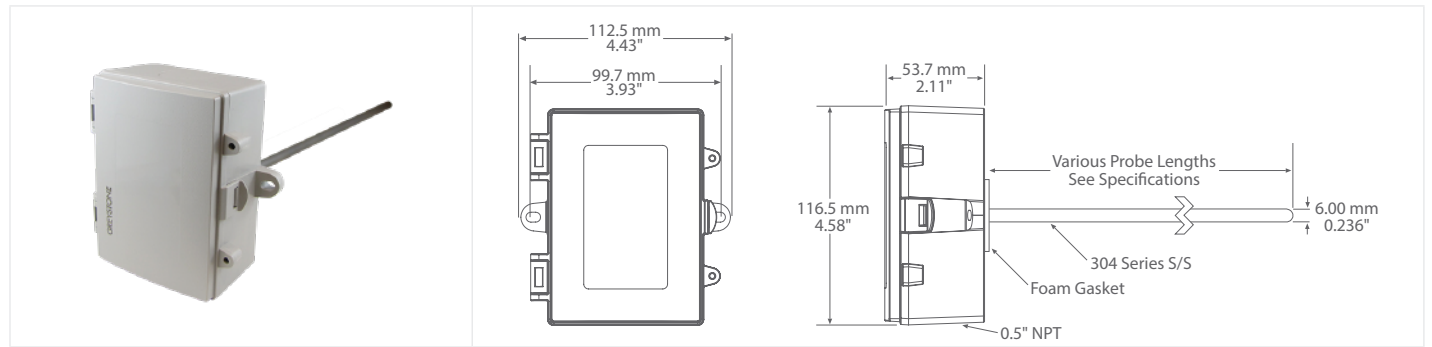




## ALL PURPOSE HIGH LIMIT THERMOSTAT



### THAP SERIES

### PRODUCT DESCRIPTION

The single point duct/immersion high limit thermostat incorporates a precision thermistor sensor and provides a Form C relay output (NO/NC) with an adjustable setpoint. The sensor is encapsulated in a 6mm (0.236") 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. A hinged and gasketed polycarbonate enclosure is provided for ease of installation.

### 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.

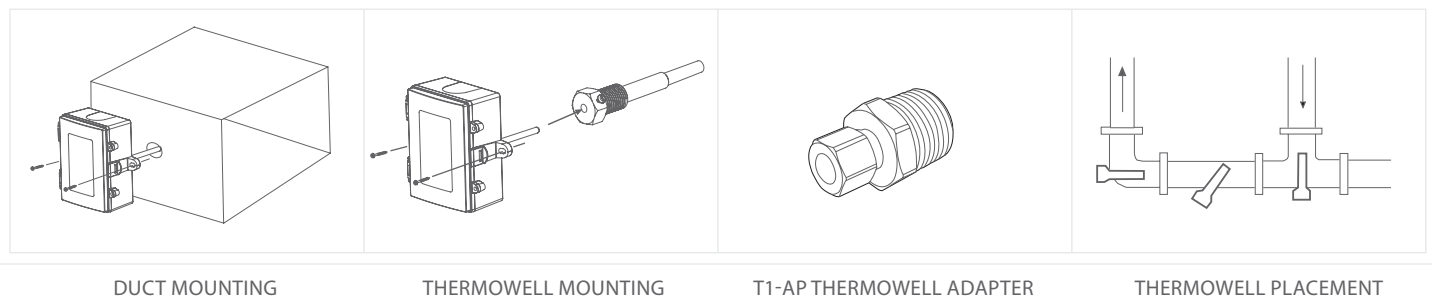
The enclosure provides mounting tabs for ease of installation.

NOTE: For immersion applications, T2 series thermowell is required. When using a T1 series thermowell an adapter will be required.

### SPECIFICATIONS

POWER SUPPLY	12 to 28 Vac/dc
SENSOR ACCURACY	±0.2°C, 0 to 70°C (±0.36°F, 32 to 158°F)
PROBE SENSING RANGE	-40 to 100°C (-40 to 212°F)
PROBE MATERIAL	304 series stainless steel
PROBE DIAMETER	6 mm (0.236")
STANDARD LENGTHS	50, 100, 150, 200, 300, and 450 mm (2", 4", 6", 8", 12", and 18")
WIRE MATERIAL	PVC insulated, parallel bonded, 22 AWG
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	<b>Range 1:</b> 38 to 104°C (100 to 220°F) <b>Range 2:</b> 38 to 60°C (100 to 140°F)
TEMPERATURE DIFFERENTIAL	<b>Low:</b> 1.1°C (2°F) <b>Mid:</b> 2.8°C (5°F) <b>High:</b> 5.6°C (10°F) Jumper selectable
TEMPERATURE SENSOR	Precision thermistor
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
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
ENCLOSURE	<b>B:</b> Grey polycarbonate UL94-V0, IP65 (NEMA 4X) <b>F:</b> Same as B with thread adapter (1/2" NPT to M16) and cable gland fitting
COUNTRY OF ORIGIN	Canada

### MOUNTING STYLES



DUCT MOUNTING

THERMOWELL MOUNTING

T1-AP THERMOWELL ADAPTER

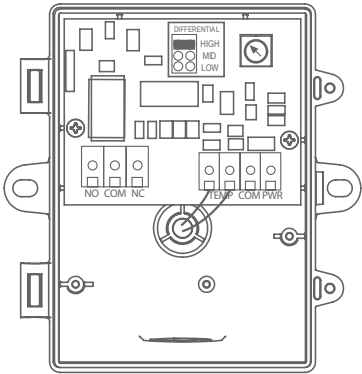
THERMOWELL PLACEMENT



## ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION

		
CABLE GLAND FITTING	THREAD ADAPTER 1/2" NPT TO M16	

## WIRING INFORMATION

	<table border="1"> <thead> <tr> <th>TERMINAL</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>PWR</td> <td>Power Supply</td> </tr> <tr> <td>COM</td> <td>Power Supply Common</td> </tr> <tr> <td>TEMP (2)</td> <td>Temperature Sensor Input</td> </tr> <tr> <td>NO</td> <td>Relay Output - Normally Open Contact</td> </tr> <tr> <td>COM</td> <td>Relay Common</td> </tr> <tr> <td>NC</td> <td>Relay Output - Normally Closed Contact</td> </tr> </tbody> </table>	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
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TEMP (2)	Temperature Sensor Input														
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## ORDERING

PRODUCT	THAP	All Purpose Duct/Immersion High Limit thermostat
ENCLOSURE	<b>B</b> <b>F</b>	Polycarbonate, with hinged and gasketed cover Same as B, with thread adapter (1/2" NPT to M16) and cable gland fitting
SENSOR	<b>24</b>	10,000 $\Omega$ , Type 2, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$
PROBE LENGTH	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b> <b>F</b>	50mm (2") 100mm (4") 150mm (6") 200mm (8") 300mm (12") 450mm (18")
ADJUSTABLE SETPOINT RANGE	<b>01</b> <b>02</b>	38 to 104°C (100 to 220°F) 38 to 60°C (100 to 140°F)

## PART NUMBER

THAP

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



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