CHV-TSTAT-FCU

Heating/Cooling Fan-Coil Thermostat

- *Wall-mount thermostat for fan coil unit HVAC systems*
- *Multiple Crestron® thermostats may be networked via Cresnet®*
- *Supports remote humidity sensors and outdoor temperature sensors*
- *Backlit LCD display*
- *Front panel buttons for setup, configuring, and temperature and humidity adjustments [1]*
- *Available in white, black, or almond finishes*

The CHV-TSTAT-FCU is a versatile heating and cooling thermostat for fan coil unit (FCU) HVAC systems. Relative humidity capability can be added through an external remote humidity sensor (sold separately). Although functional as a standalone thermostat, the CHV-TSTAT delivers greatly enhanced functionality as part of a complete home automation system from Crestron®. Available in white, black, or almond, the stylish wall mount design is a complement to any décor.

The large backlit LCD display, navigable using four simple pushbuttons, provides easy access to indoor and outdoor temperature and humidity readings, setpoint adjustments, system mode and fan status indicators, and setup menus. Climate control features include separate heating, cooling, and humidity setpoints with optional automatic changeover between heating and cooling modes. Adjustable anticipators prevent overshooting the set temperature, and continuous fan operation can be selected when needed for increased circulation.

Automation System Integration

Multiple Crestron thermostats may be networked via Cresnet® to any 3-Series® control system, including the DIN-AP3, enabling global temperature and humidity adjustment from any thermostat. Automation functions such as lighting, motorized blinds, or lawn sprinklers can be accessed through two custom remote function pages, and customized text messages can be sent to the LCD display to provide maintenance reminders and other alerts.

Its connection to the control system also allows for full control and scheduling of the CHV-TSTAT-FCU from touch screens and computers throughout the home, and supports extensive flexibility for integration with other devices and systems. In the event that communication with the control system is disrupted for any reason, the CHV-TSTAT-FCU will remain operable to control the HVAC system.

Remote Sensors

Optional remote temperature and humidity sensors can be connected to the CHV-TSTAT-FCU for enhanced flexibility and optimized performance. Climate can be regulated according to an average of multiple sensors, or the built-in sensors can be disabled entirely to allow the CHV-TSTAT-FCU to be installed out of view. Outdoor climate can also be monitored, enabling outdoor low-temperature compensation to prevent condensation on windows during cold weather. The CHV-TSTAT-FCU accepts up to four remote temperature sensors, two remote temp/humidity sensors, or a combination of one temp/humidity sensor and two temperature sensors.

SPECIFICATIONS

Measurement Range

Indoor Temperature: 0º to 110º F (-18º to 43º C)
Outdoor Temperature: -40º to 170º F (-40º to 77º C)[1]
Humidity: 0% to 100% RH [1]

Temperature Tolerance

Over Full Range: ±1º F (±0.5º C)
At Room Temperatures: ±1º F (+0.1/-0.4º C)

Setpoint Range

Auto Setpoint: 38° to 99° F (3° to 37° C)
Heat Only Setpoint: 38° to 89° F (3° to 32° C)
Cool Only Setpoint: 59° to 99° F (15° to 37° C);
38° to 99° F (3° to 37° C) when extended cool mode is enabled
Humidity Setpoint: 5% to 70% RH [1]

Relay Rating

1 Amp at 40 Volts DC or 24 Volts AC (nominal)

Power Requirements

24V: 2 Watts (0.083 Amps) at 24 Volts AC, supplied by heating or cooling system
Cresnet® Power Usage: <1 Watts (<0.05 Amps at 24 Volts DC), required for Cresnet communication only

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Buttons

MODE: Accesses user controls - system mode, fan mode, humidifier,[1] Crestron® system, and global update
VIEW: Accesses humidity reading,[1] outdoor temperature reading,[1] system messages, and remote functions
UP: Selects user modes and increments selection in setup modes
DOWN: Selects user modes and decrements selection in setup modes

Display

Type: Transflective LCD, backlit
Size: 2.75 in (70 mm)
Resolution: 128 x 64
Viewing Angle: ±50° horizontal (at 0° vertical), ±50° vertical (at 0° horizontal)
Displays current room temperature, current setpoint, current Heat or Cool mode, thermostat's call for heating or cooling, and current fan setting

Connections

HVAC: (2) 9-position terminal blocks comprising the following:
Power Connections (Required):

- **24 (C):** 24V AC common terminal supplies remote 24V AC power to thermostat;
- **24 (R):** 24V AC reference terminal – Can be connected to RH or RC by P4 jumper setting, or tied directly to power source

HVAC Control Connections (System Dependent):

- **HUM, RHU:** Humidity Control – Energized together during humidity call;
- **R, R:** Reference – Used for all system calls (except humidity);
- **G-L:** Fan Low – Energized to R during call for low-speed fan;
- **G-M:** Fan – Energized to R during call for medium-speed fan;
- **G-H:** Fan – Energized to R during call for high-speed fan;
- **O:** Changeover control – Energized to R during cooling modes;
- **B:** Energized to R during non-cooling modes;
- **W:** Heat – Energized to R during call for heating;
- **Y:** Cool – Energized to R during call for cooling

Remote Sensing Connections (Optional):

- **RSR:** Remote Sensor Returns – Common sensor terminal;
- **RS1:** Remote Sensor terminal – Connect the sensor from RS1 to RSR;
- **RS2:** Remote Sensor terminal – Connect the sensor from RS2 to RSR

NETWORK: (1) 4-position terminal block;
Cresnet slave port, connects to Cresnet control network

Enclosure

Plastic, surface-mountable to the front of a horizontally-oriented 1-gang electrical box

Dimensions

Height: 3.75 in (96 mm)
Width: 5.00 in (127 mm)
Depth: 1.04 in (27 mm)

Weight

5.80 oz (165 g)

MODELS & ACCESSORIES

Available Models

CHV-TSTAT-FCU-A: Heating/Cooling Fan-Coil Thermostat, Almond Faceplate
CHV-TSTAT-FCU-B: Heating/Cooling Fan-Coil Thermostat, Black Faceplate
CHV-TSTAT-FCU-W: Heating/Cooling Fan-Coil Thermostat, White Faceplate

Available Accessories

CHV-RSS: Remote Slab Sensor and Outdoor Temperature Sensor
CHV-RTHS: Remote Temperature and Humidity Sensor
CHV-RTS: Remote Temperature Sensor
CRESNET-HP-NP-TL-SP1000: Cresnet® "High-Power" Control Cable, non-plenum, teal, 1000 ft spool
CRESNET-HP-NP-TL-SP500: Cresnet® "High-Power" Control Cable, non-plenum, teal, 500 ft spool
CRESNET-NP-BK-B500: Cresnet® Control Cable, non-plenum, black, 500 ft box
CRESNET-NP-OR-B500: Cresnet® Control Cable, non-plenum, orange, 500 ft box
CRESNET-NP-TL-B250: Cresnet® Control Cable, non-plenum, teal, 250 ft box
CRESNET-NP-TL-B500: Cresnet® Control Cable, non-plenum, teal, 500 ft box
CRESNET-NP-TL-SP1000: Cresnet® Control Cable, non-plenum, teal, 1000 ft spool
CRESNET-NP-TL-SP500: Cresnet® Control Cable, non-plenum, teal, 500 ft spool
CRESNET-P-BK-SP500: Cresnet® Control Cable, plenum, black, 500 ft spool
CRESNET-P-OR-SP500: Cresnet® Control Cable, plenum, orange, 500 ft spool
CRESNET-P-TL-SP1000: Cresnet® Control Cable, plenum, teal, 1000 ft spool
CRESNET-P-TL-SP500: Cresnet® Control Cable, plenum, teal, 500 ft spool

Notes:

1. Humidity sensing and outdoor temperature/humidity sensing require additional remote sensors, sold separately. See "Available Accessories" for model names.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

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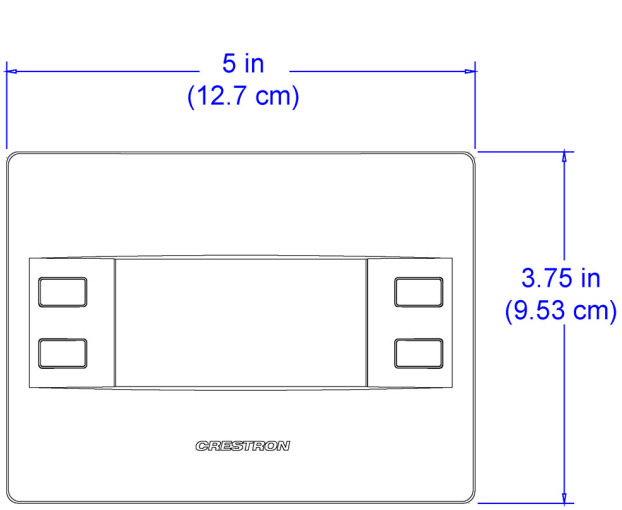
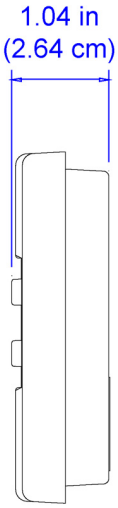
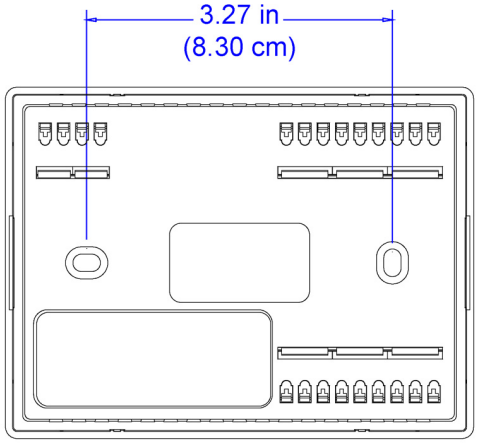
CAD DRAWINGS







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