



## HIGH LIMIT STRAP-ON TEMPERATURE THERMOSTAT TTHSO Series

The TTHSO single point strap-on 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 to a 38 mm x 38 mm (1.5" x 1.5") aluminum plate and adhered to a 38 mm x 25.4 mm (1.5 x 1") compressible foam. A 254 mm (10") S/S Pipe clamp is provided to secure the assembly to various sizes of pipe. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. It is available with a variety of enclosures.

### 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)  
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 - 105 °C (-4 - 221°F)  
Probe Material ..... 38 mm (1.5") square aluminum plate  
w/ compressible foam backing  
Wire Material..... PVC insulated, parallel bonded  
Operating Conditions ..... -10 - 50 °C (14 - 122°F),  
5 to 95% RH non-condensing  
Storage Conditions..... -30 - 70°C (-22 - 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)

### 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



### PART NUMBER SELECTED

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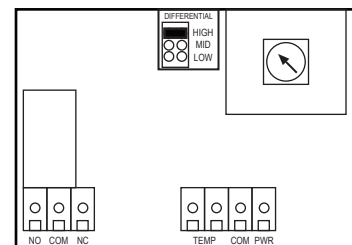
### PRODUCT SELECTION INFORMATION:

MODEL	Product Description
TTHSO	High Limit Slap-on Temperature Thermostat

CODE	Enclosure
A24	ABS Enclosure
D24	ABS Enclosure, Hinged Cover

CODE	Adjustable Setpoint Range
1	38 -104°C (100-220°F)
2	38 -60°C (100-140°F)

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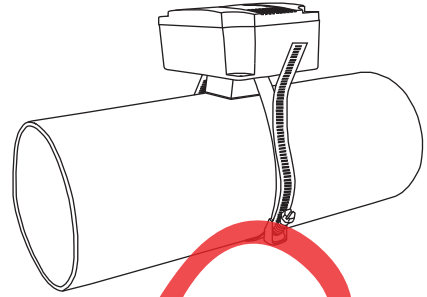
## TYPICAL INSTALLATION:

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

The TTLSO series can be mounted directly to various sizes of pipes and secured using a 10" S/S pipe clamp. If necessary, remove a section of insulation from the pipe. The 10" S/S pipe clamp is a "Quick Release" type and can be separated by moving the tightening screw so that it is perpendicular to the clamp and slide the clamp apart. Position the aluminum plate on the pipe so it makes the best contact, wrap the clamp around the pipe and re-assemble and tighten. Any excess clamp may be cut off.

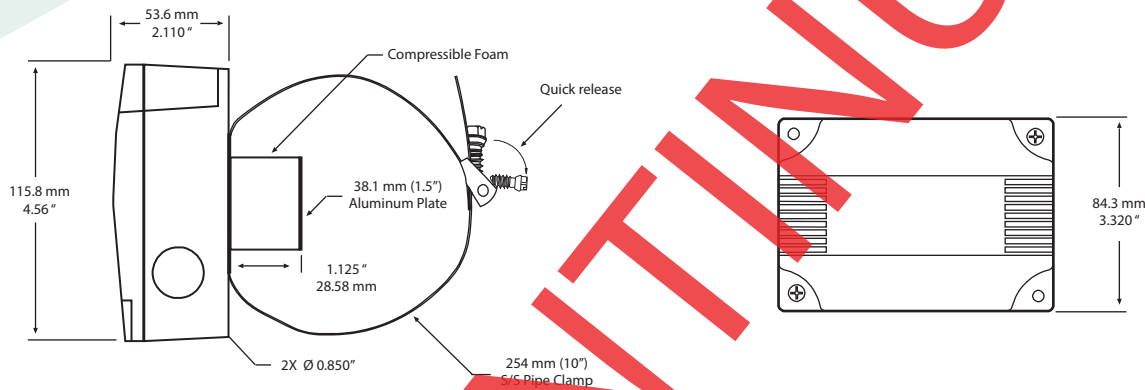
For best results, thermal conductive compound should be applied to pipe prior to mounting the probe.

Wiring connections are made inside the enclosure.

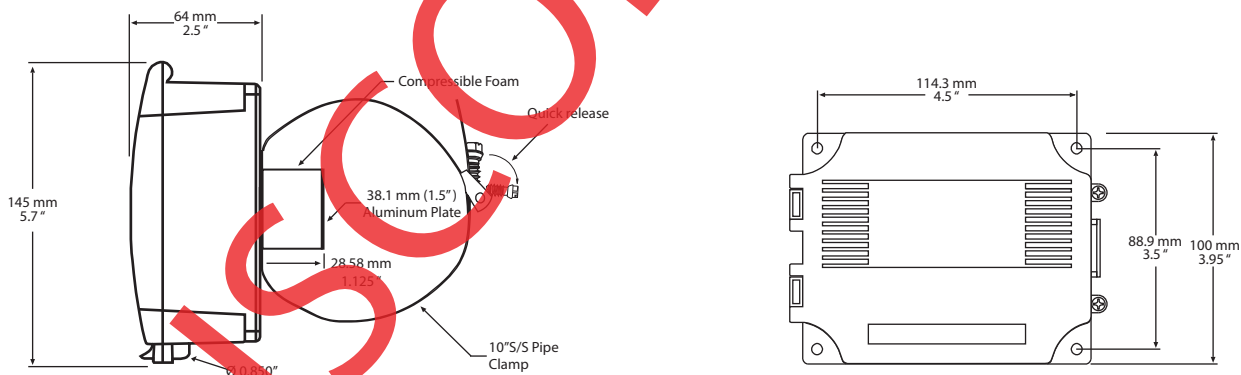


## DIMENSIONS:

### ABS Enclosure (A)



### Round ABS Enclosure (D)



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



**GREYSTONE**  
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**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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