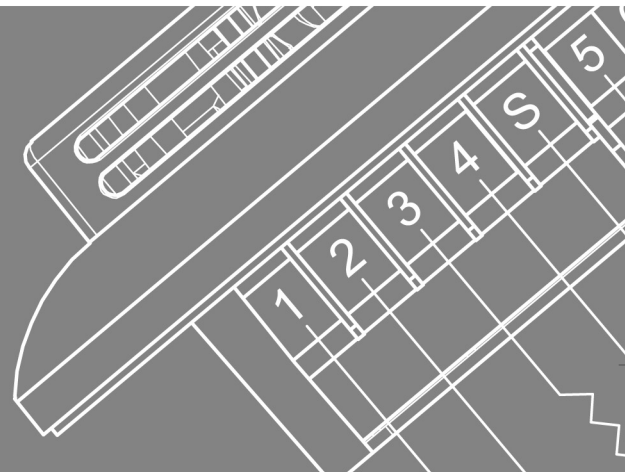


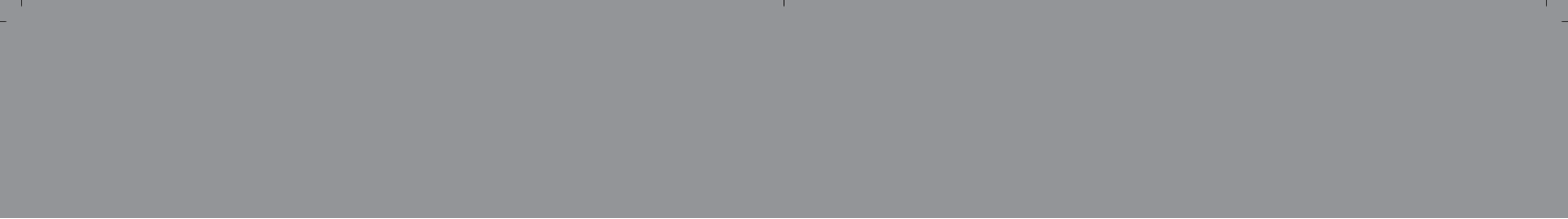


Developed by OJ Electronics A/S

Type TPS-30
with room and
floor sensor



English



Heat Mat's TPS30 electronic thermostat is designed for installation in a standard wall box. The thermostat allows the required temperature to be set within the range 0-40C. An LED indicates whether the heating is active. The thermostat is suitable for a standard UK single gang light switch box.

PRODUCT PROGRAM

TPS-345-0030	White	(OTD2-1999-HM)
TPS-COL-0030	Silver	(OTD2-1999-HMB5)

CE MARKING

Applied standards
EN 61000-6-3, EN 61000-6-2, EN 60 730-1 and EN 60730-2-9.

The product may only be used if the complete installation complies with current directives.

The final electrical connection should be completed by a suitably qualified person.

If the product has been damaged in any way, e.g. during transport, it must be inspected and checked by a suitable qualified individual before being connected to the power supply.

The product carries a manufacturer's warranty if installed in accordance with these instructions and applicable regulations.

Technical data

Voltage	.230 V AC ±15% 50/60 Hz
Max. pre-fuse	.16 A
Built-in circuit breaker	.2-pole, 16 A
Output relay	.Make contact - SPST - NO
Output	.Max. 16 A / 3600 W
Control principle	.PWM regulation
Temperature range	.+0/+40°C
- control voltage signal	.230 V AC
Frost protection temperature	.5°C absolute
- control voltage signal via rectifier diode	.230 V AC
Sensor fault protection	.-20°C
Ambient operating temperature	.0/+40°C
Dimensions	.H/84, W/84, D/40 mm
Enclosure rating	.IP 21

The thermostat is maintenance free.

Classification

The product is a Class II appliance (with reinforced insulation) and must be connected as follows:

- Term. 1: Live (L1) 230 V ±15%, 50/60 Hz
- Term. 2: Neutral (L2)
- Term. 3-4: Max. load 16 A, 3600 W

Pollution class: 2

Pollution class 2, representative of air circulation in typical homes.

Overvoltage category: III

Pulse voltage 4 kV to IEC 60664-1.

Sensor installation

Floor sensor (this must always be installed):

The floor sensor should be installed in standard conduit embedded in the floor. The conduit should be sealed and positioned as close to the floor surface as possible. Sensor cables can be extended up to a maximum of 50 m in length using power cable.

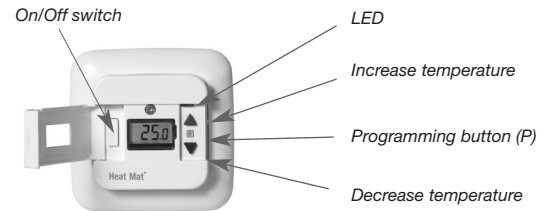
Installation of thermostat with built-in room sensor

The thermostat should be fixed on a wall in such a way as to allow free air circulation around it. It must also be positioned so as to prevent it from being affected by direct heat sources (e.g. the sun), draughts from doors and windows, or outside temperature (i.e. do not fix onto outer walls). The TPS30 has a built in fault circuit which switches the heating off if the sensor is disconnected or short-circuited.

Thermostat installation

- Open cover.
- Unscrew internal cover and remove.
- Connect wires from rear as shown in wiring diagram.
- Mount thermostat in wall box - fit frame and cover.

Temperature setting



The TPS30 has a temperature setting of 0-40°C. To help set the temperature correctly, the thermostat has an LED, which lights red when heating is activated. To set the target temperature correctly increase the target to the maximum temperature until the required room or floor temperature is reached. Then reduce the temperature setting until the LED goes out. If necessary, fine adjustment can be performed after 1 or 2 days.

Frost protection

If the signal is connected via a rectifier diode, the thermostat will maintain a floor/room temperature of 5°C.

Settings

To set parameter values, press and hold the programming button for 3 seconds. Li // Hi // 28 will be shown on the display. Firstly, Li will be displayed for 1 second, followed by Hi, and finally 28. The required value can then be set using the arrow buttons. To access the next parameter, press the programming button again. If no buttons are pressed for 30 seconds, the program returns to the initial display.

Parameter	Shown on display	Factory setting OJ standard
Max. limit temperature FLOOR	Li // Hi // 28	28°C (5-55°C)
Min. limit temperature FLOOR	Li // Lo // 5	5°C (5-30°C)
Measure floor temperature	FLo // 24.5	
Measured room temperature	ro // 21.5	
Application	APp // F : Floor sensor // AF : Room with Limit sensor	

Error codes:

E1 - Sensor error. Sensor is short-circuited or disconnected.

E5 - Overheating. The temperature is too high in the thermostat and switches off the heating.

Environment protection/recycling

Help protect the environment by disposing of the packaging and redundant products in a responsible manner.

Product disposal



Products marked with this symbol must not be disposed of together with household refuse but must be delivered to a waste collection centre in accordance with current local regulations.

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Sensor table

Sensor		BR929A08
Temp.(°C)	Value (ohm)	
-10	64000	
0	38000	
10	23300	
20	14800	
30	9700	

Typical wiring diagram

