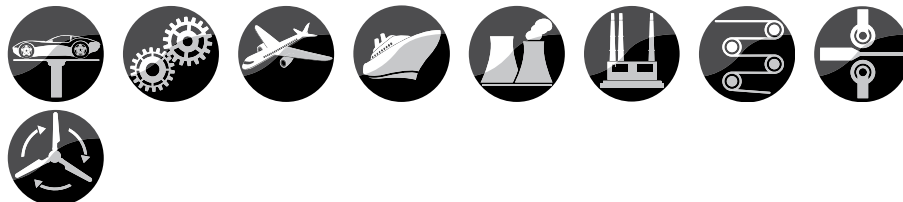


ETS 380 Series Temperature Switch with Separate Temperature Probe



Applications



Description

The ETS 380 is a compact electronic temperature switch with a 3-digit digital display.

In the model for separate temperature probe, the measuring range is -20° to 300°F and is used primarily with the temperature probe TFP 100 which was specially developed for tank mounting.

It is also possible, however, to use standard PT 100 temperature probes. Different output models with one or two switching outputs, optionally with an additional analog output signal, offer a variety of application possibilities.

Different output models with one or two switching outputs, optionally with an additional analog output signal of 4 to 20 mA, offer a variety of application possibilities.

The switching points and the associated hystereses can be adjusted very quickly and easily using the keypad.

For optimum adaptation to the particular application, the unit has many additional adjustment parameters (e.g. *switching delay times, N/C / N/O function, etc.*).

Special Features

- 2 transistor switching outputs, up to 1.2 A load per output
- Option: analog output 4 to 20 mA
- 3-digit digital display
- Switching point or window function
- Switching / reset points and many useful additional functions can be set using the keypad

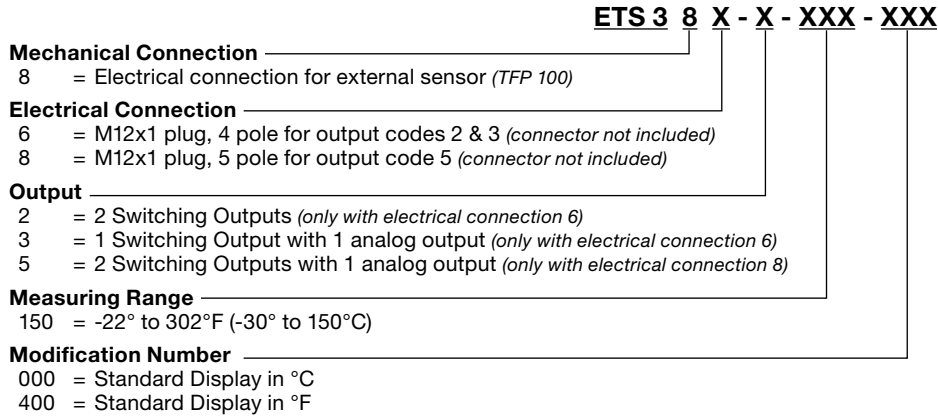
Approvals

CE CE mark is a mandatory conformity mark on many products placed on the single market in the European Economic Area

Technical Details

Sensor Specifications	
Measuring range	-20° to 300°F (-30° to 150°C)
Mechanical connection	Cable connection M12x1, 4-pole
Accuracy	≤ ±2°F (1°C)
Temperature drift (<i>ambient</i>)	≤ ±0.0085% FS / °F max. zero point ≤ ±0.0085% / °F max. range
Weight	Approximately 300g
Output signal	4 to 20 mA, ohmic resistance max. 400 Ω
External Temperature Sensor Specifications	
Rated Pressure for external sensor (<i>TFP 100</i>)	145 psi
Media temperature range	-40° to 257°F (-40° to 125°C)
Electrical connection	M18x1, 4 pole
Safety Sleeve Thermowell	
Parts in contact with medium	Nickel-plated Brass
Switching Specifications	
Type	PNP transistor
Switching current	1.2A per output
Switching cycles	≥ 100 million
Environmental Condition	
Ambient temperature range	-13° to 176°F (-25° to 80°C)
Storage temperature range	-40° to 176°F
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance to DIN EN 60068-2-6 at 0 to 500 Hz	≤ 10g
Environmental protection	IP 65
Electrical Specifications	
Supply voltage	20 to 32 VDC
Residual ripple supply voltage	≤ 5%
Current consumption	100 mA (<i>plus switching current</i>)
Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection	Standard
Display	7 segment LED display, 3 digits

Model Code



Pin Connections

M12x1, 4 pole		
Pin	386-2	386-3
1	+U _B	+U _B
2	nc	Analog
3	0 V	0 V
4	SP 1	SP 1

M12x1, 5 pole		
Pin	388-5	
1	+UB	
2	Analog	
3	0 V	
4	SP 1	
5	SP 2	

Supplied Accessories: A male connector M12 x1, 4 pole and 3 meter LIYCY 4x0.25 mm² are supplied with the device to connect to external temperature probe

Non-Supplied Accessories: External Sensor (TFP 100) must be used with TFP 100 thermowell.

TFP 100 Part Number: 00904696

TFP 100 Thermowell (Safety Sleeve) Part Number: 00906170

Dimensions

