



Thermo Regulator KTR-B

- Regulation and monitoring of temperatures
- Optionally with temperature indication
- Up to a maximum of 7 functions in one device

Function:

The thermostats work on the principle of liquid expansion. The system is composed of sensor, capillary tube and membrane. When heating up the sensor the expansive liquid is displaced by the capillary tube into the membrane activating there a working stroke. This working stroke actuates the snap switch effecting the opening and closing of the potential-free contact.

There are several types of thermostats available.

Regulator and display have separate systems, which are placed together in one protective sleeve.

The housings can be rotated and fixed in all positions. The housing cap is transparent. For the electrical connection the housing cap (4 screws) and the front plate (1 screw) have to be detached.

Technical Data - General:

Protection:	IP 65
Ambient temperature:	-40...+80°C
Max operating pressure:	16 bar
Material: Housing	macrolon
Immersion shell brass	CuZn37F38
Immersion shell high steel	1.4301
Electr. connection:	flat plug
	6,3x0,8 (DIN46244)

Thermostat: T5

Contact material:	silver
Switch voltage max.:	250 VUC
Switch current max.:	16A-AC; 4A-DC
Switch precision:*	±3 °C
Switch difference max.:*	5 °C
Regulation range:	0...80 °C

Thermostat: T10

Contact material:	silver
Switch voltage max.:	250 VUC
Switch current max.:	16A-AC; 4A-DC
Switch precision:*	±5 °C
Switch difference max.:*	10 °C
Regulation range:	10...120 °C

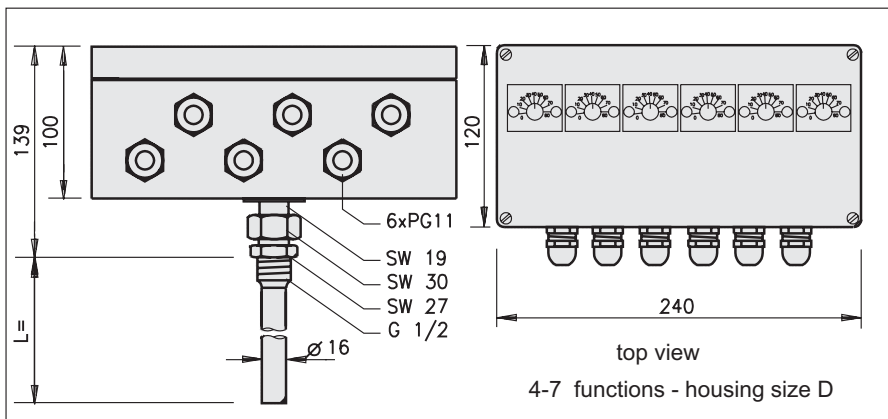
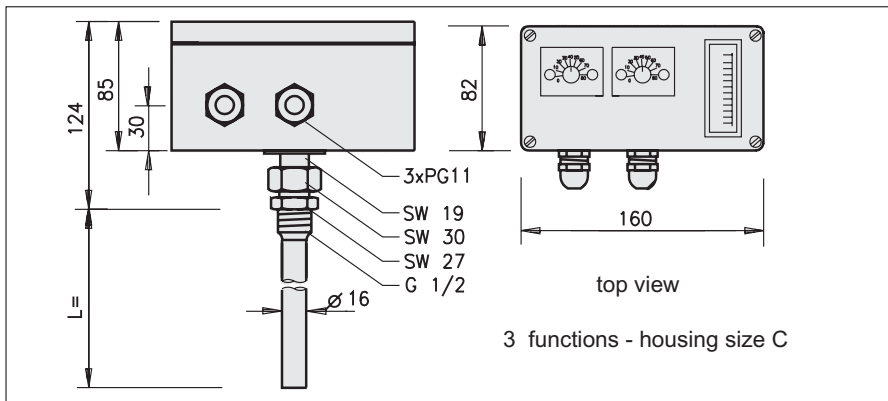
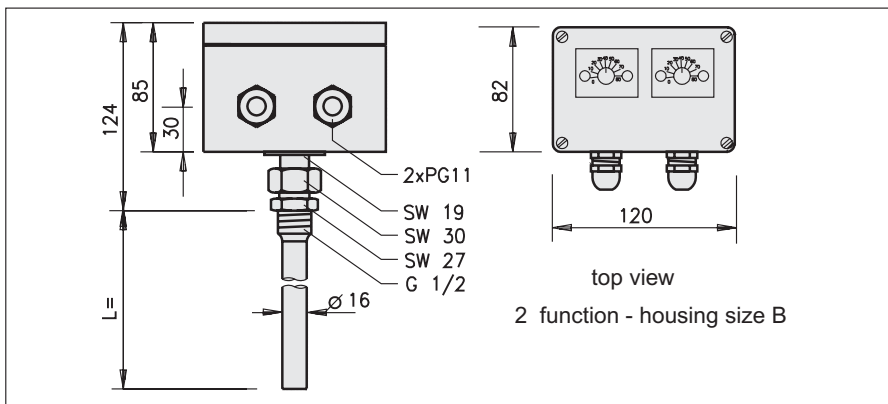
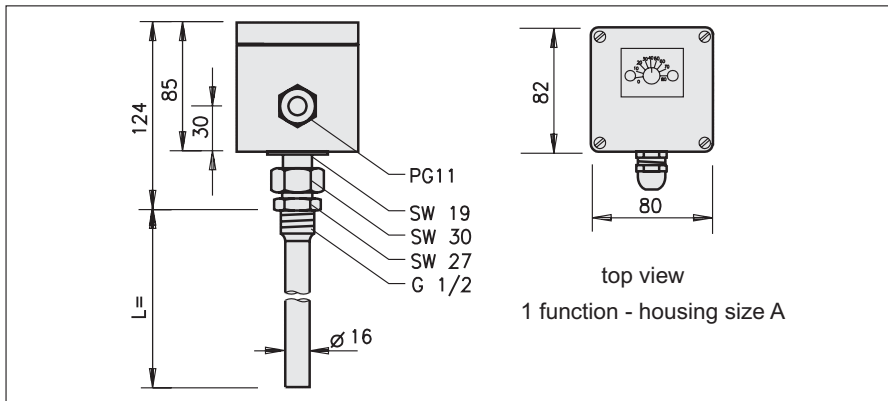
Thermostat: G5

Contact material:	gold
Switch voltage max.:	24 VDC
Switch current:	5mA...0,3A
Switch precision:*	±3 °C
Switch difference max.:*	5 °C
Regulation range:	0...80 °C

Temperature display: TA

Measuring range:	0...120 °C
Calibration:	±2 °C at 70 °C

(*see reverse)



- Subject to modifications -



Plug-in connection X3; X3N

Plug-in connection: X3
3pol.+PE DIN 43650
Delivery includes cable socket, internally wired. For each thermostate one plug-in connection set is necessary.
(X3N = without cable socket)

Plug-in connection X6; X6N

Plug-in connection: X6
6pol.+PE DIN 43651
Delivery includes cable socket, internally wired. For max two thermostates one plug-in connection set is necessary.
(X6N = without cable socket)

Plug-in connection X4N

Plug-in connection: X4N
4pol. M12x1
Delivery without cable socket, internally wired. For each thermostate one plug-in connection set is necessary.

Submerged sleeve

*** Switching accuracy:**

The given accuracy data are related to an ambient temperature of 25°C for the thermostat casing and to a temperature changing speed of the medium of ≤0,5°C/min.

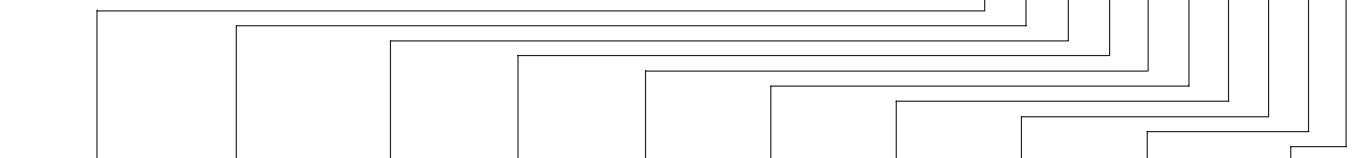
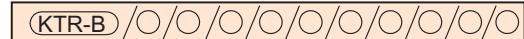
Order for example:

Thermo regulator for two thermostates with silver contacts, 1 indicator, submerged sleeve brass L=300 and plug-in connection X3.
KTR-B/3/M300/T5/T5/TA/X3

- Subject to modifications -

Order designation:

Thermo regulator



Number of functions		Submerged sleeve length L=	Function location 1	location 2	location 3	location 4	location 5	location 6	location 7	Plug-in connection
Housing	1	brass M	(T5)	Thermostate with contact silver	0 ... 80 °C	hysteresis 5°C				(X3)
	2	high steel V	(F5)	Thermostate with contact silver	32 ... 176 °F	Scale in Fahrenheit				(X3N)
	3	L= 100 (M 100)	(T10)	Thermostate with contact silver	10 ... 120 °C	hysteresis 10°C				DIN 43650
	4	L= 200 (M 200)	(F10)	Thermostate with contact silver	50 ... 248 °F	Scale in Fahrenheit				(X6)
	5	L= 300 (M 300)	(G5)	Thermostate with contact gold	0 ... 80 °C	hysteresis 5°C				(X6N)
	6	L= 400 (M 400)	(TA)	Temp.display	0 ... 120 °C	possible at the last functional place only				DIN 43651
	7	L= 500 (M 500)	(FA)	Temp.display	32 ... 248 °F					(X4N)
A	1	L= 1000 (M1000)							M12x1	
B	2								without plug-in connection	
C	3								no order	
D	4									
	5									
	6	M100 only for max.3 functions								
	7									

♦ F5,T10,F10 and G5 length max. 400.