LOW - MEDIUM - HIGH TEMPERATURE

Black anodised aluminium switchcase and covers to IP65 standards.

Temperature Settings from -40 to 230˚C.

Dual microswitch

ATEX Certified
CE Ⓔx II2GD EExd IIC
T6 Tamb -50 to +71˚C
T5 Tamb -50 to +86˚C
T4 Tamb -50 to +96˚C

TF169 & TF170 TROJAN ATEX EExd CERTIFIED TEMPERATURE SWITCH

The standard range represents the basic models to cover temperature application spanning -40 to +230˚C. The TF169 is supplied fitted with a screwed thermowell, the TF170 has no thermowell but is supplied with a screwed stem. For specification and introduction to the Trojan range refer to pages 90 & 91.

ADJUSTMENT RANGE (˚C)	MAXIMUM TEMPERATURE (˚C)	DEADBAND-FIXED (˚C)	TEMPERATURE CODE	THERMOWELL "U" DIMENSIONS IN MM
-40 TO + 10	70	5	EL	38, 45, 50, 60* 75*, 100, 125, 150, 175, 200, 225, 250, 300, 350, 400, 600, 660, 800, 1000, & 1200 * STANDARD LENGTHS
-10 TO + 40	100	4	LT	
0 TO 50	100	4	LT	
20 TO 70	120	4	MT	
50 TO 100	150	4	MT	
70 TO 120	150	8	MT	
100 TO 180	230	8	HT	
150 TO 230	280	8	HT	

REPEATIBILITY:
+/-1.5% of range (at operating temperature up to 40˚C)

TEMPERATURE LIMITATIONS
Ambient : -50 to 65˚C Standard EExe box
-50 to 90˚C High temp EExe box

CALIBRATION RATE:
2˚C per minute rate of change

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PART NUMBER BREAKDOWN				
TF169 = WITH THERMOWELL **TF170** = WITHOUT THERMOWELL	2 = 2 X SPDT MICROSWITCH	THERMOWELL LENGTH ('U' DIMENSION REFER TO TABLE	**P** = WITH THERMOWELL **S** = WITHOUT THERMOWELL	THERMOWELL **1** = 316 ST. ST. **4** = HIGH PRESS. **0** = FLANGE OR SPECIAL THERMOWELL

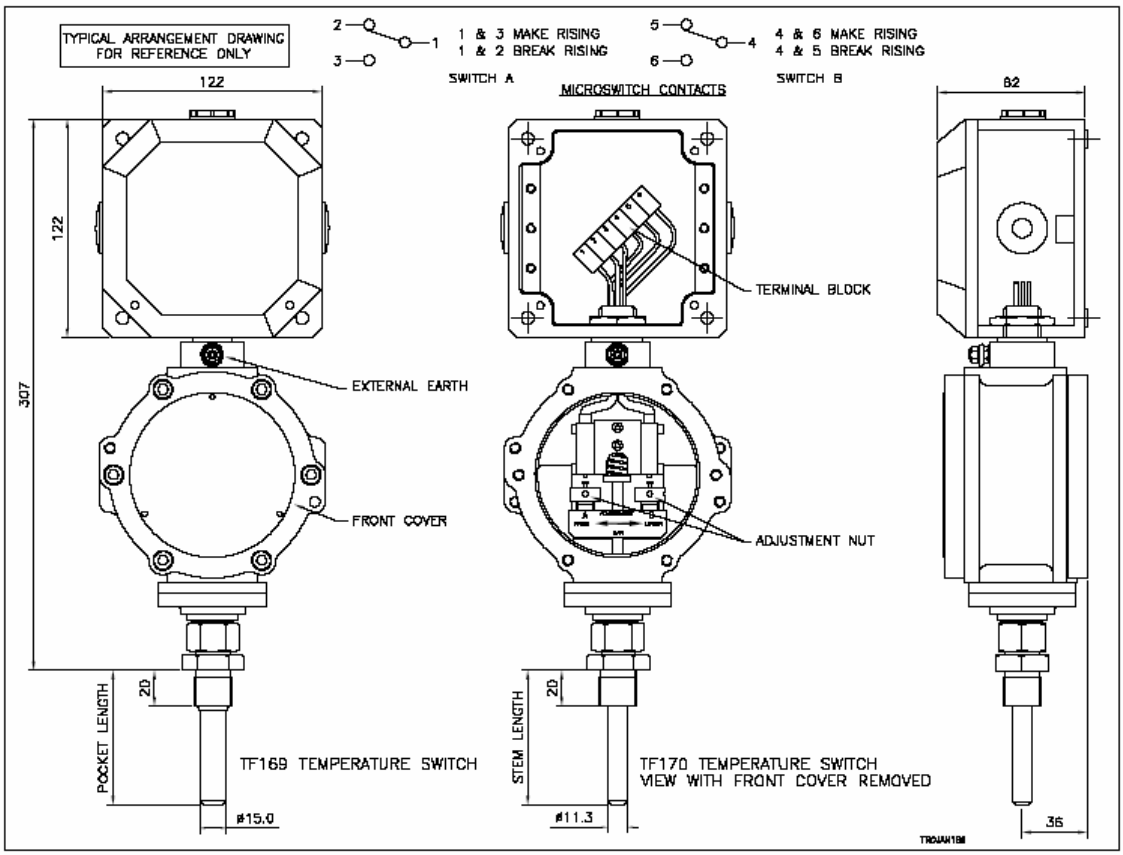
T F 1 6 9 A 2 B / 0 6 0 M T / P A 1 K A

A = ALUMINIUM CASE	**B** = ATEX CERTIFIED	TEMPERATURE ELEMENT CODE REFER TO TABLE ON OPPOSITE PAGE	THERMOWELL/STEM THREAD **A** = 1/2" BSP.P **B** = 1/2" NPT **C** = 3/8" BSP.P **D** = 3/4" BSP.P **E** = 3/4" NPT **O** = FLANGE OR SPECIAL

SPECIFICATION

Thermowell and stem material
: 316 stainless steel
Max working pressure :
35 Bar - standard
420 Bar - high pressure

Thermowells can be provided flanged o screwed to suit the application. Al exotic metals can be catered for Material certificates and wake frequency vibration analysis calculations can be provided.



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TROJAN ATEX EExd SWITCHES

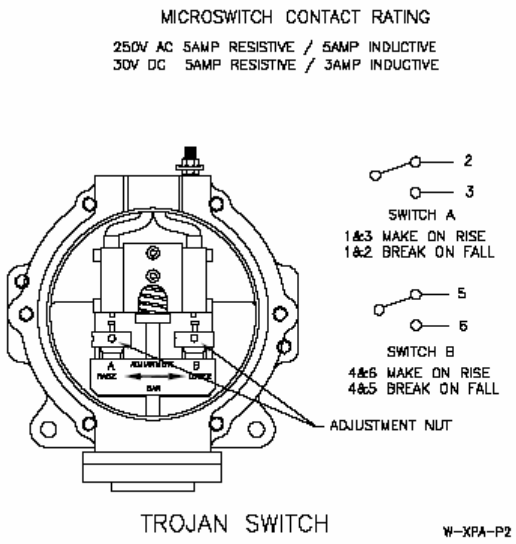
INTRODUCTION

The Trojan **pressure, temperature and flow** switches are designed for use in environments where explosive gases, dusts and extremes of both high and low ambient temperature can be present (e.g. Gas fields, oil rigs and chemical plants etc.) They have been ATEX certified for CAT 2 CE Ex II2GD EExd IIC T6,T5 & T4 and have an ATEX EExe IIC terminal housing.

These switches are manufactured from black anodised aluminium offering a robust construction and protection to IP65 for use within heavily polluted industrial and marine environments. These instruments can be adjusted with the power on and the switch in operation.

CALIBRATION

On removal of the adjustment cover both operating points can be changed. This can be carried out with the power on and the instrument in operation. To change the setting the adjuster screw for the relative micoswitch can be rotated with a 3mm diameter pin. Rotation to the left will increase the set point and to the right decrease the set point. The adjustment mechanism incorporates a friction device to ensure set point will not change under vibration conditions. These switches can either be supplied set to customers specific requirements or set to a mid range point and then adjusted to suit the application with the use of an external indicating device.



SPECIFICATIONS

Switchcase and covers : Black anodised aluminium with glass reinforced polyester junction box.

Environmental Protection : IP65

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Temperature Limitations : Pressure switch.
Ambient : This is limited by the EExe junction box -50 to +65°C for the standard and +90°C for the special high temperature version.
Process : Diaphragm actuated -20 to +150°C Viton.
Piston actuated –40 to +120°C (Nitrile) or –20 to +150°C Viton.
Storage : -60 to +80°C
(For temperature and flow switches please refer to specific pages)

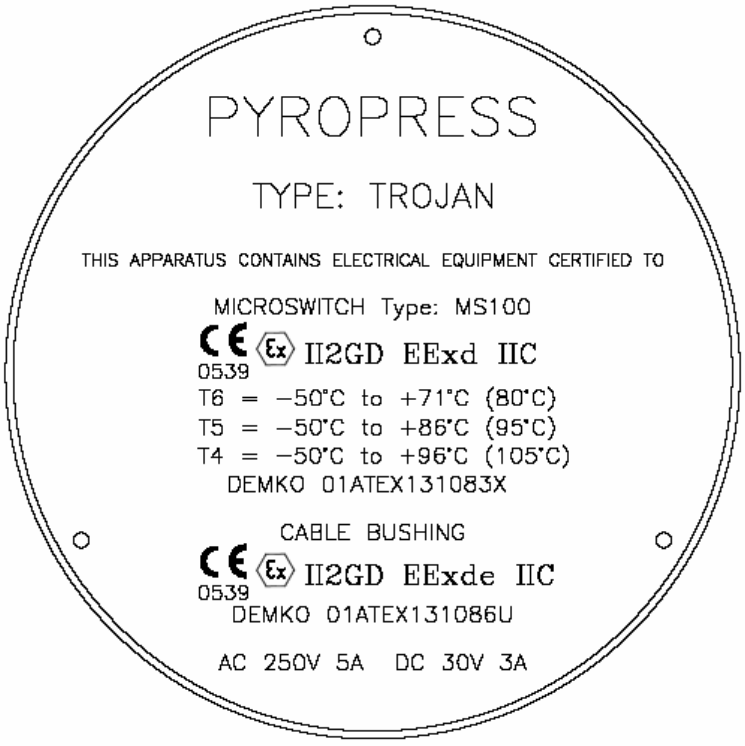
Certification : All switches are CE certified and marked in accordance with the following EU directives
EExd : 94/9/EC ATEX coded CE Ex II2GD EExd IIC for CAT 2 (Zone 1) areas

Accuracy : 1% at 20°C, Setting accuracy 2%

Microswitch : 2 x SPCO/SPDT independently adjustable

Microswitch rating : 5 Amps @ 250 VAC resistive and inductive
5 Amps @ 30VDC resistive, 3 Amps @ 30 VDC inductive

Electrical Connection : Via EExe certified junction box with 3 x M20 x 1.5 ISO entries and 2 x EExe certified blanking plugs



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