FRICD



5 3000–6000 W Electrical heat

3 models CE

Industrial infrared heater IR

For premises with large volumes and high ceilings

Application

IR is suitable for total or supplementary heating of premises with large volume and high ceilings. It can also be used outdoors for example on sport arena stands or to keep loading bays dry and frostless.

Comfort

Radiant heaters give an efficient and pleasant heat in the dwelling zone 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 a hygienic indoor climate is created 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. They give instant heat and no preheating is necessary. Radiant heaters can give cost savings of up to 25 % compared to convector heaters, especially in buildings with high ceilings that are used on an irregular basis.

Design

IR has a robust industrial design.

Product specifications

- Reflectors of shiny anodised aluminium for optimal heat distribution.
- The mounting hinges allow the heater to be angled in five different positions.
- Connection plinth which allows for connection of a regulator or for serial connection of several heaters.
- Protection grille is available as an accessory.
- Casing of grey alu-zinc coated steel panels, very resistant against corrosion.

Installation height





This train station outside Stockholm is heated by IR. A control with timer allow waiting passengers to increase the heat when it is particularly cold.

The IR heater can be mounted in an angeled position to direct the heating where it is needed. Heaters used outdoors should be placed under a roof. In this installation the working stations are heated by IR heaters in the ceiling and CIR heaters on the wall.



To divide a large hall into different zones is very energy effective especially in buildings where each zone is sporadically used. Protection grille IRG, available as an accessory, can be used to protect the heater in for example sports centres.



The temperature can be adapted perfectly in different areas of a room with IR. Spot heating increases the comfort and lowers the heating costs.



Туре	Output stages	Voltage	Amperage	Max. element temperature	Dimensions LxHxW	Weight
	[kW]	[V]	[A]	[°C]	[mm]	[kg]
IR3000	1/2/3	400V3N~*1	4,3	700	1125x83x358	9.0
IR4500	1.5/3/4.5	400V3N~*1	6,5	700	1500x83x358	11.1
IR6000	2/4/6	400V3N~*1	8,7	700	1875x83x358	13.2

Technical specifications | Industrial infrared heater IR *f*

*1) Can also be connected 400V3~, but then without output stages. With neutral, one element tube at a time can be connected.

Protection class: IP44.

Approved by SEMKO and CE compliant.

Dimensions



Positioning, mounting and installation

Positioning

For spot heating, the infrared heaters should be positioned so that people get heat from the front and from behind. The distance to the head should not be less than 2 metres. Read more in the Technical handbook.

Mounting

IR is delivered with mounting brackets and can be mounted directly on the ceiling or the wall. The mounting allow the radiation angle to be adjusted 30° in each direction. The heaters can also be suspended from wire (minimum Ø 3 mm). IR should always be mounted with the tube elements in an horizontal position. Protection grille IRG is available as an accessory. For minimum mounting distance, see Fig. 1.

Connection

IR is intended for permanent installation. In the terminal box are double connection plinths for cables of up to 16 mm². This allows for serial connection.



Fig. 1: Minimum distance for fixed installation.

Control options

Control by thermostat, contactor and switch (and timer)

The choice of thermostat depends on needs and environment.

Connection is made by a 3-step switch making it possible to manually connect the elements 1 + 1 + 1.

Timer can be set to desired time.

- T10S, electronic thermostat with concealed knob
- TK10S, electronic thermostat with visible knob
- KRT1900, capillary tube thermostat, IP55
- S123, manual switch for 1-2-3 output steps
- CBT, timer

For further information and options, see the "Controls" section.

Accessories

IRG, protecion grille

Can be used to protect the heaters in sport centres. Available in three dimensions to fit each of the IR models.



Controls and other accessories

Туре	Description	HxWxD [mm]
T10S	Electronic thermostat with concealed knob	80x80x31
TK10S	Electronic thermostat with visible knob	80x80x31
KRT1900	Capillary room thermostat, IP55	165x57x60
S123	Manual switch for 1-2-3 output steps	72x64x46
СВТ	Timer	155x87x43
IRG3000	Protection grille IR3000	869x362x40
IRG4500	Protection grille IR4500	1235x362x40
IRG6000	Protection grille IR6000	1615x362x40

Heat contribution IR



Heat contribution directly below IR 4.5-6 kW



Radiant heat contribution IR 4,5 kW



Radiant heat contribution IR 6 kW



Wiring diagrams

Internal wiring diagram



Control by thermostat, contactor and switch



Control with timer



