

# Non-Hazardous Areas Adjustable Temperature Switch

## 604T\* - Probe

## DESCRIPTION

- Highly reliable devices utilizing the CCS Dual-Snap® Belleville disc spring principle pioneered by CCS' engineers.
- Engineering based on aerospace technology.
- Rigid, midsize and internally adjustable for convenient field set point adjustment.
- Repeatable and stable set points.
- Vibration and shock resistant.
- High cycle life.
- High over-temperature capability.
- Various options for electrical ratings to meet a wide range of application requirements.

SHIPPING WEIGHT: APPROXIMATELY 65 OUNCES (1843 GRAMS)

## SERIES:

604T\*

#### ADJUSTABLE SET POINT RANGE: TEMPERATURE: -39° to 420°F

-39° to 216°C

### **OPERATING TEMPERATURE:**

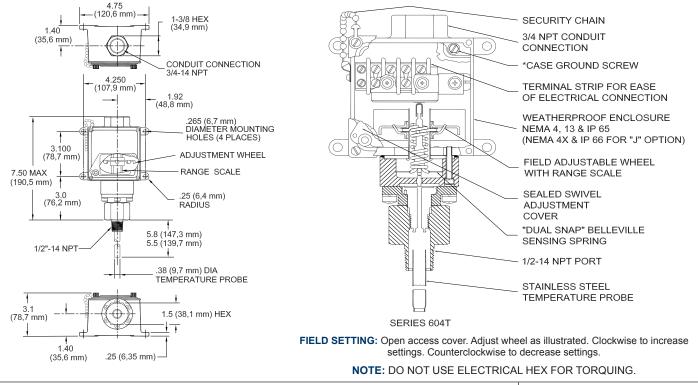
-40° to 186°F -40° to 86°C

### **STANDARD FEATURES:**

- CE Mark
- CCC
- NACE MR0175 / ISO 15156
- NEMA: 4,13 / IP65
- Weatherproof
- Internal Case Ground
- U.L. Listed (File No. E72038)

### INSTALLATION DRAWING

### **DESIGN PRINCIPLES**



**DUAL-SNAP®** 

ccsdualsnap.com





# **Non-Hazardous Areas Adjustable Temperature Switch**

## 604T\* - Probe

#### OPERATING AND ORDERING DATA

WETTED PARTS: 300 STAINLESS STEEL TEMPERATURE PROBE, NICKEL PLATED STEEL, BUNA N O-RING (RANGES 1-3) / SILCONE RUBBER O-RING (RANGES 4&5)					
ADJUSTABLE SET POINT RANGE		APPROXIMATE DEAD BAND		MAXIMUM	
INCREASING	DECREASING	AT BOTTOM	AT TOP	PROBE	
TEMPERATURE	TEMPERATURE	OF RANGE	OF RANGE	TEMPERATURE	
DEGREES F	DEGREES F	DEGREES F	DEGREES F	DEGREES F	
(DEGREES C)	(DEGREES C)	(DEGREES C)	(DEGREES C)	(DEGREES C)	
-30° to +55°	-39° to +52°	9°	3°	+150°	
(-34° to +13°)	(-39° to +11°)	(5°)	(2°)	(66°)	
+35° to +140°	+21° to +135°	14°	5°	+300°	
(+2° to +60°)	(-6° to +57°)	(4°)	(3°)	(+149°)	
+90° to +210°	+75° to +205°	15°	5°	+300°	
(+32° to +99°)	(+24° to +96°)	(8°)	(3°)	(+149°)	
+175° to +310°	+159° to +305°	16°	5°	+500°	
(+80° to +154°)	(+71° to +152)	(9°)	(2°)	(+260°)	
+275° to +420°	+256° to +414°	19°	6°	+500°	
(+135° to +216°)	(+123° to +212°)	(12°)	(4)	(+260°)	
	BUNA N O-I   ADJUSTABLE SE   INCREASING   TEMPERATURE   DEGREES F   (DEGREES C)   -30° to +55°   (-34° to +13°)   +35° to +140°   (+2° to +60°)   +90° to +210°   (+32° to +99°)   +175° to +310°   (+80° to +154°)   +275° to +420°	BUNA N O-RING (RANGES 1-3) / SADJUSTABLE SET POINT RANGEINCREASING TEMPERATURE DEGREES F (DEGREES C)DECREASING TEMPERATURE DEGREES F (DEGREES C)-30° to +55° 	BUNA N O-RING (RANGES 1-3) / SILCONE RUBBERADJUSTABLE SET POINT RANGEAPPRO DEADINCREASING TEMPERATURE DEGREES F (DEGREES C)DECREASING TEMPERATURE DEGREES F (DEGREES C)AT BOTTOM OF RANGE DEGREES F (DEGREES C)-30° to +55° (-34° to +13°)-39° to +52° (-39° to +11°)9° (5°)-30° to +55° (-34° to +13°)-39° to +52° (-39° to +11°)9° (5°)+35° to +140° (+2° to +60°)+21° to +135° (-6° to +57°)14° (4°)+90° to +210° (+32° to +99°)+75° to +205° (+24° to +96°)15° (8°)+175° to +310° (+80° to +154°)+159° to +305° (+71° to +152)16° (9°)+275° to +420° +256° to +414° (+20° to +142°19°	BUNA N O-RING (RANGES 1-3) / SILCONE RUBBER O-RING (RANGADJUSTABLE SET POINT RANGEAPPROXIMATE DEAD BANDINCREASING TEMPERATURE DEGREES F (DEGREES C)DECREASING TEMPERATURE DEGREES F (DEGREES C)AT BOTTOM OF RANGE DEGREES C)AT TOP OF RANGE DEGREES C)-30° to +55° (-34° to +13°)-39° to +52° (-39° to +11°)9° (5°)3° (2°)-30° to +55° (-39° to +11°)-39° to +52° (-39° to +11°)9° (5°)3° (2°)+35° to +140° (+2° to +60°)+21° to +135° (-6° to +57°)14° (4°)5° (3°)+90° to +210° (+32° to +99°)+75° to +205° (+24° to +96°)15° (8°)5° (3°)+175° to +310° (+80° to +154°)+159° to +305° (+71° to +152)16° (9°)5° (2°)+275° to +420° (+20°)+256° to +414° (+21°)19° (9°)6° (1000000000000000000000000000000000000	

### HOW TO ORDER

#### Follow these steps to build your part number:

- 1. Specify the series based on your required set point, range, dead band, system pressure and proof pressure.
- Add desired options 2. model code letter.
- 3. Add the applicable standard suffix number.

(Ex: 604TM5-7008)

### TEMPERATURE CONVERSION

32 Deg F = 0 Deg C

EXTERNAL PROBE PRESSURE:

System Pressure: 1250 PSIG (86 bar)

#### **OPTIONAL STANDARD MODIFIED SUFFIXES**

7008: Gold Contacts

### **OPTIONS MODEL CODES**

- J: CSA Approved (File No. LR22665) (SPDT ONLY)
- M: DPDT Electrical
- X: Double Break Electrical Assembly

### THERMOWELLS

Order as separate line items. See accessory page for detailed information.

113-34-2: 1" NPT 316 SST 7.5" "U" Dim. 113-35-2: 3/4" NPT 316 SST 7.5" "U" Dim. Note: Additional modified standard suffixes are available, consult CCS sales department or CCS Representative.

Proof Pressure: 1500 PSIG (103 bar)

## CERTIFICATIONS

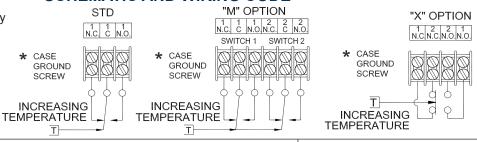
Consult CCS website for complete certification and approval listing.

### ELECTRICAL CHARACTERISTICS

RATING OF SWITCH ELEMENT

		AMPERES				
· ·	VOLTS	SPDT	DPDT "M"	Dbl Brk "X"		
		Res.	Res.	Res.		
125 AC	- 50/60 Hz	15	5	15		
250 AC	- 50/60 Hz	15	5	15		
480 AC	- 50/60 Hz	15	-	15		
28 DC		6	5	-		
125 DC		.5	.5	1		
250 DC		.2	-	.5		
*125 AC	- 50/60 Hz	1 max	1 max	-		
*30 DC		1 max	1 max	-		
*Gold Contacts -7008 Suffix						

SCHEMATIC AND WIRING CODE



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