

Infrared heater CIR

For applications where discreet design and operation is desired

CIR provide comfort all year around on terraces, balconies and open-air restaurants. Requires no protection against bad weather and has five-year corrosion warranty.

CIR is discreet with its slim design and silent, invisible operation and needs little space to fit in.

- Infrared heater CIR is available in three versions:
 - CIR100 with outputs between 500 and 2000 W.
 - CIR200 with the same outputs and built-in switch.
 - CIRC with output 1000 W, 1,8 m cord and plug.
- Reflectors of high-gloss polished aluminium with maximum resistance against corrosion. Grey terminal boxes of heat and weather resistant polycarbonate.
- Adjustable mounting brackets for easy mounting on the wall or ceiling.
- No risk for current leaks and thus no problem with a safety cut-out triggering off.
- Casing of white lacquered aluminium zinc panels. Colour: RAL 9002, NCS 1502-Y. Protection grille of stainless steel.

Infrared heater CIR without built-in switch (IP24)

Type	Heat output [W]	Voltage [V]	Amperage [A]	Max. element temperature [°C]	Dimensions LxHxW [mm]	Weight [kg]
CIR10521	500	230V~	2,2	750	710x44x94	1,5
CIR11021	1000	230V~	4,3	750	1250x44x94	2,2
CIR11031	1000	400V2~	2,5	750	1250x44x94	2,2
CIR11521	1500	230V~	6,5	750	1755x44x94	3,0
CIR11531	1500	400V2~	3,8	750	1755x44x94	3,0
CIR12021	2000	230V~	8,7	750	2180x44x94	3,7
CIR12031	2000	400V2~	5,0	750	2180x44x94	3,7

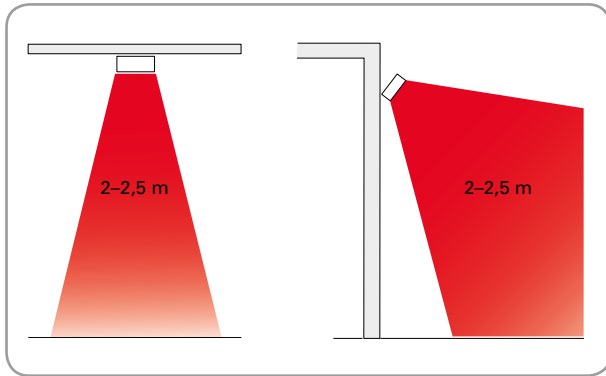
Infrared heater CIR with built-in switch (IP24)

Type	Heat output [W]	Voltage [V]	Amperage [A]	Max. element temperature [°C]	Dimensions LxHxW [mm]	Weight [kg]
CIR20521	500	230V~	2,2	750	710x44x94	1,5
CIR21021	1000	230V~	4,3	750	1250x44x94	2,2
CIR21031	1000	400V2~	2,5	750	1250x44x94	2,2
CIR21531	1500	400V2~	3,8	750	1755x44x94	3,0
CIR22031	2000	400V2~	5,0	750	2180x44x94	3,7

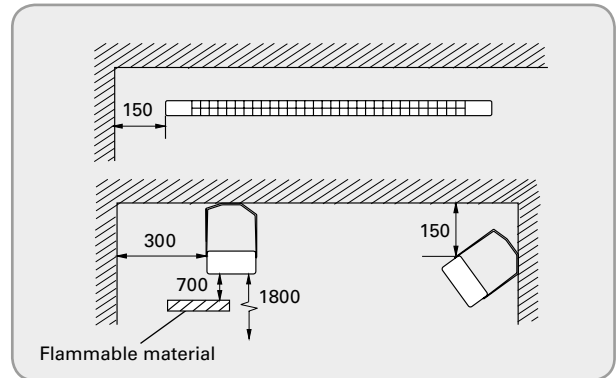
Infrared heater CIRC with 1.8 m cord and plug (IP24)

Type	Heat output [W]	Voltage [V]	Amperage [A]	Max. element temperature [°C]	Dimensions LxHxW [mm]	Weight [kg]
CIR11021C	1000	230V~	4,3	750	1250x44x94	2,2

Installation height



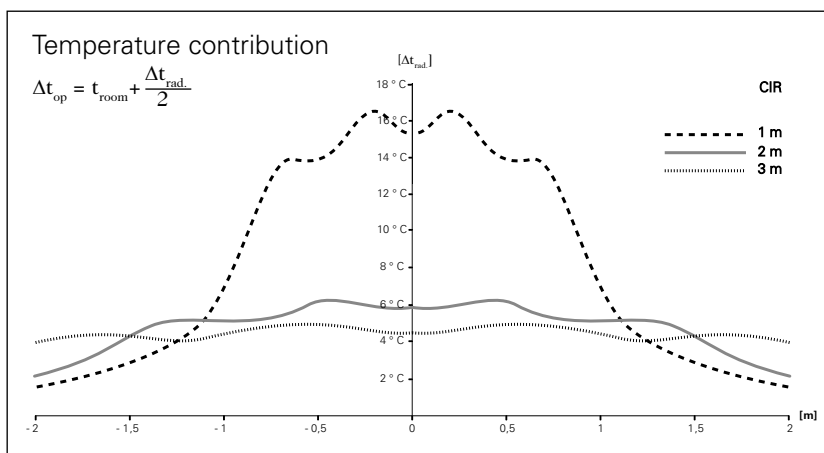
Minimum distances



Dimensions

	A [mm]	B*1 [mm]	B _{MIN} *2 [mm]
CIR105/205	710	500	300
CIR110/210	1250	900	600
CIR115/215	1755	1200	800
CIR120/220	2180	1500	1000

*1) Recommendation
*2) Minimum distances between brackets



CIR is easy to fit in with its slim design. The heaters should heat from at least two directions for an even heating.

Infrared heater CIR

Positioning, mounting and connection

Positioning

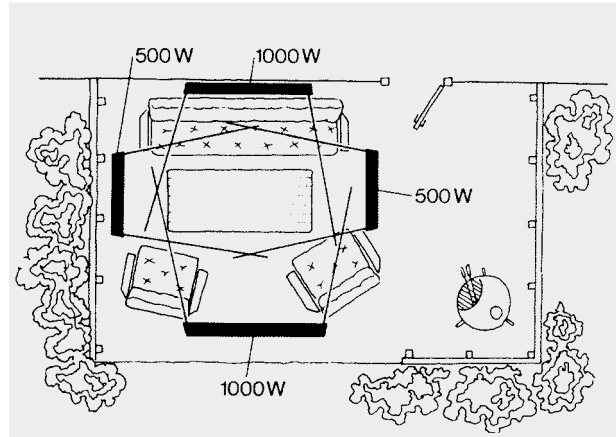
The heaters must be placed so that they enclose the area to be heated, see fig. 1 and 2. The normal assembly height is 2–2,5 metres above the ground/floor. A rule of thumb for infrared heaters equipped with metal tubular elements is that 750–1000 W/m² increases the experienced temperature by about 10 °C. The output demand can be reduced if the area to be heated is protected. If the area only has a roof, at least 1000 W/m² should be installed. 750 W/m² is sufficient if the area has three walls. For enclosed areas, the output demand must be calculated. A green house for example requires 250-300 W/m². Optimum comfort is achieved if the heat is distributed from at least two directions.

Mounting

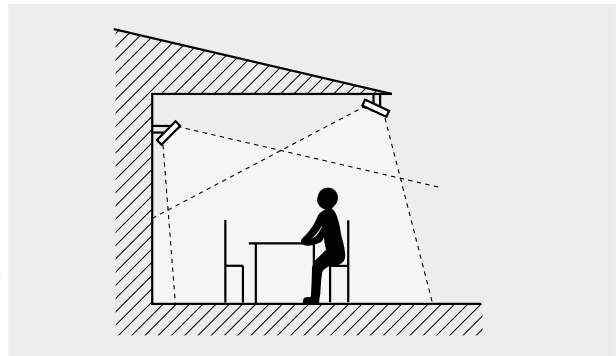
CIR is installed horizontally on the ceiling or on the wall with the supplied adjustable mounting brackets. The angle of the heater can be adjusted for optimum comfort. The standard brackets cannot be used for angled installation on the ceiling, because the distance then becomes less than the minimum distance. CIR can also be suspended by wire.

Connection

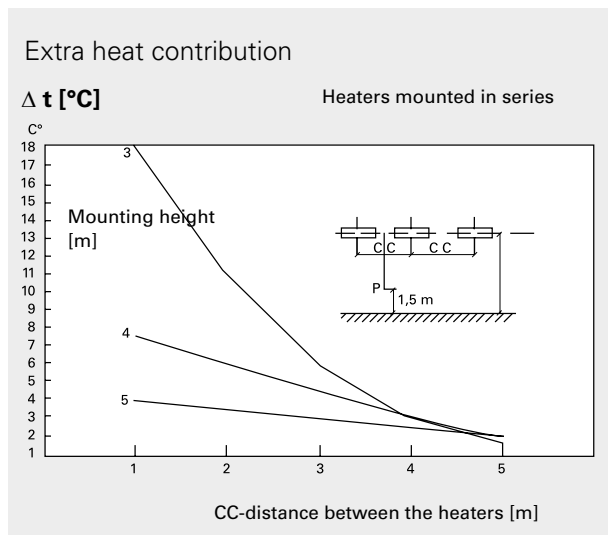
CIR11021C is equipped with 1.8 m cord and plug for connection to an earthed outlet socket. Other models are intended for fixed installation. The heaters are approved for serial connection.



Good example of positioning, seen from above. Output requirements approx. 1000 W/m².



The heaters should heat from at least two directions for an even heating.



Radiant heaters are the perfect outdoor solution as they heat people and objects directly, not the surrounding air.

Control options

Output control with timer

Stepless control especially suitable for spot and zone heating. The heat contribution is controlled for best comfort. Built-in timer is set to desired time.

- CIRT, stepless output control with timer

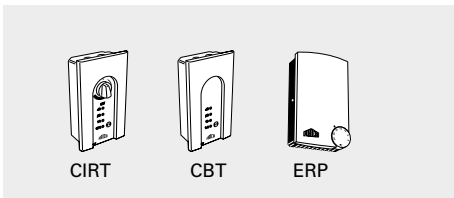
Control with timer

The timer can be set to desired time. If the load exceeds the timer's setting range or if you want to control a larger system, a contactor can be used.

- CBT, electronic timer

Beside these controls, electric heating control ERP can be used to limit the output indoors or in glassed-in areas.

Controls



Type	Description	HxWxD [mm]
CIRT	Stepless output control with timer, IP44	155x87x43
CBT	Electronic timer, IP44	155x87x43
ERP	Electric heating control, IP20	157x93x40

Controls for CIR 1500W and 2000W when used indoors

Infrared heater CIR can also be used indoors for temporary heat contribution, but please note that models 1500W and 2000W must be installed with thermostat TAP16R (accessory) to comply with Ecodesign Regulation (EU) 2015/1188. Models of less than 1200W, however, can be used indoors with the same controls that are used outdoors. (CIR 500W, 1000W). See above.

Type	Description
TAP16R	Electronic thermostat, 16A, IP21
TEP44	Protective enclosure for TAP16R, IP44. Must be supplemented with RTX54.
RTX54	External room temperature sensor. Replaces internal sensor. NTC10KΩ, IP54
SKG30	Black bulb sensor, NTC10KΩ, IP30
PDK65	Presence detector with power supply (up to 5 detectors), 230V~, max 2,3 kW, IP42/IP65
PDK65S	Additional presence detector to PDK65, IP42
RB3	Relaybox 400V3N~ (400V3~/V2~, 230V3~/V2~), 16A, IP44

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



CIR is an ideal solution for giving comfort to customers at outdoor restaurants. The heaters can be mounted on the restaurant's wall or in line directly above the tables in large terraces.