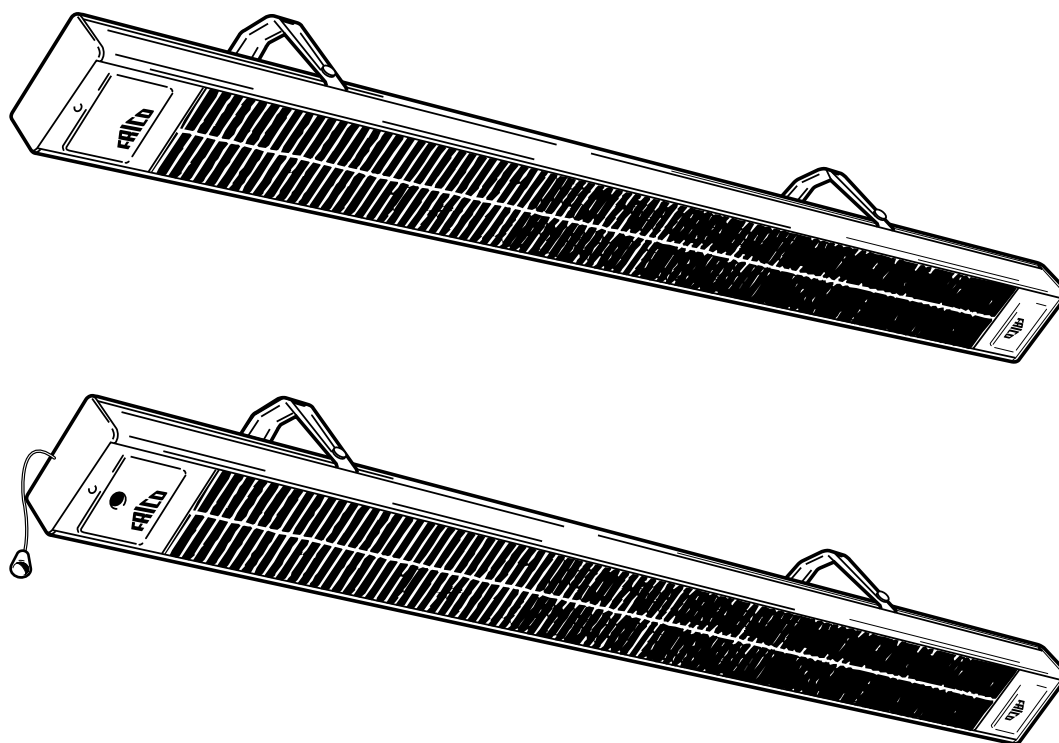


Original instructions

CIR



SE ... 6

NO ... 8

GB ... 10

FR ... 12

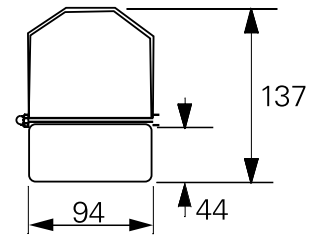
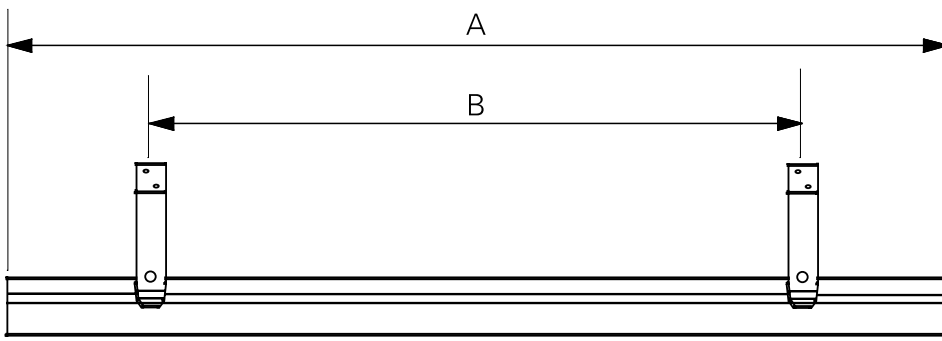
DE ... 14

FI ... 16

NL ... 18

RU ... 20

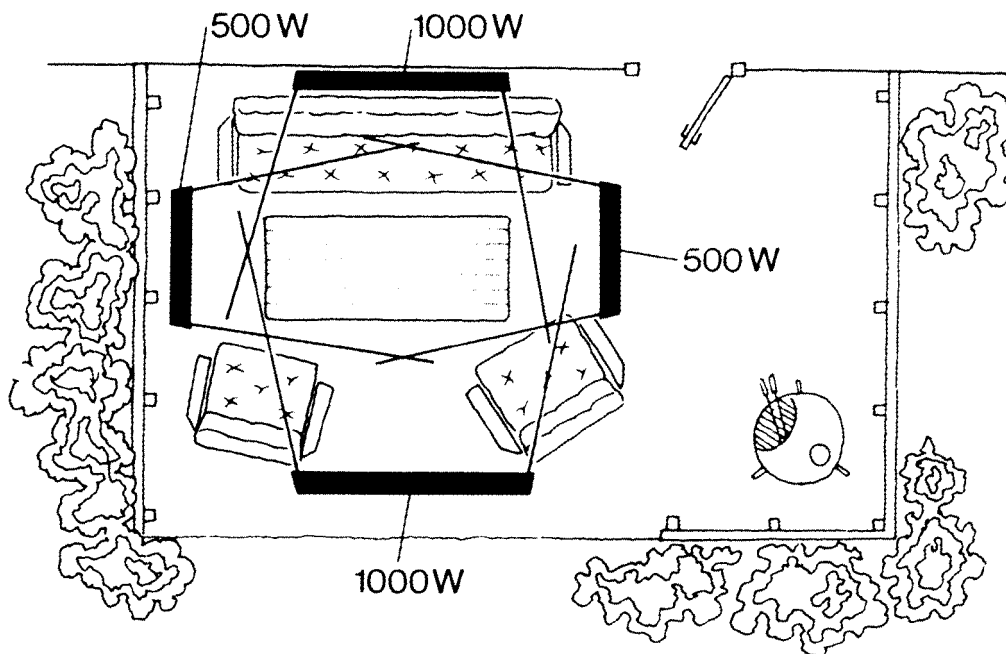
CIR



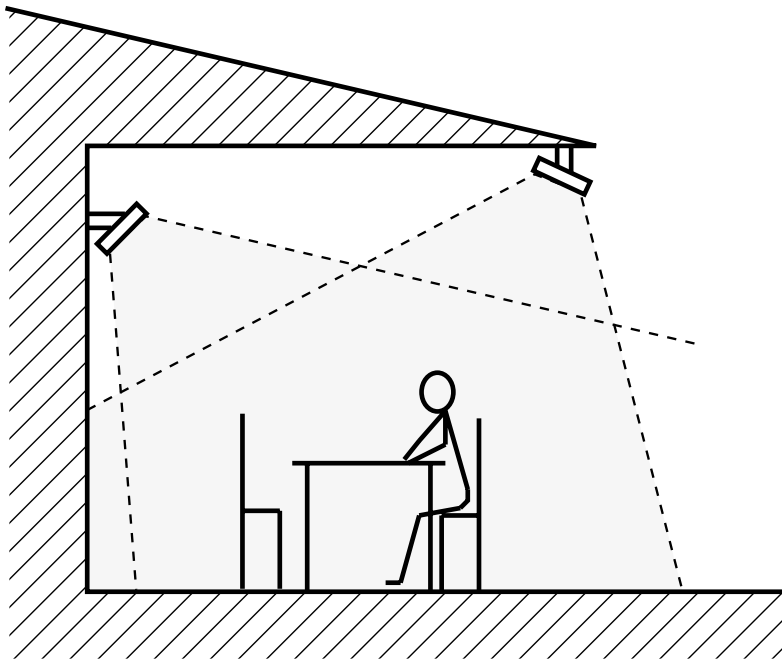
Type	Output [W]	230V~	400V2~	A [mm]	B*1 [mm]	B (min) [mm]
CIR105	500	CIR10521	-	710	500	300
CIR110	1000	CIR11021	CIR11031	1250	900	600
CIR115	1500	CIR11521	CIR11531	1755	1200	800
CIR120	2000	CIR12021	CIR12031	2180	1500	1000
CIR205	500	CIR20521	-	710	500	300
CIR210	1000	CIR21021	CIR21031	1250	900	600
CIR215	1500	-	CIR21531	1755	1200	800
CIR220	2000	-	CIR22031	2180	1500	1000

*1) Recommended

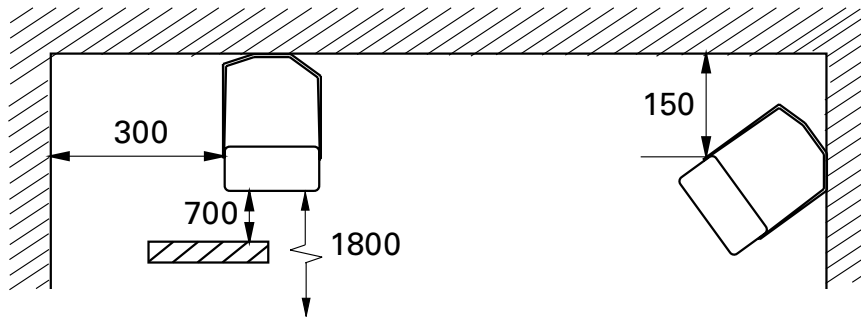
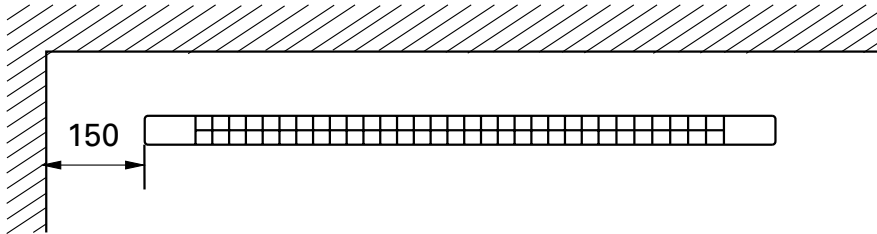
1



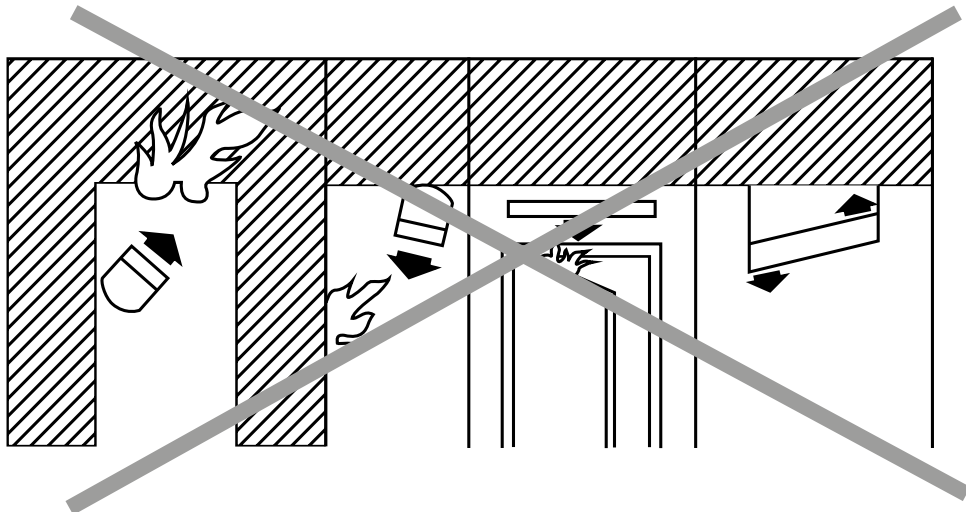
2



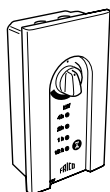
3



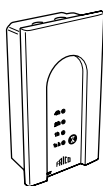
4



Accessories



CIRT



CBT

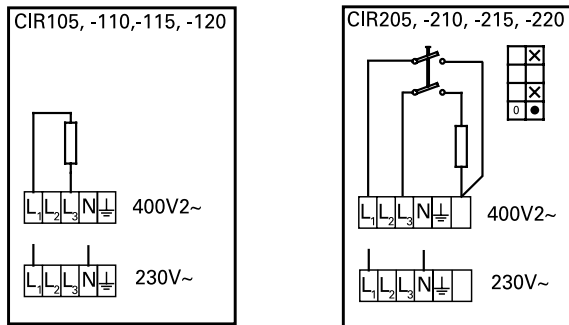


ERP

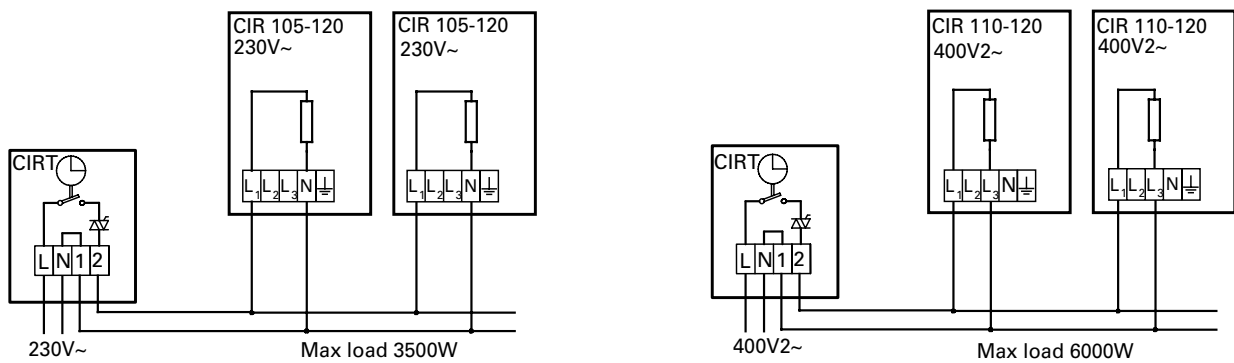
Type	E-nr [SE]	EL-nr [NO]	HxBxD [mm]
CIRT	85 702 92	54 325 39	155x87x43
CBT	87 511 87	54 322 02	155x87x43
ERP	85 820 05	54 328 86	157x93x40

Wiring diagrams CIR

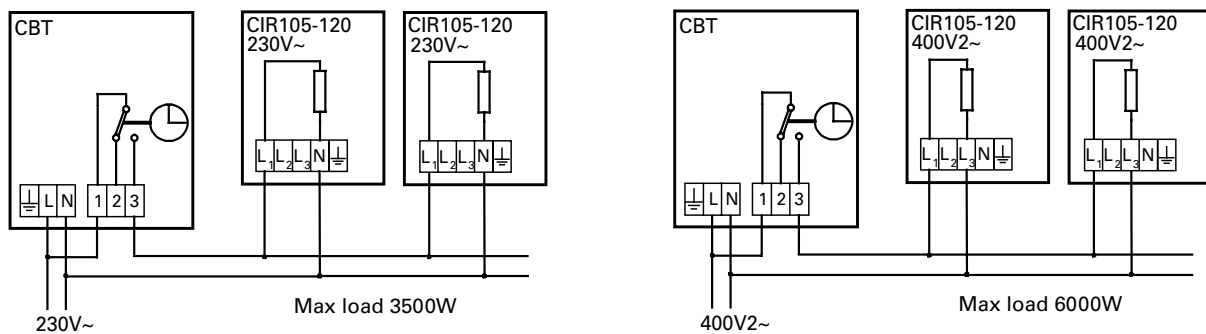
Internal



Output control with timer



Control with timer



Mounting and assembly instruction

General recommendations

Read these instructions carefully before using the appliance for the first time. Keep these instructions in a safe place for future reference.

The warranty is only valid if the units are used in accordance with the Frico installation and operating instructions

Area of use

The radiant heaters are primarily used to create comfortable heating on terraces, balconies, openair restaurants etc.

Protection class: IP24.

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

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 to the ceiling 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. CIR can also be suspended from wires. For minimum mounting distance, see Fig. 3.

- CIR may only be mounted horizontally!
- The mounting brackets enable mounting in three different angles for ceiling or wall mounting. Parallel to the wall/ceiling, 18° or 36° angle.
- Choose the desired angle and fasten the bracket onto wall or ceiling. The holes are Ø5 mm, c-c distance is 25 mm.
- Fasten the heaters, snap into the brackets and secure it by tightening the securing screws (104 mm long) and the domed nuts (spanner width 7 mm).

Electrical installation

The electrical installation should be permanent and carried out by a qualified electrician in conformity with prevailing regulations. The CIR must be preceded by an all-pole switch. CIR must not be placed directly under a wall-outlet! A terminal block, which enables connection to other heaters is situated on the same end of the heater as the name plate.

Please note that the inlet must be tight. A cable of EKK or EKLK type or similar must be used.

Minimum cross section area:

230V

protected by 10A (up to 2 kW) - min. 1,5mm²

protected by 16A (2—3,5 kW) - min. 2,5 mm²

400V

protected by 10A (up to 4kW) - min. 1,5 mm²

protected by 1 6A (4—6 kW) - min. 2,5 mm²

Start up (E)

When the unit is used for the first time or after a long period of disuse, smoke or odour may result from dust or dirt that has collected on the element. This is completely normal and disappears after a short time.

Maintenance

The heater is on the whole made of rustproof material and usually does not require any maintenance. Pollution can in the long run dull the reflectors somewhat. This however has very little affect on its function. If the heater is very dirty it can be cleaned with compressed air. If the reflector remains dirty it must be replaced by an authorized repairman. The reflector must not be polished as this may damage the protective surface.

Residual current circuit breaker (E)

When the installation is protected by means of a residual current circuit breaker, which trips when the appliance is connected, this may be due to moisture in the heating element. When an appliance containing a heater element has not been used for a long period or stored in a damp environment, moisture can enter the element.

This should not be seen as a fault, but is simply rectified by connecting the appliance to the mains supply via a socket without a safety cut-out, so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should occasionally be run for a short time when it is not being used for extended periods of time.

Safety

- *For all installations of electrically heated products should a residual current circuit breaker 300 mA for fire protection be used.*
- *The unit must not be mounted near curtains or other flammable material.*
- *This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.*



Main office

Frico AB
Box 102
SE-433 22 Partille
Sweden

Tel: +46 31 336 86 00

mailbox@frico.se
www.frico.se

**For latest updated information and information
about your local contact: www.frico.se**