



## Discreet panel heater for recessed or surface mounting

Thermocassette HC is intended for discreet heating in offices, bathrooms, schools etc. Designed for either surface or recessed mounting it is well suited for total heating as well as for spot heating of for example a reception desk. Ceiling mounting protects the panel from damage, which ensures longer life and mounting is easy thanks to the panel's H-shaped bracket.

#### **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. The panel can also be mounted directly on the ceiling or be suspended from it.



### **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.
- · Equipped with a rigid H-shaped bracket at delivery for easy mounting.
- A wire mounting kit is available as an accessory.
- In order to fulfil the requirements of Ecodesign, Regulation (EU) 2015/1188, the unit must be installed with control system FC or thermostat TAP16R.
- High protection class, IP44.

# Thermocassette HC

## **Technical specifications**

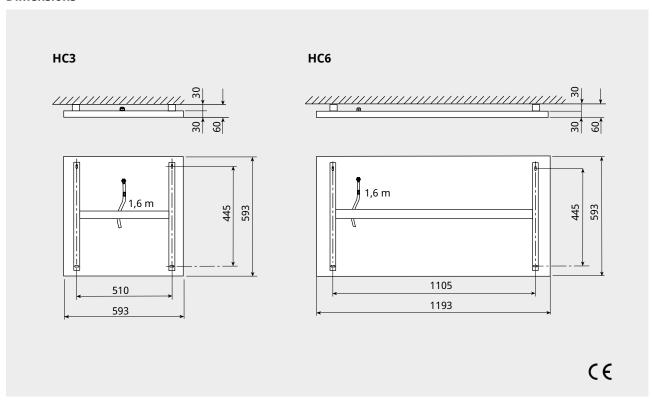
## Thermocassette HC (IP44)

Item number	Туре	Heat output	Voltage	Amperage	Max. surface temperature	Dimensions LxWxH	Weight
		[w]	[V]	[A]	[°C]	[mm]	[kg]
276625	НСЗ	300	230V~	1,30	100	593x593x60*	4,0
276626	HC6	600	230V~	2,61	100	1193x595x60*	8,0

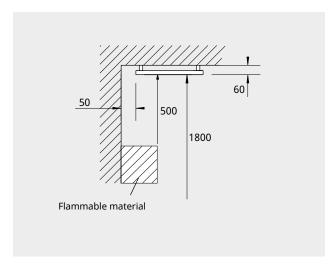
<sup>\*)</sup> Height with bracket.

Casing of powder coated aluminum with a galvanized steel cover ensuring protection class IP44. Colour: white, RAL 9010. Other RAL colours are available on request.

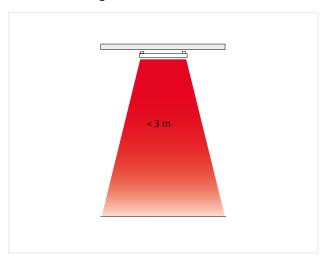
### **Dimensions**



## **Minimum distances**



## **Installation height**



## Thermocassette HC



## Positioning, mounting and connection

## **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 HC is installed horizontally in the ceiling. The panel can be recessed in false ceilings, mounted externally with brackets on the ceiling or suspended by wire, chain or threaded rods. The panel is equipped with a H-shaped mounting bracket. A wire mounting kit is available as an accessory.

### 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.



## **Accessories**

#### HPWM, wire mounting kit

Complete mounting kit for mounting on wire, gives a drop of approx. 0.5 metres.

Item number	Туре	Description
10088	HPWM	Wire mounting kit



## Thermocassette HC

## **Control options**

The heater must be supplemented with one of the following control options. The FC control system provides sophisticated control with many options. A simpler thermostat control is also available.

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.







## **Control system FC111**

The control system has many smart functions such as adaptive start, weekly program, heating blocking with outdoor sensor, airing mode and timer. The FC111 control system includes the FCCH control panel and FCPOBH control unit (max. 16A).

Heaters can be grouped in the system, allowing local control of the temperature. Each group includes a control unit as well as sensors, where applicable. The control panel has a built-in temperature sensor, which is used for control when external sensors are not used.

With accessories, such as black bulb sensors and outdoor sensors, several energy saving functions are achieved. Black bulb sensors measure the operative temperature, i.e. temperature experienced which means the heaters provide the exact amount of heat required in order to achieve a comfortable temperature. Outdoor temperature sensors disable the heating depending on the outdoor air temperature. Protection class: IP44.

Art.nr	Туре	Description	HxWxD [mm]
74680	FC111	Control system FC111, 16A, 230V~/400V2~, incl. 5 m cable, IP44	89x89x26 (Control panel)
74692	FCPOBH	Control box for system extension, 16A, 230V~/400V2~, incl. 10 m cable, IP44	105x105x38
74696	FCBB	Black bulb sensor, incl. 10 m sensor cable, IP44	89x89x43
74694	FCRTX	External room temperature sensor, incl. 10 m sensor cable, IP20	39x39x23
74695	FCOTX	Outdoor temperature sensor, incl. 10 m sensor cable, IP44	39x39x23
74718	FCBC05	Extra communication cable, 5 m	L: 5 m
74719	FCBC10	Extra communication cable, 10 m	L: 10 m
74720	FCBC25	Extra communication cable, 25 m	L: 25 m
74721	FCSC10	Extra sensor cable, 10 m	L: 10 m
74722	FCSC25	Extra sensor cable, 25 m	L: 25 m





### Control by thermostat

TAP16R has adaptive start, week program and open window detection. Black bulb sensors are available as accessories. Protection class IP44 is obtained by adding a protective enclosure TEP44 and an external temperature sensor RTX54 which replaces the internal sensor.

Art.nr	Туре	Description	HxWxD [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



## Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188

When the heater is used for technical heating purposes, and not as a local space heater, the following controls can be used.

Art.nr	Туре	Description	HxWxD [mm]
5999	KRT1900	Capillary tube thermostat, IP55	165x57x60
10214	KRTV19	Capillary tube thermostat with knob, IP44	165x57x60