



## HIGH LIMIT DUCT TEMPERATURE THERMOSTAT TTHBM Series

The TTHBM single point duct temperature thermostat incorporates a precision thermistor temperature sensor and provides a Form C relay output (NO/NC) with an adjustable setpoint. The sensor is encapsulated in a 6.35 mm (0.25") OD, 304 stainless steel probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resist 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 -104°C (100-220°F)  
 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 (±0.36°F), 0 to 70°C (32 to 158°F)  
 Probe Sensing Range..... -20 to 105°C (-4 to 221°F)  
 Wire Material..... PVC insulated, parallel bonded  
 Probe Material ..... 304 Series Stainless Steel  
 Probe Dimension..... 6.35 mm (0.25") 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
TTHBM	High Limit Duct Temperature Thermostat

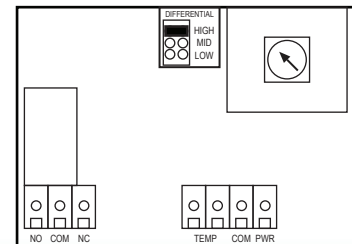
CODE	Enclosure
A24	ABS Enclosure
D24	ABS Enclosure, Hinged Cover

CODE	Probe Length
A	50 mm (2")
B	100 mm (4")
C	150 mm (6")
D	200 mm (8")
E	300 mm (12")
F	450 mm (18")

CODE	Adjustable Setpoint Range
1	38 -104°C (100-220°F)
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

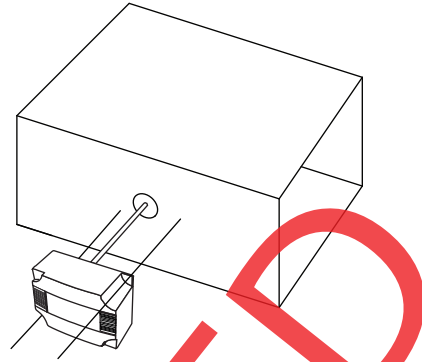


## TYPICAL INSTALLATION:

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

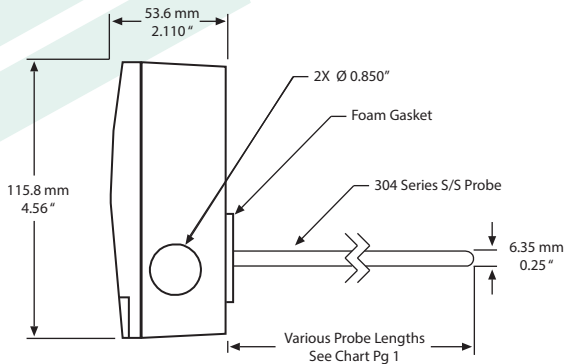
The duct type probes are installed through a hole in the side of the duct to monitor a single point temperature within the duct. Since the probes are tip sensitive, select a probe length that places the sensor well into the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Each enclosure style provides mounting tabs or holes for ease of installation.

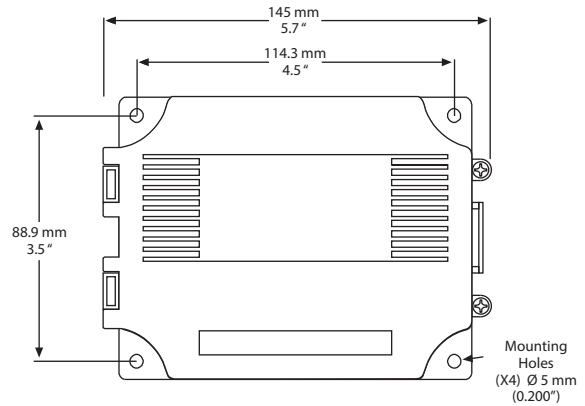
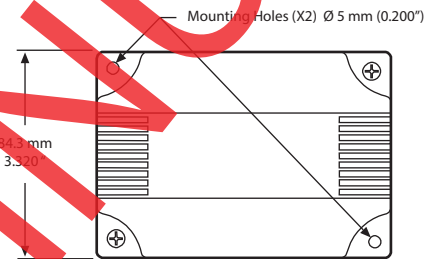
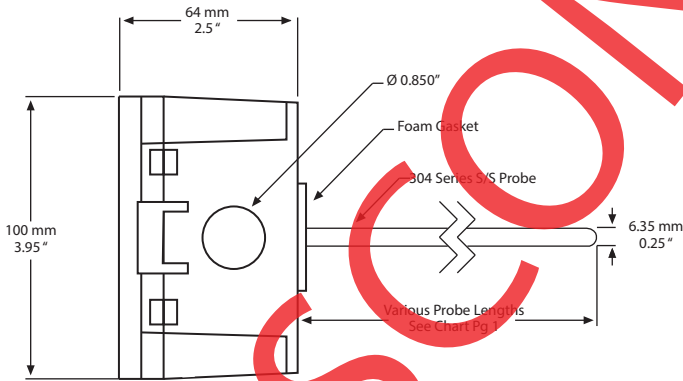


## DIMENSIONS:

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.

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