8-Zone Radiant Heat Thermostat, DIN Rail Mount



- Eight-zone radiant heat control thermostat
- Works with Crestron® remote temperature sensors (sold separately)
- Operates as part of a complete Crestron <u>control system</u> (sold separately)
- Failsafe mode ensures continuous heat if the user setpoint is temporarily lost
- Temperature offsets up to ±3°C (±6°F) in steps of 0.1° per temperature sensor input
- Onboard controls and indicators for system setup and testing
- Eight SPDT heat zone valve control relays
- One SPDT main valve control relay
- Rated 1/2 HP at 240VAC, 50/60 Hz
- System integration via Cresnet® communications
- Cresnet powered (24VDC)
- 9U 35 mm DIN rail mountable

The DIN-1TSTAT8 is an 8-zone thermostat designed for use with radiant heating systems. Customized control and scheduling is also possible. The use of remote temperature sensors eliminates the need for a separate thermostat on the wall in each zone.

The DIN-1TSTAT8 is for heat-only applications using radiators or radiant floor heating. It controls the heating valve for each zone via eight SPDT relay control outputs (one per zone). A ninth main valve control output is also provided. Each relay includes normally open and normally closed contacts, and is rated for 1/2 HP at 240VAC, 50/60 Hz.

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

The DIN-1TSTAT8 requires a Crestron control system to function. The heating setpoints for each zone are set by the user through the control system and then stored in memory on the DIN-1TSTAT8. In the event a user setpoint is lost, a failsafe operating mode takes over to keep the space heated

at a preset temperature until the user setpoint is restored from the control system.

NOTE: A complete system requires custom commissioning by a Crestron authorized installer and programmer. Contact your <u>Crestron representative</u> for more information

Remote Sensors

Each heating zone requires the installation of a remote temperature sensor. Compatible sensors include models CHVI-RTS-1G-SM-W, CHVI-RTS-1G-N-W, CHV-RTS, and CHV-RSS. Each sensor connects to the DIN-1TSTAT8 via a single twisted pair wire. The DIN-1TSTAT8 installs at a central location in a DIN rail enclosure, and connects to a Crestron control system (sold separately) via Cresnet® communications.

DIN Rail Mounting

The DIN-1TSTAT8 snaps onto a standard DIN rail for installation in a wall mount enclosure (Crestron <u>DIN-EN</u> series or similar) or on a wall panel. The DIN-1TSTAT8 is designed to mount in a <u>DIN-EN-2X18-HC-OPEN</u>, <u>DIN-EN-3X18-HC-OPEN</u>, or <u>DIN-EN-6X18-HC-OPEN</u> 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-1TSTAT8 communicates with a Crestron control system (such as the <u>DIN-AP4</u>) via the Cresnet control network. A pair of Cresnet ports is provided on the DIN-1TSTAT8 to allow easy daisy-chaining of several DIN-1TSTAT8 or Crestron DIN rail devices.



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Specifications

Contact Rating

1/2 HP @ 240VAC, 50/60 Hz per zone/channel; Provides eight SPDT heat zone valve control outputs and one SPDT main valve control output

Temperature Sensing

Measurement Range 0° to 43°C (32° to 110°F)

Temperature

±0.5°C (±1°F) over full range;

Tolerance

 $+0.1^{\circ}/-0.4^{\circ}C$ ($\pm1^{\circ}F$) at room temperature

Setpoint Range (Heat Only)

3° to 32°C (38° to 90°F)

Temperature Offset

±3°C (±6°F); in steps of 0.1° per temperature sensor input

Failsafe Setpoint 20°C (68°F) factory default setting, useradjustable from 5° to 20°C (41° to 68°F); the failsafe setpoint is used at install time prior to connection of a control system, and during runtime if the normal setpoint stored in memory gets corrupted; reverts to the normal setpoint once a value is received

from the control system

Main Valve Delay 5 minutes factory setting, adjustable from

0 to 5 minutes

Communications

Cresnet®	Cresnet secondary mode
Connections	
1-8	(8 sets of 3) Captive screw terminals; Comprises (8) zone valve control outputs with isolated common (C), normally closed (NC), and normally open (NO) terminals; Each output provides one SPDT relay rated 1/2 HP @ 240VAC, 50/60 Hz
MAIN	(3) Captive screw terminals; Main valve control output with isolated common (C), normally closed (NC), and normally open (NO) terminals; Provides one SPDT relay rated 1/2 HP @ 240VAC, 50/60 Hz
NET	(2) 4-pin detachable terminal blocks; Cresnet secondary port with hardwire parallel pass-through

TEMP SENSE

1 - 8

(8) 2-pin detachable terminal blocks; Temperature sensor inputs for zones 1 - 8; Each input accepts one sensor, model CHVI-RTS-1G-SM-W, CHVI-RTS-1G-N-W, CHVI-RTS, or CHV-RSS (sold separately); Requires a dedicated low-capacitance twisted pair wire per zone (<7 nF per run); Supports wire lengths of 76 m (250 ft) using CAT3 or 152 m (500 ft) using CAT5; Thermostat wire is not recommended, but may be used if necessary at lengths up to 30 m (100 ft);

Controls and Indicators

1 – 8 (8) Red LEDs and (8) pushbuttons, each button toggles the corresponding zone

output on and off (press and hold 10 seconds for test call), each LED indicates the corresponding zone output is on (flashes with heat call, steady without

heat call)

MAIN (1) Red LED and (1) pushbutton, button toggles the main output on and off when

held 10 seconds, LED indicates the main output is on (flashes with heat call,

steady without heat call)

SETUP (1) Recessed pushbutton and (1) red LED

for Cresnet TSID (touch-settable ID)

PWR (1) Green LED, indicates device is

powered via Cresnet

NET (1) Yellow LED, indicates Cresnet

communication with the control system

RESET (1) Recessed pushbutton for hardware

reset

Power

Cresnet Power

Usage

6 W (250 mA @ 24VDC)

Power <6 W

Consumption

Environmental

Temperature -18° to 43°C (0° to 110°F)

Humidity 10% to 90% RH (noncondensing)

Heat Dissipation 20 BTU/hr maximum

For indoor use only

Construction

Housing

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0

rated

8-Zone Radiant Heat Thermostat, DIN Rail Mount

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)

Dimensions

 Height
 94 mm (3.68 in.)

 Width
 161 mm (6.33 in.)

 Depth
 60 mm (2.34 in.)

Weight

0.5 kg (1.08 lb)

Compliance

Regulatory Model: DIN-1TSTAT8

CE, IC, FCC Part 15 Class B digital device

To search for product certificates, refer to support.crestron.com/app/certificates.

Model

DIN-1TSTAT8

8-Zone Radiant Heat Thermostat, DIN Rail Mount

Available Accessories

For a list of available accessories, visit the $\frac{\mbox{DIN-1TSTAT8}}{\mbox{product page}}$

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 contact us for additional information by visiting www.crestron.com/contact/our-locations for your local contact.

The original language version of this document is U.S. English. All other languages are a translation of the original document.

The product warranty can be found at www.crestron.com/warranty.

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