

The VYKONstat VT7600

Series can be used in any type of building and provides increased comfort, accuracy and energy savings while adding functionality and flexibilty.

# VYKONstat VT7600 Series



### Programmable & Non-Programmable Thermostats for Roof Top and Self Contained AHUs

The VT7600 Series is specifically designed for single stage and multi-stage control of heating/cooling equipment. The product features an intuitive, menu-driven, back-lit LCD display which makes the programming steps extremely simple. Accurate temperature control is achieved due to the product's PI time proportional control algorithm, which virtually eliminates temperature offset associated with traditional, differential-based thermostats.

All models contain two digital inputs, which can be set by the user to monitor filter status, activate a remote temporary occupancy switch, and/or used as a general purpose service indicator. In addition, depending on the model, up to three remote sensor inputs are available. All models contain a SPST auxiliary switch, which can be used to control lighting or disable the economizer function and a discharge air sensor input. For more advanced applications, economizer control logic has been integrated onto the thermostat for use with proportional damper economizer actuators.

### **Features**

- PI time proportioning algorithm
- 2 digital inputs
- Smart fan
- Unique configuration key
- Lockable keypad
- Freeze protection
- EEPROM memory
- 6 hour reserve time for clock
- Remote room and outdoor temperature sensor
- Auxiliary output
- Discharge air sensor
- Intuitive, menu-driven programming (7 day, 2/4 events on programmable models only)
- Economizer output (0-10V) (on economizer models only)
- Low/High balance point (on heat pump models only)
- 3 Heat/2 Cool (on heat pump models only)







## **Benefits**

- Increase comfort, accuracy, and energy savings
- Add functionality
- Save energy during night mode
- Minimize parameter tampering
- Tamper proof, no need for thermostat guards
- Prevent costly freeze damage
- No loss of program
- Avoid reprogramming day/time after power shortage

# Specifications

#### **Power Supply**

19-30 Vac 50 or 60 Hz; 2 VA Class 2

#### **Environmental**

- Operating: 0 °C to 50 °C (32 °F to 122 °F); 0% to 95% R.H. non-condensing
- Storage: -30 °C to 50 °C (-22 °F to 122 °F): 0% to 95% R.H. non-condensing

#### Sensor

- Local: 10 K NTC thermistor
- Resolution: ± 0.1 °C (± 0.2 °F)
- Accuracy: ± 0.5 ° C (± 0.9 °F) @ 21 °C (70 °F) typical calibrated

#### Occupied and unocc. set point range

- Cooling: 12.0 to 37.5 °C (54 100°F)
- Heating: 4.5 °C to 32 °C (40°F- 90°F)

### Temperature display range

• -40°C to 50°C (-40 °F -122°F)

#### Proportional band

• Cooling & Heating: 1.1C (2.0°F)

#### **Binary inputs**

Dry contact: DI1 & DI2 to C

- Increase flexibility and functionality
- Use for lighting and/or economizer override
- Monitor unit efficiency
- Use for all types of establishments
- Excellent for retro-fit opportunities
- Protect and optimize systems performances
- Support single and two stages heat pump with one auxiliary heat stage

#### **Output ratings**

- Contact Outputs: 30 Vac/1A;. Max in-rush 3A (Y1, Y@, G,W1, W2 & AU)
- Economizer Analog:  $0-1\Omega$  min.  $/\pm 3\%$

#### Wire gauge

• 22 AWG (18 AWG Max.)

#### **Dimensions**

• 4.94" x 3.38" x 1.13"

#### Approximate shipping weight

• 0.75 lb (0.34 kg)

#### **Agency Approvals**

- UL: UL 873 (US) and CSA C22.2 No. 24 (Canada), File E27734 with CCN XAPX (US) and XAPX7 (Canada)
- Industry Canada: ICES-003 (Canada) Agency Approvals Stand-Alone, BACnet & LON models
- FCC: Compliant to CFR 47, Part 15, Subpart B, Class A
   (US); Wireless models Compliant to: Part 15, Subpart C
- CE: EMC Directive 89/336/EEC (Europe Union)
- C-Tick: AS/NZS CISPR 22 Compliant (Australia / New Zealand) Supplier Code Number N10696

# Ordering Information - VT7600 Series

Application Type	1 Heat/1 Cool	1 Heat/1 Cool	2 Heat/2 Cool	2 Heat/2 Cool	2 Heat/2 Cool with Humidity Control	2 Heat /2 Cool with Humidity Control
Network Type	Product Model Number					
Stand Alone	VT7652A5X28	VT7600A5X28	VT7652B5X28	VT7600B5X28	VT7657B5X28	VT7607B5X28
BACnet-MS/TP	VT7652A5X28B	VT7600A5X28B	VT7652B5X28B	VT7600B5X28B	VT7657B5X28B	VT7607B5X28B
Echelon-LonTalk	VT7652A5X28E	VT7600A5X28E	VT7652B5X28E	VT7600B5X28E	VT7657B5X28E	VT7607B5X28E
Wireless 802.15.4	VT7652A5X28W	VT7600A5X28W	VT7652B5X28W	VT7600B5X28W	VT7657B5X28W	VT7607B5X28W
TOD Schedule	Yes	No	Yes	No	Yes	No

Application Type	2 Heat/2 cool w/Economizer	2 Heat/2 Cool w/Economizer	3 Heat/2 Cool Heat Pump	3 Heat/ 2 Cool Heat Pump
Network Type	Product Model Number			
Stand Alone	VT656B5X28	VT605BX28	VT652H5X28	VT600H5X28
BACnet-MS/TP	VT656B5X28B	VT605BX28B	VT652H5X28B	VT600H5X28B
Echelon-LonTalk	VT656B5X28E	VT605BX28E	VT652H5X28E	VT600H5X28E
Wireless 802.15.4	VT656B5X28W	VT605BX28W	VT652H5X28W	VT600H5X28W
TOD Schedule	Yes	No	Yes	No

### PIR Occupancy Sensor

X=0 for no PIR Occupancy Sensor X=5 includes PIR Occupancy Sensor

# Ordering Information - Remote Sensor Accessories

Model Number	Description
S3010W1028	Wall mounted temperature sensor
S3020W1028	Wall mounted temperature sensor with override key and occupancy status LED
S2020E1028	Outdoor temperature sensor
S2060A1028	Averaging temperature sensor
S2000D1028	Duct mounted temperature sensor
VH2020W1028	Wall mounted humidity sensor





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