# GREYSTONE ENERGY SYSTEMS INC

## GLASS TEMPERATURE HIGH LIMIT THERMOSTAT THGL Series

The single point glass high limit 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 31.75mm L x 9.525mm W x 9.525 mm H ( $1.25^{\circ}x.375^{\circ}x.375^{\circ}$ ) Aluminum probe. Standard wire length is 1.5 m (5'). All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. A weatherproof Polycarbonate enclosure is included for ease of installation.

### **SPECIFICATION:**

Power Supply:	12 to 28 Vac/dc
Consumption:	
	SPDT, Form C contacts (N.O. and N.C.)
	5 Amps @ 30 Vac/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 to 104°C (100 to 221°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 105°C (-4 to 221°F)
Probe Material:	Aluminum
Probe Diameter:	31.75 mm L x 9.525 mm W x 9.525 mm H
	(1.25" x 0.375" x 0.375")
Wire Length:	1.5 m (5′)
Wire Material:	PVC insulated, parallel bonded
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:	Grey Polycarbonate UL94-V0, IP65 (NEMA 4X)
	F style includes thread adapter (1/2" NPT to M16)
	and cable gland adapter
Country of Origin:	Canada

#### PART NUMBER SELECTED

## **PRODUCT SELECTION INFORMATION:**

	MODEL	Product	Product Description						
	THGL	Glass Hig	High Limit Thermostat						
		CODE	Enclosure						
		B F	Polycarbonate, with hinged & gasketed cover Same as B, with thread adapter & cable gland						
			со	DE	E Sensor				
			24X		10,000 $\Omega$ , Type 2, NTC Thermistor, ±0.2°C				
					CODE	Scaled Range			
					01	38 to 104°C (100 to 220°F)			
	↓ I	↓ I		,	↓ I				

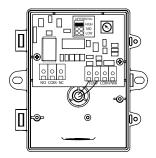
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

**TYPICAL INSTALLATION:** For complete installation and wiring details, please refer to the

product installation instructions.

Find a suitable location on an exterior window where both the probe and enclosure can be mounted. On one side apply epoxy compound and press firmly against the glass. Hold in place until the epoxy has set.

Enclosure provides mounting tabs for ease of installation.



#### Wiring: Terminal

PWR

COM TEMP (2)

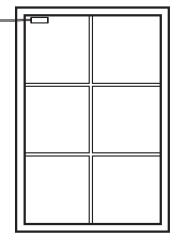
NO COM

NC

**Function** Power Supply Power Supply Common Temperature Sensor Input

Relay Output - Normally Open Contact Relay Common Relay Output - Normally Closed Contact

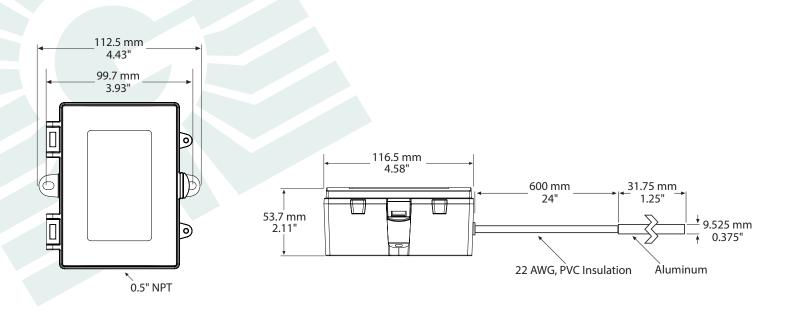




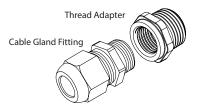




## **DIMENSIONS:**



Included with F style enclosure





#### **ENERGY SYSTEMS INC** 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



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 leadingedge 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