

TS20

Electronic Temperature Switch

- switching range from -50...+200 °C
- switching output: relay with changeover contact
- red LED for switching indication
- accuracy class A
- simple mounting
- switch point adjustment via magnet or HART®-Tool
- material in contact with medium: st. steel 1.4571
- Pt100 resistance thermometers



Description:

The low-cost electronic temperature switch of the TS20 series measures the temperature of the medium with a Pt100 resistance thermometer. A switching output (relay with changeover contact) is used for electronic limit value control.

At higher temperatures, a neck tube protects the electronics from overheating. Due to the large measuring range from -50 to +200 °C, the different process connections and installation lengths, a very flexible use in almost all industrial processes is possible.

Typical applications:

Due to its versatility, the temperature switch can be used very universally. It is mainly used in cooling and heating circuits, plants, compressors and motors.

Materials:

Housing/Cover:	PBT GF30
Lens:	PMMA
Medium contact:	stainless steel, 1.4571
Neck tube (optional):	stainless steel, 1.4571, 100 mm

Technical Data:

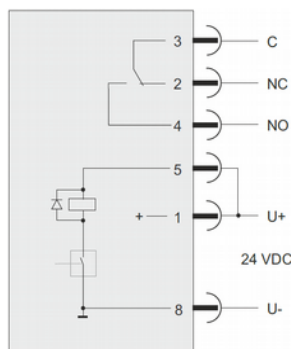
Process connection:	different, see order code
Medium temperature:	-50...+200 °C (adjustment range)
Ambient temp.:	-40...+80 °C
Storage temp.:	-40...+100 °C

Accuracy:	+/- 0,5 K
Mounting position:	any
System pressure:	PN 25
Weight:	ca. 140 g
Protection class:	at least IP65 (electronic)

Electrical Data:

Sensor:	Pt100, class A
Power supply:	24 ... 30 VDC, 35 mA
Switching relays:	1 changeover contact
Switching current:	1 A, 30 VDC (ohmic load) 0,3 A, 125 VAC (ohmic load)
Max. switching capacity:	30 W or 37,5 VA (ohmic load)
LED signalling:	LED lights up: relay active LED dark: relay inactive
Switching point adjustment:	with a magnet (included in delivery)
Switching delay:	0 s, (standard); configuration: 0...99,9 s
Hysteresis:	0,1 °C (standard); configuration: >0,1 °C
Damping:	0 s (standard), configuration: 0...99,9 s
Switching cycles:	>10 millions
Electr. connection:	round plug M12x1, 8-wire

Pin assignment:



Order Code:

Order number:	TS20.	6S.	A.	1.	W.	W.	0
Electronic temperature switch							
Protective tube:							
6S = Ø 6 mm							
6H = Ø 6 mm, with neck tube 100 mm							
Installation length:							
A = 50 mm							
B = 100 mm							
C = 200 mm							
D = 250 mm							
E = 400 mm							
F = 600 mm							
G = 1000 mm							
Process connection:							
1 = G 1/4 male thread							
2 = G 3/8 male thread							
3 = G 1/2 male thread							
4 = G 3/4 male thread							
5 = G 1 male thread							
6 = 1/4" NPT							
7 = 3/8" NPT							
8 = 1/2" NPT							
Switching output:							
W = 1 changeover contact							
Configuration:							
0 = factory setting (see below)							
K = customer specific (please specify)							
Options:							
0 = without							
1 = please specify in plain text							

Accessories:

PVC-cable **SM12** with M12 plug, 8-wire
HART®-Tool: modem with HART®-cable, USB-cable, software

Factory setting:

Switching point:	100 °C
Hysteresis:	0,1 °C
Switching delay:	0 s

Dimensions:

