



# Discreet panel heater for recessed mounting

Thermocassette CTS is a radiant panel for recessed mounting in false ceilings. Suited for total heating as well as for spot heating, CTS offers discreet heating in for example offices, entrance halls, school premises, workstations and store checkouts. Mounted in a false ceiling it is well protected against damage.

#### **Comfort**

Radiant heaters give a soft, pleasant heat and individual comfort can be created with spot and zone heating. No moving parts mean a silent system that does not cause air movements and the hygiene is improved when the spread of dust, bacteria or odours is reduced.

#### **Operation and economy**

Radiant heaters have an easy and flexible installation and require a minimum of maintenance. Ceiling mounting leaves the walls free and increases safety. They give instant heat and the room temperature can be reduced with maintained comfort.

#### Design

Thermocassette is designed to perfectly fit false ceilings. Recessed mounting makes the heater an integral part of the ceiling.



#### **Product specifications**

- The low surface temperature (max. 100 °C) makes Thermocassette well suited for low ceiling heights. There is no risk of burns to the person(s) in this vicinity.
- Thermocassette is available in two sizes, 600x600 and 600x1200 mm, that fit perfectly in false ceilings.
- To comply with Ecodesign Regulation (EU) 2015/1188 the unit must be installed with thermostat TAP16R (accessory). TAP16R has adaptive start, week program and open window detection.

# Thermocassette CTS

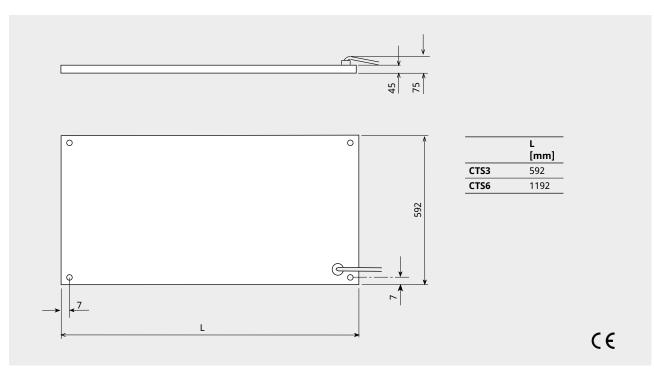
# **Technical specifications**

## Thermocassette CTS (IP20)

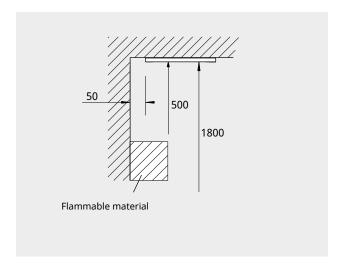
| Item<br>number | Туре | Heat output | Voltage | Amperage | Max. surface temperature | Dimensions<br>LxWxH | Weight |
|----------------|------|-------------|---------|----------|--------------------------|---------------------|--------|
|                |      | [w]         | [V]     | [A]      | [°C]                     | [mm]                | [kg]   |
| 276621         | CTS3 | 300         | 230V~   | 1,30     | 100                      | 592x592x45          | 2,0    |
| 276622         | CTS6 | 600         | 230V~   | 2,61     | 100                      | 1192x592x45         | 4,0    |

Casing of powder coated aluminum. Colour: white, RAL 9010. Other RAL colours are available on request.

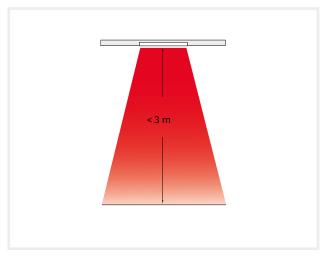
#### **Dimensions**



#### **Minimum distances**

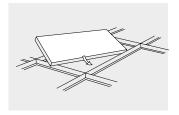


### **Installation height**



# Mounting

## **Thermocassette CTS**





#### **Positioning**

To estimate approximately how many radiant heaters are needed to cover an area the formula is:

 $\begin{array}{ll} \mbox{Min. number} & = & \mbox{Area of the premises } \mbox{[$m^2$]} \\ \mbox{of heaters} & = & \mbox{Installation height } \mbox{[$m$]} \times \mbox{Installation height } \mbox{[$m$]} \end{array}$ 

This formula is a basic estimation of the minimum number of radiant heaters needed to maintain the comfort. To calculate the right output for each heater, the total heating requirement must be calculated, see the Technical handbook.

#### Mounting

Thermocassette CTS is installed horizontally, recessed in false ceilings. Four hooks are included. The panel is provided with a nut in each corner where the hooks or another fastener can be fixed.

#### Connection

Thermocassette is intended for permanent installation. The panel is equipped with a 1,6 meter cable without plug.

For wiring diagrams and other technical information, please see the manual and www.frico.net.







Thermocassette creates a pleasant heat on the floor in premises where you might want to be barefooted.



Thermocassette CTS is often used in public premises.



By putting the heater in the ceiling, valuable wall and floor space is saved.

## Thermocassette CTS

## **Control options**



The heater must be supplemented with one of the following control options.

#### **Control by thermostat**

• TAP16R, electronic thermostat

#### Control by thermostat and black bulb sensor

- · TAP16R, electronic thermostat
- · SKG30, black bulb sensor

The product can be controlled in a different way, e.g. by an overall control system (BMS) as long as the requirements of Ecodesign Regulation are met.



#### **TAP16R**, electronic thermostat

Programmable thermostat for room/floor heating. Processor controlled with digital display and built-in clock. A number of weekly preset programs simplify programming. Several advanced features are included such as adaptive function, open window mode, energy saving and frost protection programs. Setting range: +5 - +37 °C. 230V. Max. breaking current: 16A. IP21.



#### TEP44, protective enclosure for TAP16R

Enclosure which is required should TAP16R be used in environments which demand IP44 and used in conjunction with external room temperature sensor (RTX54) which replaces the internal sensor.



#### RTX54, external room temperature sensor

Replaces internal sensor when using TEP44. Can also be used to achieve an improved detection point in the room when locating the control unit in order that the internal room temperature sensor does not show a relevant value. Cable lenght: max. 50 m. NTC10K $\Omega$ . IP54.



#### SKG30, black bulb sensor

Measures air and radiation temperature. High-quality thermistor. NTC10K $\Omega$ . IP30.

| Item   | Туре   | Description   | HxWxD     |  |
|--------|--------|---|-----------|--|
| number |        |   | [mm]      |  |
| 92790  | TAP16R | Electronic thermostat, 16A, IP21  | 87x87x53  |  |
| 205540 | TEP44  | Protective enclosure for TAP16R, IP44. Must be supplemented with external sensor. | 87x87x55  |  |
| 93044  | RTX54  | External room temperature sensor. Replaces internal senor. NTC10KΩ, IP54          | 82x88x25  |  |
| 205550 | SKG30  | Black bulb sensor, NTC10KΩ, IP30  | 115x85x40 |  |