

Electrical heat 500–2000 W

CE

12 models

## Comfortinfra CIR

### INFRARED HEATER WITH FIVE-YEAR CORROSION WARRANTY

Comfortinfra is used primarily to provide heating comfort all year around on terraces, balconies and open-air restaurants. CIR requires no protection against bad weather and has five-year corrosion warranty.

CIR can also be used for spot heating in workshops and warehouses. It is also approved for installation in baths and showers. No risk for current leaks and thus no problem with a safety cut-out triggering off.

Comfortinfra CIR is available in two versions. CIR100 with outputs between 500 and 2000 W and CIR200 with the same outputs and built-in switch.

Reflectors of high-glossed polished aluminium with maximum resistance against corrosion. The heat is dispersed at an angle of 60°.

CIR is delivered with adjustable mounting brackets for easy mounting. It can also be suspended from wires.

- Reflectors of high-gloss polished aluminium with maximum resistance against corrosion
- Casing of white lacquered aluminium zinc panels. Colour: RAL 9002
- Grey terminal boxes of heat- and weather resistant polycarbonate
- Protection grille of stainless steel
- Adjustable mounting brackets for easy mounting on the wall or ceiling
- Cord switch for on/off control (CIR200)



*Warm and content customers stay longer. CIR makes the summer last longer!*



*Comfortinfra CIR can also be used for spot heating and extra heat contribution.*



*CIR gives heating comfort in sun rooms and terraces.*



*This large open-air restaurant in Torekov, Sweden is keeping their guests warm with the help of Comfortinfra 2000 W. Thanks to CIR the season of the open-air restaurant can be prolonged several weeks.*



**TECHNICAL SPECIFICATIONS**
**Comfortinfra CIR100 without built-in switch**

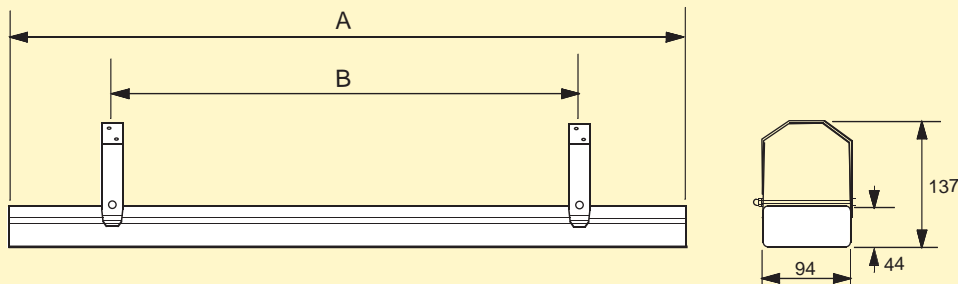
Type	Heat output [W]	Voltage [V]	Dimensions LxHxW [mm]	Recommended bracket distance [mm]	Max. element temperature [°C]	Weight [kg]
CIR10521	500	230V~	710x44x94	500	750	1.5
CIR11021	1000	230V~	1250x44x94	900	750	2.2
CIR11031	1000	400V2~	1250x44x94	900	750	2.2
CIR11521	1500	230V~	1755x44x94	1200	750	3.0
CIR11531	1500	400V2~	1755x44x94	1200	750	3.0
CIR12021	2000	230V~	2180x44x94	1500	750	3.7
CIR12031	2000	400V2~	2180x44x94	1500	750	3.7

Protection class CIR100 without built-in switch: (IP24), splash-proof design.  
Approved by SEMKO and CE compliant.

**Comfortinfra CIR200 with built-in switch**

Type	Heat output [W]	Voltage [V]	Dimensions LxHxW [mm]	Recommended bracket distance [mm]	Max. element temperature [°C]	Weight [kg]
CIR20521	500	230V~	710x44x94	500	750	1.5
CIR21021	1000	230V~	1250x44x94	900	750	2.2
CIR21031	1000	400V2~	1250x44x94	900	750	2.2
CIR21531	1500	400V2~	1755x44x94	1200	750	3.0
CIR22031	2000	400V2~	2180x44x94	1500	750	3.7

Protection class CIR200 with built-in switch: (IP24), splash-proof design.  
Approved by SEMKO and CE compliant.

**DIMENSIONS**


Type	A [mm]	B* <sup>1</sup> [mm]	B (min) [mm]
CIR105/205	710	500	300
CIR110/210	1250	900	600
CIR115/215	1755	1200	800
CIR120/220	2180	1500	1000

\*<sup>1</sup>) Recommendation

**POSITIONING, MOUNTING AND INSTALLATION**

**Positioning**

The infrared heaters should encircle the area that should be heated, see Fig. 1 and 2. The units are normally positioned 2-2.5 metres above the ground. As a general rule, 750-1000 W/m<sup>2</sup> increases the temperature by approx. 10°C. The output could be reduced according to how sheltered the terrace is. If the terrace has only a roof at least 1000 W/m<sup>2</sup> should be installed whereas if the terrace has three walls it should be sufficient with 750 W/m<sup>2</sup>. For a completely closed terrace, the output requirements should be calculated. A green house for example requires 250-300 W/m<sup>2</sup>.

**Extra heat contribution**

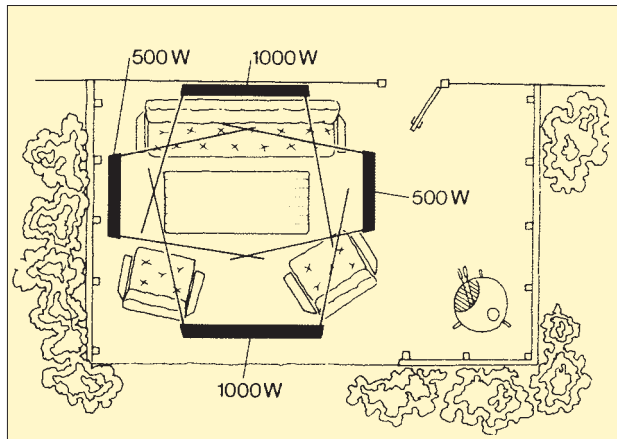
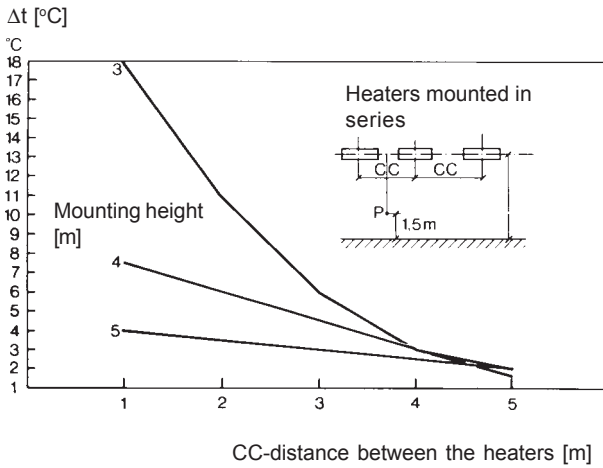


Fig. 1: Good example of positioning, seen from above. Output requirements approx. 1000 W/m<sup>2</sup>.

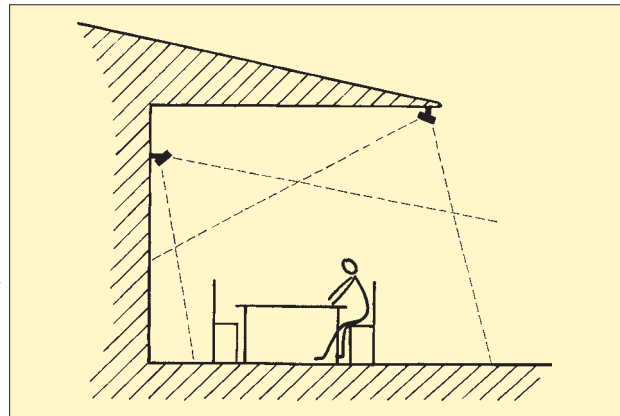
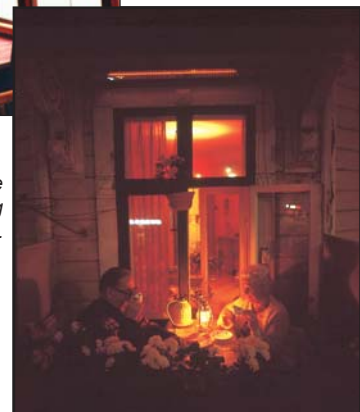


Fig. 2: The heaters should heat from at least two directions for an even heating.



Comfortinfra prolongs the summer..

...and the evenings in spring and autumn.



### Mounting

Mounting is very easy using the two brackets (supplied as standard), which can be mounted on the ceiling or wall in different angles. When angle mounting CIR on the ceiling, standard brackets can not be used (the distance will be smaller than the minimum distance 150 mm). The distance between the brackets is adjustable and can be chosen according to the most appropriate place for installation. The infrared heaters are snapped into the brackets and then locked in place. CIR can also be suspended from wires. The units should always be mounted horizontally. For minimum mounting distance, see Fig. 3.

### Connection

CIR is intended for permanent installation. Connection and serial connection of CIR is done with a maximum cable of 4x2,5 mm<sup>2</sup> + earth.

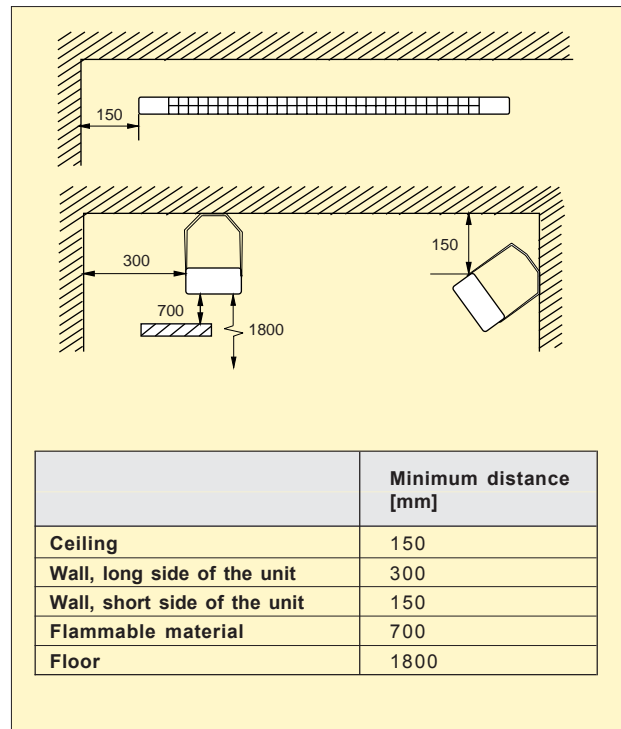


Fig. 3: Minimum mounting distance.

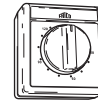
## ACCESSORIES



CIRC



CIRT



TIM120/240

### CIRC, variable output regulator

Variable control of CIR up to 2000 W. Desired radiant heat contribution is set via an external switch. Connection is via incoming cable. Protection class: IP44.

### CIRT, variable output regulator with timer

Especially suited for spot and zone heating. The heat contribution is regulated for best comfort (30-100%). Built-in timer that can be set on one to eight hours in the standard setting. For use on 230V and 400V2~ (not 3-phase loads). Load 2300/5000W. Protection class: IP44.

### TIM120/240, timer

Mechanical timer, of 2 or 4 hours respectively. Enclosed design for external mounting. Disconnects the unit when the preset time is reached. Protection class: IP44.

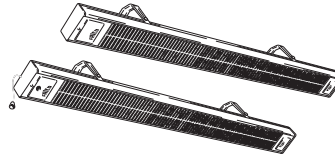
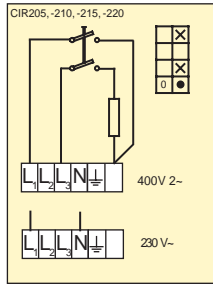
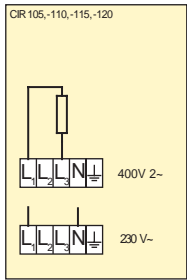
CIR is primarily intended for outdoor use and for cold areas. Beside these regulators, electric heating regulator ERP can be used to limit the output indoors or in glassed-in areas like conservatories.

For further alternatives, see section on Thermostats and regulators.

Type	Description	HxBxW [mm]
CIRC	Variable output regulator, 2000 W	145x95x85
CIRT	Variable output regulator with timer	155x87x43
TIM120	Timer 2 hours	80x75x70
TIM240	Timer 4 hours	80x75x70

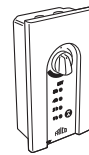
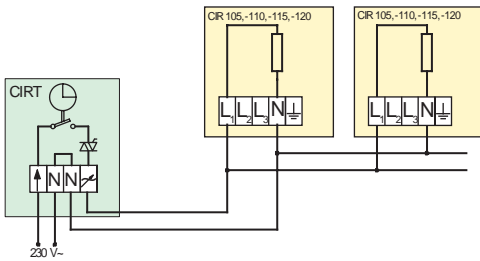
**WIRING DIAGRAMS CIR**

*Internal wiring diagrams.*

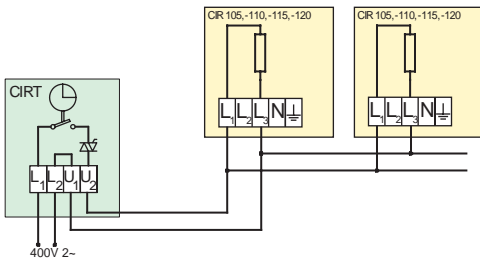


Comfortinfra CIR

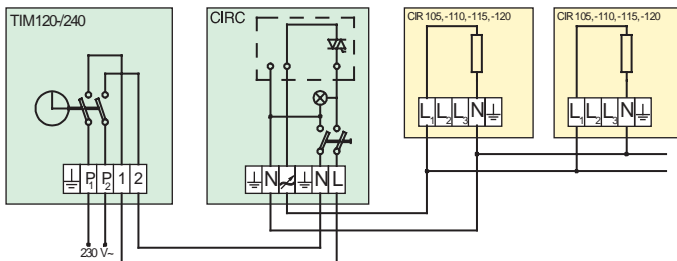
*Regulation with variable output regulator CIRT with built-in timer.*



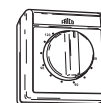
CIRT  
output regulator  
with timer



*Regulation with variable output regulator CIRC and external timer, TIM120/240.*



CIRC,  
output  
regulator



TIM120,  
timer