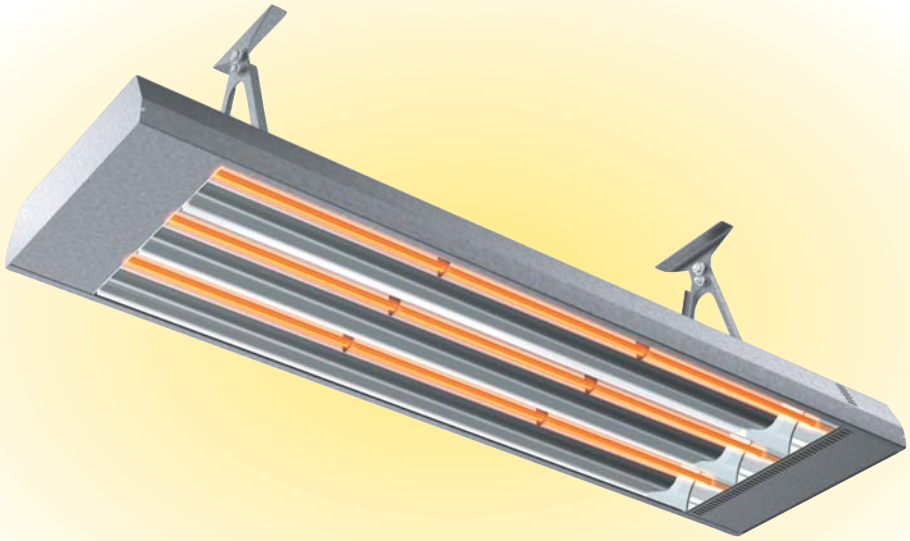

CE

Electrical heat 3000–6000 W

3 models

Infrared heater IR

INDUSTRIAL INFRARED HEATER FOR BUILDINGS WITH CEILING HEIGHTS ABOVE 4.5 METRES

Industrial infrared heater IR is used for spot heating or total heating in rooms with ceiling heights between 4.5 and 20 metres, such as industrial buildings, sport centres, warehouses etc. IR can also be used outdoors on loading bays or sport arena stands.

A radiant heater primarily heats surfaces such as the floor, walls and people. Compared to other heating systems, the temperature can be lowered due to the radiant heat contribution. Heating costs will be lower, especially in buildings with high ceilings.

Infrared heater IR is available in three versions. IR3000 with maximum output 3000 W, IR4500 with maximum output 4500 W and IR6000 with maximum output 6000 W.

IR can be mounted on the ceiling, on the wall or be suspended from wire. The mounting hinges allow IR to be angled in five different positions.

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

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This train station outside Stockholm is heated by industrial infrared heaters. A regulator with timer allow waiting passengers to increase the heat when it is particularly cold.

To divide a large hall into different zones is very energy effective. 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 industrial infrared heater IR. Spot heating increases the comfort and lowers the heating costs.

Radiant heating heats people directly without warming the surrounding air. The operative temperature, i.e. the temperature a person senses, is therefore a little higher than the actual temperature. Every degree reduction will save approximately 5% of the energy consumed!

TECHNICAL SPECIFICATIONS

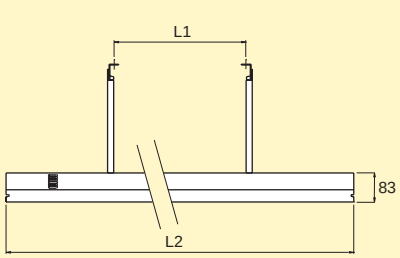
Industrial infrared heater IR

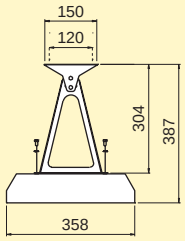
Type	Output stages [kW]	Voltage [V]	LxHxW [mm]	Max. element temperature [°C]	Weight [kg]
IR3000	1/2/3	400V3N~*1	1125x358x83	700	9.0
IR4500	1.5/3/4.5	400V3N~*1	1500x358x83	700	11.1
IR6000	2/4/6	400V3N~*1	1875x358x83	700	13.2

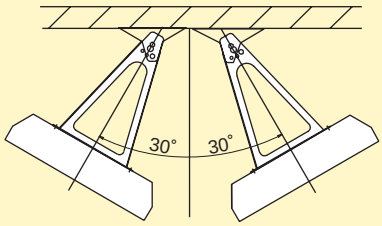
*1) Can also be connected 400V3~, but then without output stages. With neutral, one element tube at a time can be connected.

Protection class Industrial infrared heater IR: (IP44), splash-proof design.
Approved by SEMKO and CE compliant.

DIMENSIONS







Type	L1 [mm]	L2 [mm]
IR3000	600	1125
IR4500	900	1500
IR6000	1200	1875

POSITIONING, MOUNTING AND INSTALLATION

Positioning

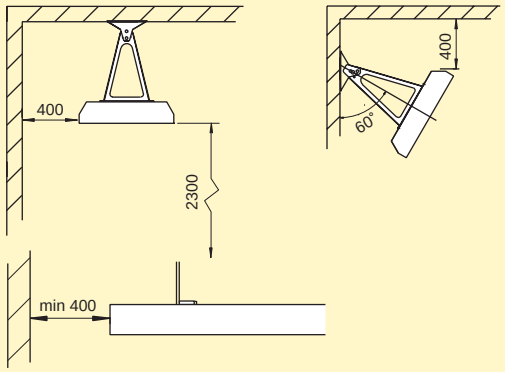
For spot heating, the infrared heaters should be positioned so that people get heat from the front and from behind. The distance to the head should not be less than 2 metres. Read more in the Heating & energy handbook.

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.



	Minimum distance [mm]
Ceiling	400
Wall, long side of the unit	400
Wall, short side of the unit	400
Flammable material	700
Floor	2300

Fig. 1: Minimum distance for permanent installation.

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REGULATION ALTERNATIVES

For spot heating, the connection should be via a 3-stage switch, in order that the tube elements can be manually connected 1 + 1 + 1.

A contactor with thermostat and timer will prevent it getting too warm and insure that the installation is not connected unnecessarily.

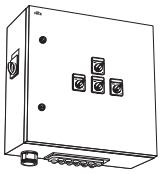
When several units heat a large room, a regulation centre ERC is suitable.

ACCESSORIES

RTE102

KRTE12

KRT1900



ERC

RTE102, electronic thermostat
Control the heat via contactor. Internal temperature setting +7 – +35°C. Delivered with covering frame for recessed installation. Required connection voltage: 230V. Protection class: IP30.

KRTE12, electronic thermostat
Internal temperature setting -40 – +40°C. A sensor on a 3 meter cable is included, the cable can easily be lengthened. Required connection voltage: 230V. Protection class: IP55.

KRT1900, capillary tube thermostat
Internal temperature setting 0 – +40°C. Required connection voltage: 230/400V (volt free contact). Protection class: IP55.

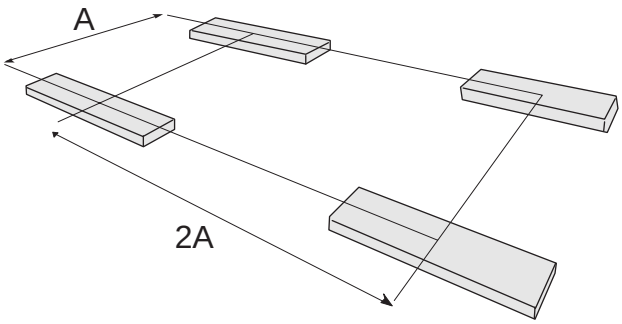
ERC, control and regulation centre
Control and group centre for large heating installations. ERC include main switch, group fuses and seven day timer for economy savings (for example at night). Protection class: IP30.

IRG3000/4500/6000, protection grille
IRG is used to protect IR in for example sports centres. Available in three sizes to suit the sizes of industrial infrared heater IR.

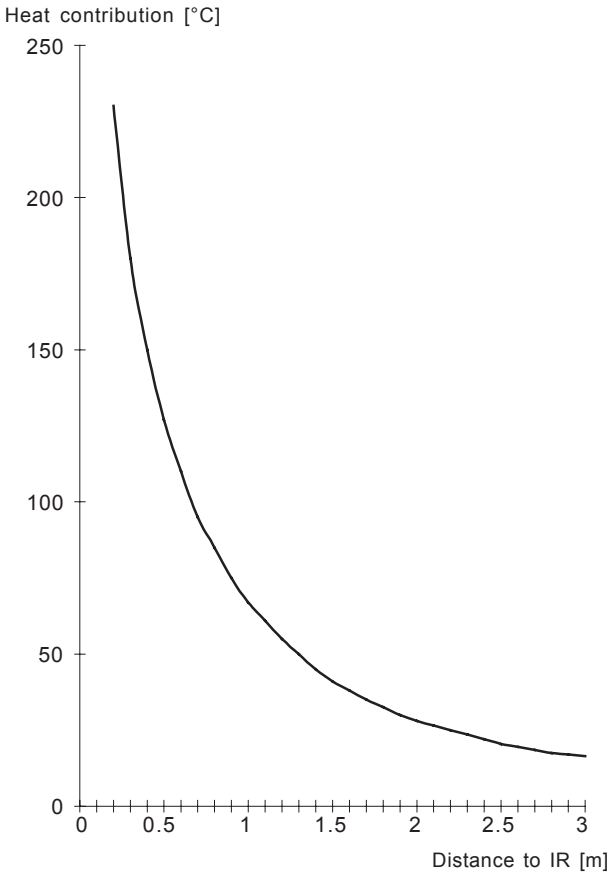
For further alternatives, see section on Thermostats and Regulators.

Type	Description	HxWxD [mm]
RTE102	Electronic thermostat	71x71x28
KRTE12	Electronic thermostat	165x57x60
KRT1900	Capillary tube thermostat	165x57x60
ERC11	Control and regulation centre, 16A/group, 1 group	400x300x150
ERC22	Control and regulation centre, 16A/group, 2 groups	400x400x200
ERC33	Control and regulation centre, 16A/group, 3 groups	500x500x200
ERC44	Control and regulation centre, 16A/group, 4 groups	500x500x200
ERC55	Control and regulation centre, 16A/group, 5 groups	600x600x200
ERC66	Control and regulation centre, 16A/group, 6 groups	600x600x200
ERC14	Control and regulation centre, 20A/group, 1 group	400x300x150
ERC28	Control and regulation centre, 20A/group, 2 groups	400x400x200
ERC42	Control and regulation centre, 20A/group, 3 groups	500x500x200
ERC56	Control and regulation centre, 20A/group, 4 groups	600x600x200
IRG3000	Protection grille IR3000	
IRG4500	Protection grille IR4500	
IRG6000	Protection grille IR6000	

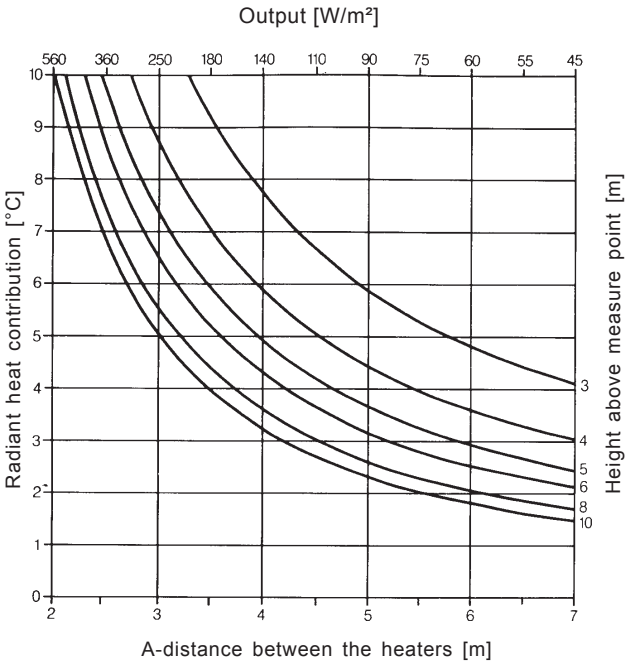
HEAT CONTRIBUTION IR



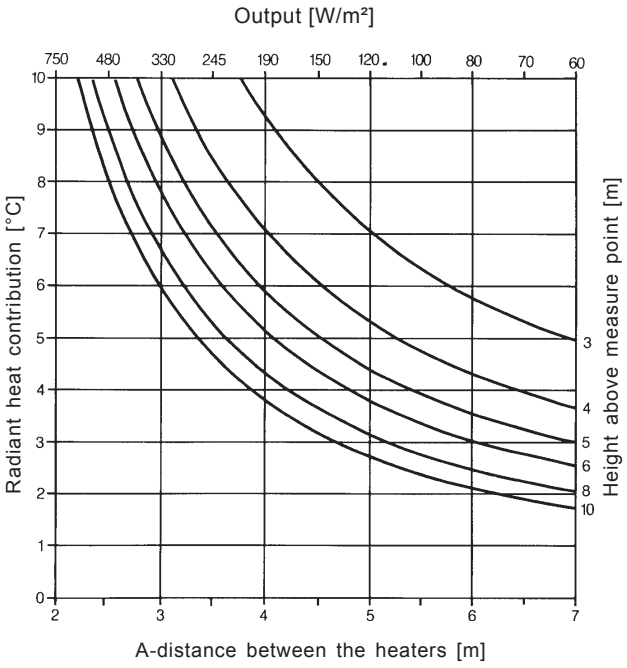
Heat contribution directly below IR 4.5-6 kW



Radiant heat contribution IR 4.5 kW



Radiant heat contribution IR 6 kW



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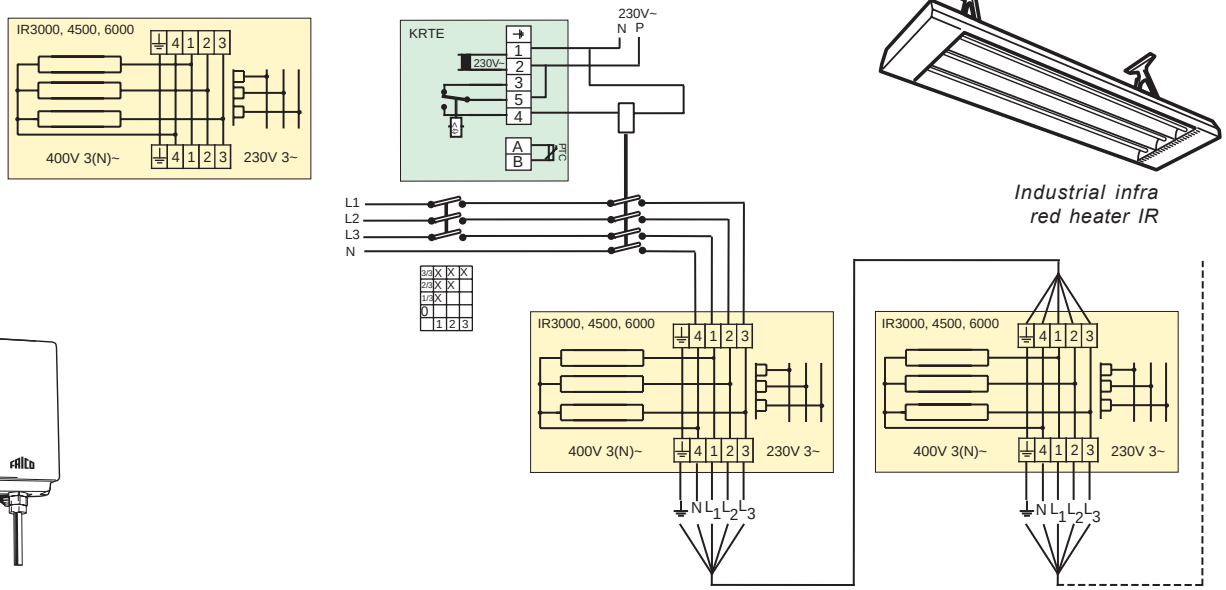
WIRING DIAGRAMS IR

Automatic heat regulation via external thermostat. Serial connection of units.



Industrial infra red heater IR

KRTE12, electronic thermostat