

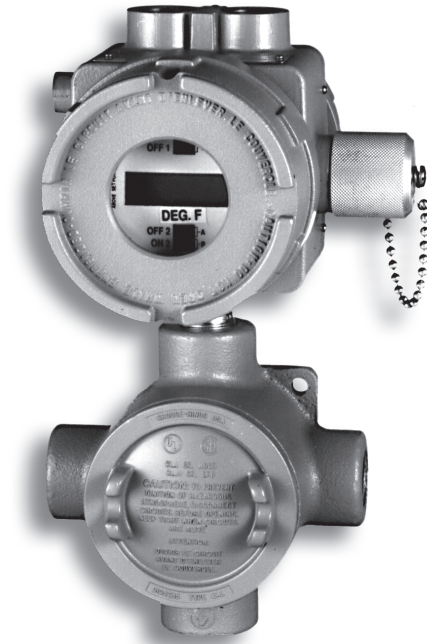


ETS Electronic Temperature Switch

Form 429

The Series 592 Electronic Temperature Switch is well suited for applications in oil, gas, petrochem, process and power industries when the requirement exists for a field-mounted instrument that has two independent field adjustable Set Points plus process temperature indication and 4-20 mA output.

Design and specifications subject to change without notice.



Features and Benefits

- Temperature ranges:
-150 to 1000°F/-101 to 538°C
- Two independent field adjustable Set Points with adjustable dead bands
- 4-20 mA output
- LCD indicator
- LED Set Point indication
- Explosive proof Class I, Groups B, C, D; Class II, Groups E, F, G; Divisions 1 and 2
- External adjustment permits field calibration while in service
- Weathertight
- Compartmentalized housing
- Separate output & line power conduit connections
- Pipe stanchion mounting (optional)

Product Specifications

Housing		Adjustability	
Weathertight	NEMA 4X, IP65	*Zero	0-20% Temperature Range
Explosion Proof	Class I; Group B, C & D; Class II Group E, F & G; Divisions 1 & 2	*Span	20-100% Temperature Range
Conduit Connections		Set Point(s)	0-100% Temperature Range
Electrical	2 x 3/4" NPT(F)	Dead Bands	
RTD	3 x 3/4" NPT(F)	Standard Minimum	1% Temperature Range
Output		Standard Maximum	40% Set Point
Mechanical Relays	1 SPDT Relay for Set Point 1 1 SPDT Relay for Set Point 2	Consult factory for optional values.	
Both relays:	4A @ 120 VAC; 4A @ 28 VDC (resistive)	*80% of span must be available when zero is adjusted.	
Analog Signal Loop Resistance	4-20 mA, 900 ohms @ 120 VAC or 24V supply 500 ohms @ 12V supply	External Adjustments	4-20 mA output Zero 4-20 mA output Span Set Point #1 Set Point #2
Indication	LCD Display LED Set Point Indication	Internal Adjustments	Set Point #1 Dead Band Set Point #2 Dead Band LCD Display Zero LCD Display Span
Temperature Limits		RTD	
Process	-150 to 1000° F (-101 to 538° C)	Input	100 ohm; platinum
Ambient	-40 to 160° F (-40 to 71° C)	Stability	±0.5°C per year
Accuracy	(% Temperature Range)	Cable	Shielded 3-wire
4-20 mA	± 0.5	Temperature Coefficient of Resistance	0.00385
Display	± 0.5	Shield should be connected to ground at RTD end of sensor.	
Temperature Effect	±1% per 100°F	Shipping Weight	12 lbs (6 kgs)
Linearity	± 0.5	Design and specifications are subject to change without notice.	
Repeatability			
(% Temperature Range)			
Set Point(s)	± 0.5		

How to Order

Select the appropriate model number from the table below.
Insert adjustable temperature range designator ① from range table below.

Power Supply	Maximum Current Draw	Model Number
12 VDC (Accepts 9 - 16 VDC)	350 mA	592E1 - TC ① - P5 - C7A
24 VDC (Accepts 16 - 36 VDC)	140 mA	592E1 - TC ① - P6 - C7A
120 VAC (Accepts 90 - 130 VAC)	50 mA	592E1 - TC ① - P7 - C7A

Electronic Temperature Switch

How to Order

Temperature Range Selection

Designator ①	Temperature Range	
	°F	°C
1	-150 to 0	-101 to -18
15	-50 to 150	-46 to 66
41	0 to 400	-18 to 204
71	0 to 700	-18 to 371
111	0 to 1000	-18 to 538

Accessories

Add accessories designator to the end of the model number.

Designator	Description
PK	Pipe mounting kit
PP	Fiber tag attached to housing
RR	Stainless steel tag wired to housing
TT	Stainless steel oversize nameplate permanently attached to housing
WV	Fungicidal varnish
WV	UL-Listed: Class I Group B, C & D; Class II Group E, F & G; Division 1 & 2
YY	Epoxy coating

RTD Sensor – For Non-explosion Proof Applications

A factory-supplied RTD is available as a separate line item by using its part number. The part number is not part of the Electronic Temperature Switch model number.

Part Number	Temperature Range		Length
	° F	° C	Feet
8924 - 103	-150 to 400	-101 to 204	10
8924 - 104	-150 to 1000	-101 to 593	10
8924 - 114	-150 to 400	-101 to 204	15
8924 - 115	-150 to 1000	-101 to 593	15
8924 - 116	-150 to 400	-101 to 204	20
8924 - 117	-150 to 1000	-101 to 593	20

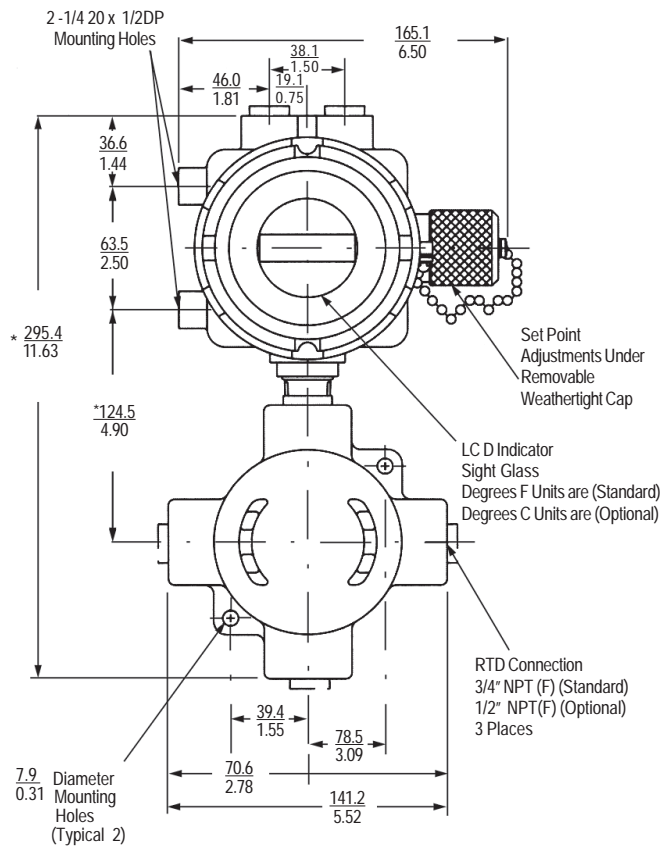
Notes

1. Part number 8924-103 is stocked at the factory.
2. RTD leads are teflon insulated with PVC-coated stainless steel armor. 3/4" NPT(M) weathertight cable gland fitting included.
3. RTD sensor wetted material: 1/4-inch O.D. 316SS sheathed sensor, 1/2" NPT(M) brass compression fitting.
4. The insertion length for all RTD's: 12 inches.

Electronic Temperature Switch

Dimensions

Dimensions in this catalog are for reference only. They may be changed without notice. Contact the factory for certified drawings for a particular model number. Dimensions in this catalog are expressed as millimeters over inches. Linear = mm/in.



*This dimension is approximate and based on a 5 thread engagement.

