

DIN-THSTAT

Heating, Cooling, and Relative Humidity Thermostat, DIN Rail Mount



- Works with Crestron® remote temperature sensors (sold separately)
- Operates as part of a complete Crestron automation system (sold separately)
- Onboard controls for system setup and testing
- System integration via Cresnet® communications
- Cresnet powered (24 VDC)
- 9U 35 mm DIN rail mountable
- Backlit LCD display
- Front panel controls for setup, temperature, and humidity adjustments

The DIN-THSTAT is a versatile heating, cooling and relative-humidity thermostat that provides control of radiant floor heat, forced air, and heat pump HVAC systems. DIN rail mounting allows for installation in an equipment cabinet, keeping the living area free from a wall-mounted thermostat. Small, unobtrusive remote temperature and humidity sensors¹ gather the environmental conditions from the room and transmit the data to the DIN-THSTAT.

A Crestron control system connection allows temperature adjustments from virtually anywhere by using a Crestron touch screen, handheld remote, mobile app, or computer.

Remote Sensors

The CHV-RTS and CHV-RTHS remote sensors provide indoor temperature and humidity data so that the DIN-THSTAT can be installed out of view. The CHV-RSS monitors outdoor climate and floor temperature, enabling outdoor low-temperature compensation to prevent condensation on windows during cold weather. The DIN-THSTAT accepts up to three temperature sensors. Each sensor connects via a single twisted pair wire.

Auxiliary Ports

Auxiliary ports allow state sensing from HVAC equipment and interfacing with additional HVAC devices.

DIN Rail Mounting

The DIN-THSTAT snaps onto a standard DIN rail for installation in a wall mount enclosure (Crestron DIN-EN series or similar¹) or on a wall panel. The DIN-THSTAT is designed to mount in a DIN-EN-2X18-HC-OPEN, DIN-EN-3X18-HC-OPEN, or DIN-EN-6X18-HC-OPEN for an attractive centralized mounting solution. The hinged cover provides easy access to equipment wiring while openings in the cover provide access to the DIN modules through the cover.

Cresnet Communications

The DIN-THSTAT communicates with a Crestron control system (such as the DIN-AP3) via the Cresnet control network. A pair of Cresnet ports is provided on the DIN-THSTAT to allow easy daisy-chaining of several DIN-THSTAT or Crestron DIN rail devices.

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Specifications

Measurement Range (Supplied by Remote Sensor)

Indoor Temperature	32° to 110° F (0° to 43° C)
Outdoor Temperature	-40° to 170° F (-40° to 77° C) ²
Humidity	0% to 100% RH

Temperature Tolerance

±1° F (±0.5° C)

Humidity Tolerance

±5%

Setpoint Range³

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)
Humidity Setpoint	5% to 90% RH

Power

Cresnet Power Usage	3 W (125 mA @ 24 VDC)
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Controls

Keypad	(1) 5-way navigation pad for menu navigation and temperature/humidity adjustments
HOME	(1) pushbutton, returns to the previous screen or the home screen
BACK	(1) pushbutton, steps menu back one level

Display

Type	RGB LCD
Size (diagonal)	1.80 in. (46 mm)
Resolution	176 x 220
Function	Front panel display to view temperature and humidity settings; Used for local configuration

Communications

Cresnet	Cresnet slave mode
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Connections

Y1, Y2, Y3	(1) Compressor stage 1, 2, and 3
G	(1) Fan relay
B	(1) Active in non-cool modes
O	(1) Active in cool mode
RC	(1) Reference cool
RH	(1) Reference heat
W1, W2, W3	(1) Heat stage 1, 2, and 3
HUM	(1) Humidity call switch power
AUX1, AUX2	(2) Output relay to interface with other HVAC devices
AUX-IN	(1) Signal from HVAC state sensing or other custom programming
TS1, TS2 & G	(2) From remote temperature sensor (CHV-RTS), remote slab sensor (CHV-RSS), or remote temperature and humidity sensor (CHV-RTHS) and (2) ground ⁴
TS3 & G	(1) From outdoor remote temperature sensor and (1) ground ⁴
24 Y Z G	(2) 4-pin detachable terminal blocks; Cresnet slave port with hardwire parallel pass-through
USB	(1) Micro B female, USB 2.0 computer console port for firmware download
INTERFACE	For future use

Construction

Housing	Plastic
Mounting	35 mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45 mm front panel cutout, occupies 9 DIN module spaces (162 mm)

Environmental

Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% RH (noncondensing)
Heat Dissipation	10 BTU/hr maximum; For indoor use only

Dimensions

Height	3.68 in. (94 mm)
Width	6.33 in. (161 mm)
Depth	2.34 in. (60 mm)

Weight

13 oz (363 g)

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Compliance

CE, IC, FCC Part 15 Class B digital device

Models

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Available Accessories

CHV-RTS

Remote Temperature Sensor

CHV-RTHS

Remote Temperature and Relative Humidity Sensor

CHV-RSS

Remote Slab Sensor and Outdoor Temperature Sensor

DIN-AP3

DIN Rail 3-Series® Automation Processor

DIN-AP3MEX

DIN Rail 3-Series® Automation Processor w/ infiNET EX® Communications & ER Wireless Gateway

DIN-EN-2X18

Enclosure for DIN Rail Devices, 2 DIN Rails, 18 Units Wide

DIN-EN-3X18

Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide

DIN-EN-6X18

Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide

DIN-EN-2X18-HC-2OPEN

DIN Rail Enclosure with 2 DIN Rails and 2 Cover Openings

DIN-EN-3X18-HC-2OPEN

DIN Rail Enclosure with 3 DIN Rails and 2 Cover Openings

DIN-EN-6X18-HC-5OPEN

DIN Rail Enclosure with 6 DIN Rails and 5 Cover Openings

DIN-EN-3X18-MMOE

Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide, Rough-In Enclosure

DIN-EN-3X18-MMP

Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide, Lay-In Panel

DIN-EN-6X18-MMOE

Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide, Rough-In Enclosure

DIN-EN-6X18-MMP

Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide, Lay-In Panel

DIN-PWS60

60 W Cresnet Power Supply

Notes:

1. Item(s) sold separately.
2. Outdoor temperature measurement is -30° to 120° F (-34° to 49° C) if thermistor sensors are used.
3. The setpoint range can be decreased during device configuration.
4. Each temperature sensor requires a dedicated low-capacitance twisted pair wire (<7 nF per run) and supports a wire length of 500 ft (152 m) using CAT5. Thermostat wire is not recommended, but may be used if necessary at lengths up to 100 ft (30 m).

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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

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

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