

## TLC: Thermostat with room sensor, for industrial use

### How energy efficiency is improved

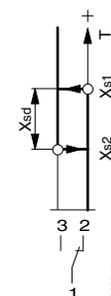
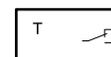
Control and monitoring according to needs and with no auxiliary energy

### Features

- Control and monitoring of temperature
- Especially suitable for installations subject to vibrations, industrial spaces, halls, etc.
- 0...45 °C temperature setting range
- 1 mA / 6 V to 10 A / 400 V contact rating
- Gold-plated silver contacts
- Upper and lower switching points can be set independently of each other
- Sealable
- Splashproof



TLC7B17F001



### Technical data

#### Power supply

Admissible contact rating for smaller loads	Maximum load with gold-plated contacts	200 mA, 50 V
	Minimum load with gold-plated contacts	1 mA, 6 V
Admissible contact rating for larger loads	Maximum load with silver-plated contacts	10 (2) A, 400 V~ 25 W, 250 V=
	Minimum load with silver-plated contacts	100 mA, 24 V
Time characteristic	Time constant at 0.15 m/s	12 min
	Time constant at 0.5 m/s	8 min

#### Parameters

Setting range	0...45 °C
Lowest switching difference	1.0...2.2 K

#### Ambient conditions

Storage and transport temperature	-40...55 °C
Admissible ambient temperature	-40...55 °C

#### Construction

Weight	0.65 kg
Housing	Light-alloy housing with transparent cover

#### Standards and directives

Type of protection	IP44 (EN 60529)
Protection class	I (IEC 60730)

CE conformity according to	EMC Directive 2004/108/EC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
	Low-voltage directive 2006/95/EC	EN 60730, EN 60730-2-9

#### Overview of types

Type	Description
TLC7B17F001	Thermostat with room sensor, for industrial use

#### Accessories

Type	Description
0259189000	Holder for raised wall mounting
0259299000	Cable screw fitting PG 13.5
0259409000	Fixing bracket (provides 3-point fixing with accessory 0259189)

### Description of operation

When the temperature exceeds the upper change-over point (which is set in the scale on the right), the contacts switch from 1-2 to 1-3.



When the temperature falls below the lower change-over point (which is set in the scale on the left), the contacts switch from 1-3 to 1-2. The vibration-proof snap-action switch has a pre-loaded spring that only activates the change-over mechanism when the change-over point has been reached. As a result, the contact force is maintained up to the change-over point even when the switch is activated very slowly.

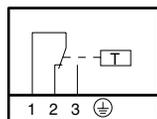
**Technical appendix**

RC circuitry for inductive load

For the optimum RC circuitry, see the information from manufacturers of gates, relays, etc. If this is not available, the inductive load can be reduced by applying the following rule of thumb:

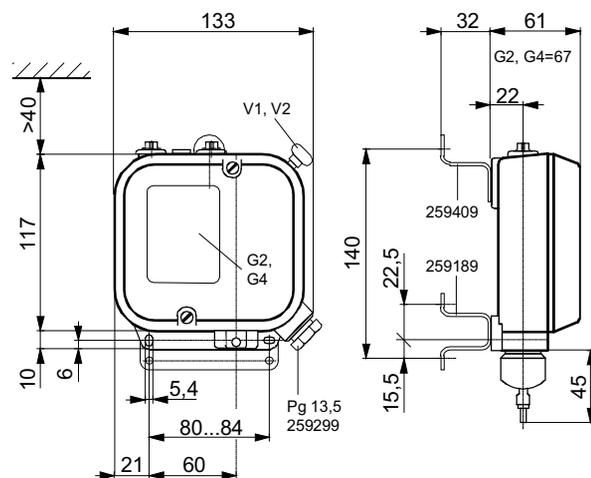
- Capacity of the RC circuitry ( $\mu\text{F}$ ) equal to or greater than the operating current (A)
- Resistance of the RC circuitry ( $\Omega$ ) approx. the same as the resistance of the coil ( $\Omega$ )

**Connection diagram**



A01497a

**Dimension drawing**



**Accessories**

