# **Options & Accessories**

**Dial Thermometers** 

#### Windows (PLW/GLW/SGW)

Trerice offers a complete set of window options, including: plastic (acrylic PLW), glass (GLW), and laminated safety glass (SGW). Please consult the Option Availability Table for window availability. Replacement windows are sold separately, please consult the price sheet for item numbers.

### Set Hand (RSH)

Attached at the center of the dialface, a red set hand can be adjusted to indicate a desired pre-determined reference point. The set point is adjusted by removing the ring and window of the thermometer. Please consult the Option Availability Table for set hand availability. A second red set hand may be available on some models - please consult factory.

### Maximum Registering Pointer (MAX)

A maximum registering pointer can be furnished on most Trerice Dial Thermometers. This pointer is designed to indicate the maximum or minimum temperature attained by the process being measured since the pointer was last reset. The pointer assembly is installed to an acrylic window, with an external knob for manually resetting the pointer. Please consult the Option Availability Table for maximum registering pointer availability.

### **Electric Contacts**

Electric contact assemblies can be supplied on most 4<sup>1</sup>/<sub>2</sub>" & 6" dial thermometers. These units are well suited for making the electrical contact required to activate alarms, signals, or other electrical devices. Each unit is provided with an external adjustment key, making it easy to adjust and providing for tamper resistant operation. The contacts have adjustable magnets to eliminate bounce caused by vibration, and have pass/repass capability, allowing the pointer to move past the set point while maintaining contact.

Electric Contact Configurations					
Optional Feature Code	Contact Style	Contact Action	1		
EC1	Single High	Single contact: Makes on clockwise rotation	2		
EC2	Single Low	Single contact: Breaks on clockwise rotation			
EC3	High-Low	Double contact: High contact makes on clockwise rotation Low contact breaks on clockwise rotation	-		
EC4	Double High	Double contact: 1st makes on clockwise rotation 2nd makes on clockwise rotation			

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Please consult the Option Availability Table for electric contact availability.



THERMOMETER



#### Recommended Load Limits

	Volts	Resistive	Inductive		
_	110 Vac	0.25 A	0.13 A		
	24 Vdc	0.40 A	0.25 A		



# **Options & Accessories** (cont'd)

Dial Thermometers

## Weatherproofed Cases (WPC)

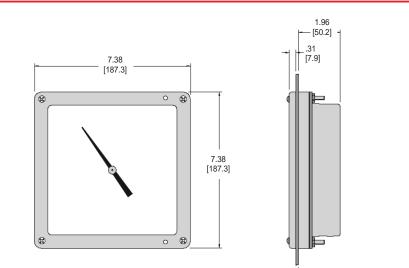
Trerice Dial Thermometers may be sealed (NEMA 3) for outdoor use, or for use in applications where sprays and washes may come in contact with the thermometer. Please consult the Option Availability Table for weatherproofed case availability.

### Silicone Dampened Movements (SDM)

The application of highly viscous silicone to the gear, sector, and all bearing points of the movement will help reduce the effects of vibration to which the thermometer may be subjected. This feature will extend the life of the instrument by reducing wear on the movement, and is available on most Trerice Filled System Dial Thermometers. Please consult the Option Availability Table for silicone dampened movement availability.

### 7 <sup>3</sup>/8" Square Case

This 7 3/8" square front, back outlet case (Model 80373) is constructed from black finished cast aluminum. A black steel bezel ring is included for panel mounting the thermometer. Please consult the Option Availability Table for square case availability, and order as model V80373 or L80373.



#### ----- PANEL THICKNESS

### Micro Switches (MSS/MSD)

Single (MSS) or double (MSD) Micro Switches, designed to operate low current alarms and warning lights, are available on 6" and 7 3/8" Trerice Vapor Dial Thermometers. The switches are factory-set to close and operate a circuit when the temperature reaches a predetermined point. Red set hands are provided to indicate the temperature at which the switches have been set to operate. Although Micro Switches are designed for applications where the alarm temperature remains at the factory set point, they may be field adjusted if required. When ordering, please provide the set point(s) required.

### Recommended Load Limits

Volts	Resistive	Inductive			
250 VAC	10 A	10 A			
125 VDC	0.4 A	0.3 A			

# 3/4 NPT Hub (SHB/SHS)

A 3/4 NPT union connection hub is available in brass (SHB) or 316 stainless steel (SHS). This hub may be installed by the factory or ordered as a separate unit. When ordering separately, please use the item numbers listed in table.

Material	Item Number			
Brass	082-0015			
316 Stainless Steel	082-0015.2			



# **Options & Accessories**

The following table indicates optional features that are available for Trerice Dial Thermometers.

**Option Availability Table** 

	Plastic In.	Lamination Undow	os Window Bety Glasso ,	Red So.	Maximum Registrum	Electric Pointer	Weathernard	Silicone Dan	Micro Suir	Bass or SSUD
Optional Feature Code	PLW	SGW	GLW	RSH	MAX	EC- <u>X</u>	WPC	SDM	MS- <u>X</u>	SH- <u>X</u>
Model										
80025	S	N/A	0	0	0	N/A	N/A	0	N/A	0
80030	S	N/A	0	0	0	N/A	N/A	0	N/A	0
80035	S	N/A	0	0	0	N/A	N/A	0	N/A	0
80036	S	N/A	0	0	0	N/A	0	0	N/A	0
80040	S	N/A	0	0	0	N/A	0	0	N/A	0
80041	S	N/A	0	0	0	N/A	0	0	N/A	0
80341	0	0	S	0	0	0	0	0	N/A	0
80342	0	0	S	0	0	0	0	0	N/A	0
80345	0	0	S	0	0	0	0	0	N/A	0
80361	0	0	S	0	0	0	0	0	0*	0
80362	0	0	S	0	0	0	0	0	0*	0
80365	0	0	S	0	0	0	0	0	0*	0
80381	0	0	S	0	0	N/A	0	0	N/A	0
	-	-		-				-		

DIAL THERMOMETERS

\* 6" Vapor Dial Thermometers only.

80382

80445

80742

80762

80373

0

0

0

0

N/A

S - Standard Product Feature

0

N/A

0

0

N/A

S

S

S

S

S

0

0

0

0

0

0

N/A

0

0

0

O - Optional Feature at Additional Charge

N/A

N/A

0

0

N/A

0

N/A

0

0

0

0

0

0

0

0

N/A

N/A

N/A

0

0

N/A - Not Available

0

0

0

0

0

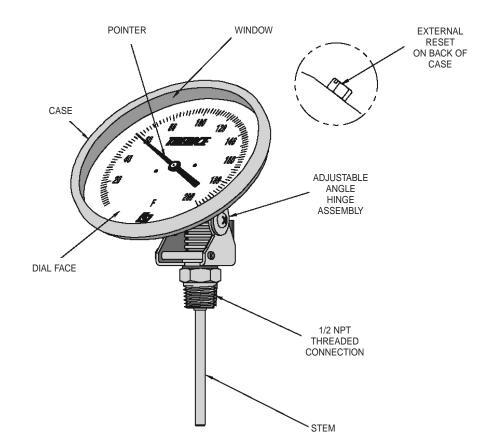
#### How to Order

Specify the Optional Feature Code (from the table above) at the end of the Instrument Ordering Code.

Sample Order Number: V 80341 110 B01 05 EC1



# **Bimetal Thermometers** DESIGN & OPERATION



#### Description

A thermometer is an instrument designed to measure and indicate the temperature of a specific application or condition. A bimetallic dial thermometer, commonly known as a bimetal thermometer, is installed at the point of measurement and is usually read from that location.

#### **Principles of Operation**

The Trerice Bimetal Thermometer employs a bimetallic sensing element which reacts consistently to temperature change, producing an accurately calibrated temperature measurement. The sensing element consists of two dissimilar metals welded together (in the form of a coil), and encased in a stainless steel stem. The coil is silicone dampened (ranges up to 300°F) to protect against vibration, and connected to a dial pointer on the instrument face. When the stem is exposed to temperature change, the coil expands or contracts, and the corresponding reaction is transmitted to the pointer, thereby indicating the temperature of the process.

