	Stand alone
VT7652H5000B	U010-0070	programmable;	BACnet (MS/TP)
VT7652H5000E	U010-0071	PIR Ready (PIR cover not	Echelon
VT7652H5000W	U010-0072	included)	Wireless (Zigbee)
VT7600H5500	U010-0073		Stand alone
VT7600H5500B	U010-0074	3H/2C heat pump thermostat,	BACnet (MS/TP)
VT7600H5500E	U010-0075	non-programmable;	Echelon
VT7600H5500W	U010-0076	PIR factory equipped	Wireless (Zigbee)
VT7652H5500	U010-0077		Stand alone
VT7652H5500B	U010-0078	3H/2C heat pump thermostat,	BACnet (MS/TP)
VT7652H5500E	U010-0079	programmable;	Echelon
VT7652H5500W	U010-0080	PIR factory equipped	Wireless (Zigbee)