

#### **Features**

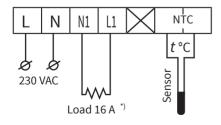
- Easy handling
- Requires no complicated programming
- Reliable construction
- Built-in power ON/OFF switch
- Control LED indicates heating ON condition
- Temperature scale for easier setting
- Setting knob with range limitation mechanism
- Control knob adjustable to the room temperature

# **Description**

The TP 710 is a mechanical thermostat with power ON/OFF switch and control LED (indicates heating ON condition) intended to control electrical underfloor heating systems indoors. The thermostat automatically controls the heating to the selected comfort temperature using floor temperature sensor (included in the scope of delivery). The comfort temperature can be simply set by turning the temperature adjustment knob. The built-in power ON/OFF switch allows convenient heating break e.g. during ventilation of the room or for longer time in periods without heating.

A locking mechanism positioned behind the control knob offers range limitation with defining minimum and maximum setting temperature. Further, when the room temperature has been stabilized, the setting knob position can be adjusted to match actual room temperature. As a result, the temperature line on temperature adjustment knob is in line with the measured room temperature.

# **Terminal block layout**



# Design



# **Technical data**

#### Thermostat TP 710

Supply voltage	230 VAC, 50 Hz	
Maximum load current	16 A *)	
Power consumption	5 W	
Weight	90 g	
Dimensions	86x86x50 mm	
IP protection class	IP20	
Appliance class	II	
Floor temperature sensor	NTC 10 kΩ	
Sensor installation wire length	3 m	
Permissible ambient air temperature range	+5 +50 °C	
Permissible relative air humidity	60 % (non-condensing)	
Temperature setting range	+5 +40 °C	
Hysteresis	0.5 °C	
Color	White	
Mounting type	in-wall	
Certifications	<b>(</b> ← RoHS	

<sup>\*)</sup> In order to keep the thermal impact on the relevant device components low in the event of improper use under continuous load and to achieve maximum service life, it is recommended to switch (connect) a maximum load current of 13 A.

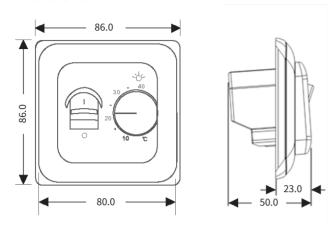
#### Floor temperature sensor NTC 10 kOhm

Temperature [°C]	Resistance $[k\Omega]$	Temperature [°C]	Resistance $[k\Omega]$
10	16.92 - 18.17	21	11.21 - 11.94
11	16.29 - 17.48	22	10.81 - 11.51
12	15.68 - 16.81	23	10.43 - 11.09
13	15.10 - 16.18	24	10.06 - 10.69
14	14.54 - 15.57	25	9.70 - 10.30
15	14.00 - 14.98	26	9.35 - 9.94
16	13.49 - 14.42	27	9.02 - 9.59
17	13.00 - 13.88	28	8.70 - 9.25
18	12.52 - 13.37	29	8.39 - 8.93
19	12.07 - 12.87	30	8.09 - 8.62
20	11.63 - 12.40	31	7.80 - 8.32

# **Mechanical Thermostat TP 710**

# **CONTROL EQUIPMENT**

#### **Dimensions**



#### **Order information**

	Colour	Order information
9	White	TP 710

### Installation

Installation of the thermostat and the heating system requires to use the services of qualified specialists. The electrical connection and connection to the power supply must be performed by a professional electrician. Applicable national laws, rules and regulations as well as the installation instructions must be observed. The manual and wiring diagram do not replace the professional skills of the device installer.

The floor temperature sensor cable has to be placed into a separate conduit. It should be placed at heating level directly underneath the heating mat by chiselling out a channel in the subfloor. The sensor should be centrally positioned between two heating conductors, which is in the middle of a cable loop. The thermostat needs to be installed using electrical plastic wall mounting box with suitable screw spacing of 60 mm. If two or more heating mats are to be connected and controlled with one thermostat, a separate intermediate junction box is required.