

#### **Features**

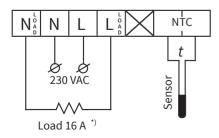
- Digital thermostat in a modern design
- Weekday programming working with 4-events schedule
- Touch display with background lighting
- Clear menu structure for easy programming
- Supports floor sensors from other manufacturers
- Advanced setting options
- Various operating modes available
- Floor and room sensor for temperature control
- Open window detection mode
- Adaptive control of the heating start for maximum energy efficiency

# **Description**

The TP 750 is a digital, programmable touch thermostat intended to control electrical underfloor heating systems indoors. The easy-to-read display with background lighting and the clear menu structure make the temperature controller a very user-friendly device with easy programming. The touch display only requires a soft tip with the finger to register the touch. The advanced settings with additional parameters beyond the standard settings, possible to be set according to the user's preference (e.g. display accuracy, temperature input steps), provide even more comfort.

The TP 750 provides different operating modes for heating control. Week programming with a 4-events heating schedule allows heating control according to the user's daily routine. The thermostat automatically regulates the heating 24/7 to the selected temperature within set periods of time (events). Heating control is either possible with floor sensor (included in the scope of delivery) or room sensor (built-in). Intelligent adaptive control of the heating start (self-learning) and open window detection contribute to an energy efficient operation of the heating system. With simple reset function, the thermostat can be easily reset to the factory settings. The TP 750 is available in white and black.

## **Terminal block layout**



### Design



### **Technical data**

#### Thermostat TP 750

Supply voltage	230 VAC, 50 Hz	
Maximum load current	16 A *)	
Power consumption	< 2 W	
Weight	140 g	
Dimensions	86x86x48 mm	
IP protection class	IP21	
Appliance class	II	
Floor temperature sensor	NTC 10 kΩ	
Sensor installation wire length	3 m	
Permissible ambient air temperature range	+5 +55 °C	
Permissible relative air humidity	60 % (non-condensing)	
Temperature setting range	+5 +40 °C	
Other floor temperature sensor types supported	3, 5, 6.8, 12, 15, 20, 22, 33, 47 kOhm	
Color	White or black	
Mounting type	in-wall	
Certifications	C C (ECC) 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.

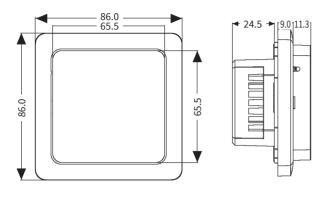
#### Floor temperature sensor NTC 10 kOhm

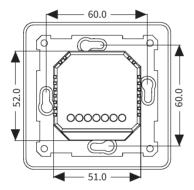
Temperature [°C]	Resistance $[k\Omega]$	Temperature [°C]	Resistance $[k\Omega]$
10	19.46 - 20.11	21	11.82 - 12.09
11	18.65 - 19.27	22	11.30 - 11.55
12	17.80 - 18.37	23	10.81 - 11.04
13	17.00 - 17.52	24	10.35 - 10.56
14	16.23 - 16.71	25	9.90 - 10.10
15	15.50 - 15.95	26	9.47 - 9.66
16	14.81 - 15.22	27	9.06 - 9.25
17	14.15 - 14.53	28	8.67 - 8.86
18	13.52 - 13.87	29	8.30 - 8.49
19	12.92 - 13.25	30	7.95 - 8.14
20	12.36 - 12.65	31	7.61 - 7.80

# Digital Touch Thermostat TP 750

# **CONTROL EQUIPMENT**

#### **Dimensions**





#### **Order information**

	Colour	Order information
300 m	White	TP 750 white
230 =	Black	TP 750 black

## 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.