



## HIGH LIMIT DUCT AVERAGE TEMPERATURE THERMOSTAT TTHDC Series

The TTHDC multi point duct average temperature thermostat incorporates several precision thermistor temperature sensors and provides a Form C relay output (NO/NC) with an adjustable setpoint. The sensor is encapsulated in a 7.94 mm (0.3125") OD, soft copper probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resistance to moisture penetration. Two enclosure styles are available.



### SPECIFICATION:

Power Supply..... 12 to 28 Vac/dc  
 Consumption..... 50 mA max  
 Relay Contacts..... SPDT, Form C contacts (N.O. and N.C.)  
 5 Amps @ 30 Vdc/250 Vac resistive  
 1.5 Amps @ 30 Vdc/250 Vac inductive  
 Relay Action..... Activates on temperature rise  
 Setpoint Operation..... Single-turn knob-pot on pcb  
 Adjustable Setpoint..... 38° - 60°C (100 - 140°F)  
 Setpoint Temperature ..... Low/Mid/High jumper selectable  
 Differential 1.1/2.8/5.6° C (2/5/10 °F)  
 Temperature Sensor..... 10K ohm curve matched  
 precision thermistor  
 Sensor Accuracy..... ±0.2°C, 0 to 70°C (±0.36°F, 32 to 158°F)  
 Probe Sensing Range..... -20 to 60 °C (-4 to 140 °F)  
 Wire Material ..... FT-6 Plenum-rated  
 Probe Material ..... Soft copper  
 Probe Dimensions ..... 7.94 mm (0.3125") Diameter  
 Operating Conditions..... -10 to 50°C (14 to 122°F),  
 5 to 95% RH non-condensing  
 Storage Conditions..... -30 to 70 °C (-22 to 158°F),  
 5 to 95%RH, non-condensing  
 Enclosure..... (A) ABS, UL94-5VB, IP61 (NEMA 2)  
 (D)-ABS, UL94-5VB, IP65 (NEMA 4X)  
 Wiring Connections..... Screw terminal block  
 (14 to 22 AWG)

### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TTHDC	High Limit Duct Average Temperature Thermostat

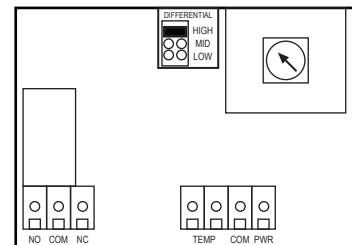
CODE	Enclosure
A24	ABS Enclosure
D24	ABS Enclosure, Hinged Cover

CODE	Probe Length
I	1800 mm (6')
J	3600 mm (12')
K	6100 mm (20')
L	7300 mm (24')

CODE	Adjusted Setpoint Range
2	38° - 60°C (100 - 140°F)

### WIRING:

Terminal	Function
PWR	Power Supply
COM	Power Supply Common
TEMP (2)	Temperature Sensor Input
NO	Relay Output - Normally Open Contact
COM	Relay Common
NC	Relay Output - Normally Closed Contact

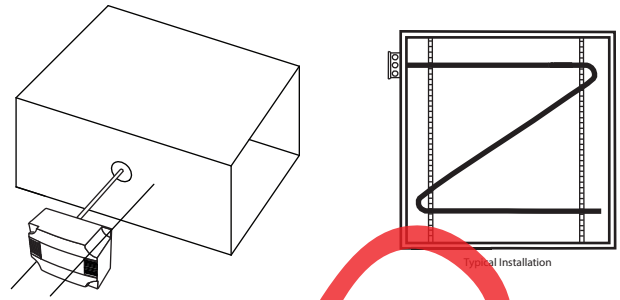


## TYPICAL INSTALLATION:

For complete installation and wiring details, please refer to the product installation instructions.

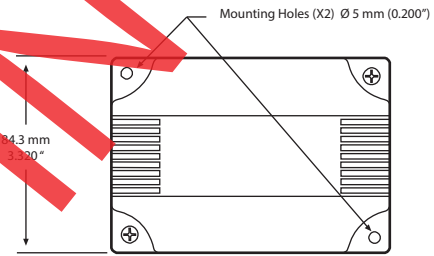
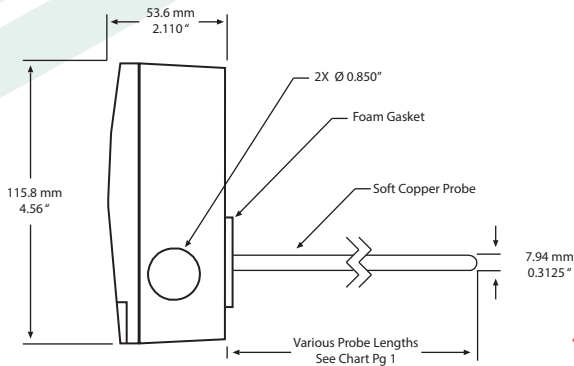
The duct average probes are installed through a hole in the side of the duct to monitor an average temperature within the duct. Select a probe length that allows for criss-crossing the duct multiple times. Install the probes in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification elements.

Each enclosure style provides mounting tabs on the outside for ease of installation.

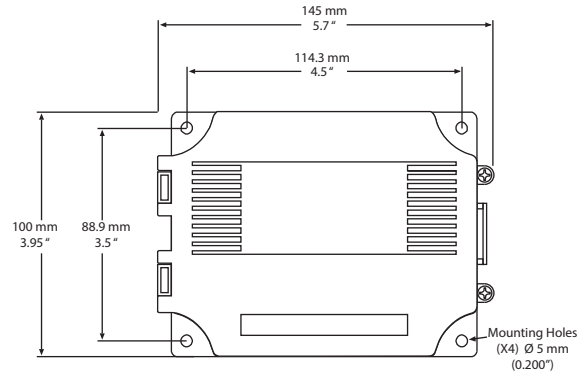
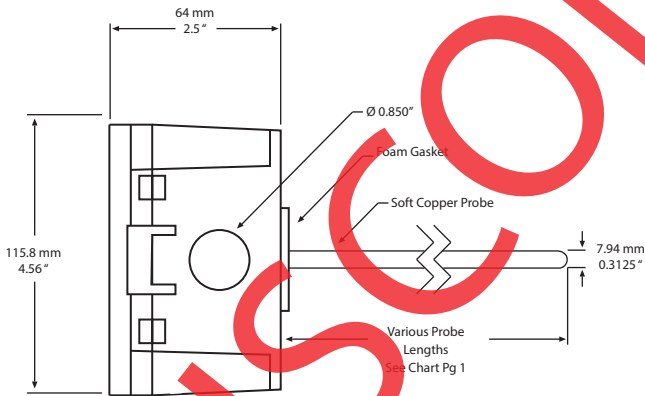


## DIMENSIONS:

### ABS Enclosure (A)



### Hinged ABS Enclosure (D)



Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.



Greystone Energy Systems, Inc.  
150 English Drive, Moncton,  
New Brunswick, Canada E1E 4G7  
(506) 853-3057 Fax: (506) 853-6014  
North America: 1-800-561-5611  
e-mail: mail@greystoneenergy.com  
www.greystoneenergy.com

RoHS  
COMPLIANT



Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM