DIN-1TSTAT8

8-Zone Radiant Heat Thermostat, DIN Rail Mount

- > Eight-zone radiant heat control thermostat
- > Works with Crestron[®] remote temperature sensors^[1]
- > Operates as part of a complete Crestron automation system^[1]
- > Failsafe mode ensures continuous heat if the user setpoint is temporarily lost
- > Onboard controls and indicators for system testing
- > Eight SPDT heat zone valve control relays
- > One SPDT main valve control relay
- > Rated 1/2 HP at 240 Volts AC, 50/60 Hz
- > System integration via Cresnet®
- > Cresnet powered (24 Volts DC)
- > 9U 35 mm DIN rail mountable

The DIN-1TSTAT8 is an 8-zone thermostat designed for use with radiant heating systems. Each zone requires a remote temperature sensor to be installed in each heating zone. 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 system via Cresnet[®].^[1]

Its connection to a control system allows each zone to be adjusted from a Crestron touch screen, handheld remote, mobile app, or computer. Customized automation 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 240 Volts AC, 50/60 Hz.

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.^[1]

Standard 35 mm DIN rail mounting allows the DIN-1TSTAT8 to be installed in a DIN rail enclosure (Crestron DIN-EN series or similar). It occupies 9 DIN module spaces, and is powered by the Cresnet control bus.

SPECIFICATIONS

Contact Rating

1/2 HP @ 240 Volts AC, 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 Tolerance: $\pm 0.5^{\circ}$ C ($\pm 1^{\circ}$ F) over full range;

 $+0.1^{\circ}/-0.4^{\circ}$ C ($\pm 1^{\circ}$ F) at room temperature Setpoint Range (Heat Only): 3° to 32° C (38° to 90° F)

Failsafe Setpoint: 20° C (68° F) factory default setting, user-adjustable 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 slave 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 @ 240 Volts AC, 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 @ 240 Volts AC, 50/60 Hz

NET: (2) 4-pin detachable terminal blocks; Cresnet slave port with hardwire parallel pass-through

TEMP SENSE 1 – 8: (8) 2-pin detachable terminal blocks;

Comprised (8) zone temperature sensor inputs;

Each input accepts one sensor, model CHVI-RTS-1G-SM-W, CHVI-RTS-1G-N-W, CHV-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);

Refer to the DIN-1TSTAT8 Installation Guide, Doc. # 7950, for additional wiring guidelines

Controls & 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

 $\ensuremath{\text{NET:}}\xspace$ (1) Yellow LED, indicates Cresnet communication with the control system

RESET: (1) Recessed pushbutton for hardware reset

Power

Cresnet Power Usage: 6 Watts (250 mA @ 24 Volts DC) Power Consumption: <6 Watts

Construction

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

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: -18° to 43° C (0° to 110° F) Humidity: 10% to 90% RH (non-condensing) Heat Dissipation: 20 BTU/hr maximum *For indoor use only*

Dimensions

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

Weight

395 g (13.9 oz)

Compliance

CE, IC, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

DIN-1TSTAT8: 8-Zone Radiant Heat Thermostat, DIN Rail Mount

Available Accessories

CHVI-RTS-1G-SM-W: Surface Mount Remote Temperature Sensor, White CHVI-RTS-1G-N-W: Wall Mount Remote Temperature Sensor, White CHV-RTS: Remote Temperature Sensor CHV-RSS: Remote Slab Sensor and Outdoor Temperature Sensor DIN-EN Series: Enclosures for DIN Rail Devices DIN-AP3: DIN Rail 3-Series® Automation Processor DIN-AP3MEX: DIN Rail 3-Series® Automation Processor w/infiNET EX® & ER Wireless Gateway DIN-PWS60: 60 Watt Cresnet Power Supply CRESNET Series: Cresnet® Control Cable

Notes:

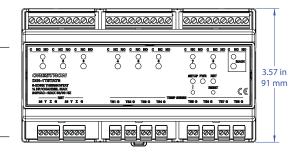
 The remote temperature sensors, DIN rail enclosure, and control system are all sold separately. A complete system requires custom commissioning by a Crestron authorized installer and programmer. Contact your Crestron representative for more information.

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

The specific patents that cover this and other Crestron products are listed online at https://www.crestron.com/legal/patents.

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

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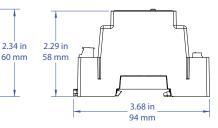
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6.33 in

161 mm

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Specifications subject to change without notice. Revised 12/17/18