## thermorex



# adjustable thermostats

(Operating Temperature Range -45°C to + 250°C)

This is a cyclic operation temperature sensitive device, which is intended to keep temperature between two particular values under normal operating conditions, automatically switching on or off the electrical circuit. Once the temperature of the bimetal plate has returned to the specified reset temperature, the contacts will automatically return to their original state. Operating temperature of this thermostat is adjusted by rotating the shaft.

This thermostat can be built to either open or close its electrical contacts as the temperature increases.

The current sensitive model of this thermostat is also available. In this case it is also a regulator of energy.

These thermostats are widely used throughout the heating and cooling appliance industry and are designed for smooth regulation of temperature for variety of heating and cooling devices.

#### BASIC TECHNICAL DATA SPECIFIC FOR TKP-1; TKP-2; TKP-3

Parameter	Value			
Rated voltage, V, not more	~250			
Rated current, A, at power coeff. 0,95, not more	16; 10			
Rated current, A, at power coeff. 0,6, not more	2,6; 1,6			
Number of automatic cycles, at rated current 16 (2,6) A and power coeff. 0,95, not less than	100 000			
Control ranges, <sup>o</sup> C	min. 60; max. 225*			
Reset temperature, lower than operating temperature, on <sup>O</sup> C	5; 8; 10; 15			
Tolerance of operating temperature, on <sup>O</sup> C	±3; ±5; ±8; ±10			
Transient resistance, Ω, not more	0,01; 0,05			
Electric strength of insulation, V, not less than	1500			
Insulation resistance, M $\Omega$ , not less than	50			
Turning range	270°; 306°			
Heating speed, K/min	1,0			

\*Operating temperature range can be customized according to customers' needs

### BASIC TECHNICAL DATA SPECIFIC FOR TKP (Current Sensitive)

Parameter	Value				
Rated voltage, V, not more	~250				
Rated current, A, at power coeff. 0,95, not more	16; 10				
Rated current, A, at power coeff. 0,6, not more	2,6; 1,6				
Number of automatic cycles, at rated current 16 (2,6) A and power coeff. 0,95, not less than	100 000				
Operating temperature, ranges, <sup>O</sup> C	-25 - +250**				
Reset temperature, lower than operating temperature, on <sup>O</sup> C	15				
Tolerance of operating temperature, on <sup>O</sup> C	Low value $\pm 20$ ; High value $\pm 10$				
Transient resistance, $\Omega$ , not more	0,15				
Electric strength of insulation, V, not less than	1500				
Insulation resistance, M $\Omega$ , not less than	50				
Turning range	270 <sup>°</sup> ; 306 <sup>°</sup>				
Heating speed, K/min	1,0				

\*\*Operating temperature range can be customized according to customers' needs

#### Table 1.1 (CONTACT TYPE AND CONTACT TRANSIENT RESISTANCE VALUE)

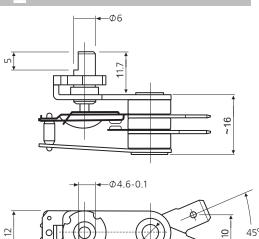
CODE	CONTACT TYPE	CONTACT TRANSIENT RESISTANCE, mOhm
1	Normally closed (NC)	≤50
2	Normally open (NO)	≤50
3	Normally closed (NC)	≤10
4	Normally open (NO)	≤10

### PART ORDERING SYSTEM

TKP	MGX	X	X - X	X	
1	2	3	4	5	

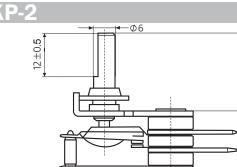
1	Thermostat type: TKP-1; TKP-2; TKP-3; TKP CS (Current Sensitive)
2	Mounting: A - with one mounting hole; B- with three mounting holes (Both mounting versions are applicable to all types)
3	Contact type and contact transient resistance value (select from Table 1.1)
4	Operating temperature range in <sup>o</sup> C
5	Rated current, A

**Example:** TKP - 1 - MGA - 1 - 0°C - 60°C - 10



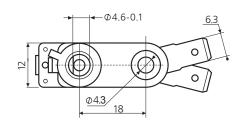
Ø4.3

18



~22

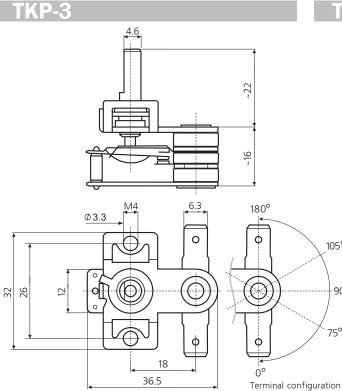
~16



-45°C to + 120°C (with plastic knob)

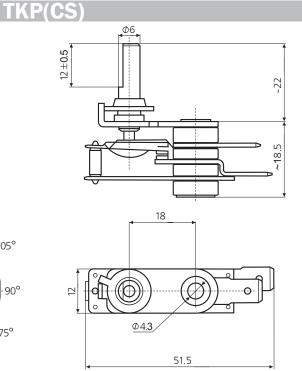
-45°C to + 120°C (with plastic knob)

a



<u>ر</u>

וב



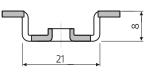
Note: For all types terminal and knob configurations can be customized according to customers' needs

MGB <u>.</u> 6.5 2 12 32 26 18 32.5 M4(Ø3.3)

105°

- 90°

75°



MGA

Mounting

6.5

4

....

18 32.5

-45°C to + 250°C (with brass knob)

Ø.

TKP-2