# GREYSTONE ENERGY SYSTEMS INC

# STRAP-ON LOW LIMIT THERMOSTAT TLRP Series

The single point strap-on low 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 6 mm (0.236") OD, 304 stainless steel probe and is available in various lengths (see ordering chart). Standard wire length is 5' (1.5 m). 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.

### **SPECIFICATIONS:**

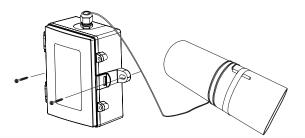
Power Supply:				
Consumption:	50 mA max			
Relay Contacts:	SPDT, Form C contacts (N.O. and N.C.)			
	5 Amps @ 30 Vac/250 Vac resistive			
	1.5 Amps @ 30 Vdc/250 Vac inductive			
Relay Action:	Activates on temperature fall			
	Single-turn knob-pot on PCB			
Adjustable Setpoint:	4 to 10°C (25 to 50°F)			
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:	304 Series Stainless Steel			
Probe Diameter:	6 mm (0.236")			
Probe Length:	50 mm, 100 mm, 150 mm 200 mm (2", 4", 6", 8")			
	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 fitting			
Country of Origin:	Canada			

#### **TYPICAL INSTALLATION:**

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

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

Find a suitable location along the pipe where both the probe and remote enclosure can be mounted. If necessary, remove a section of insulation from pipe. Position probe directly on the pipe and secure using a pipe clamp. For added security, make 1 to 3 loops of the sensor cable around the pipe and feed through wire hole on the enclosure and secure using the supplied grommet. If applicable, the pipe insulation can be re-applied to the pipe over the probe.

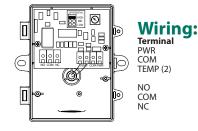


#### PART NUMBER SELECTED

### **PRODUCT SELECTION INFORMATION:**

MO	DEL	Product Description						
TL	RP	Flexible C	Cable Duct Average Low Limit Thermostat					
		CODE	Enclosure					
		B F		arbonate, with hinged & gasketed cover as B, with thread adapter & cable gland fitting				
			CODE	Sensor				
			24	10,000 Ω	10,000 Ω Type 2, NTC Thermistor, ±0.2°C			
			CODE	Probe Length				
				A B C D	50 mm (2") 100 mm (4") 150 mm (6") 200 mm (8")			
					CODE	Scaled Range		
					01	-4 to 10°C (25 to 50°F)		
		•	•	+	<b>↓</b>			

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



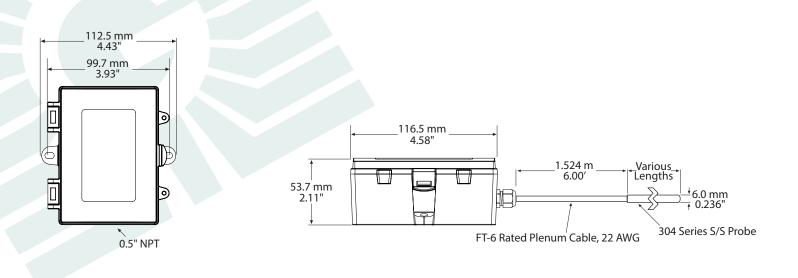
**Function** Power Supply Power Supply Common Temperature Sensor Input

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

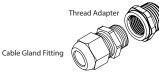




## **DIMENSIONS:**



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