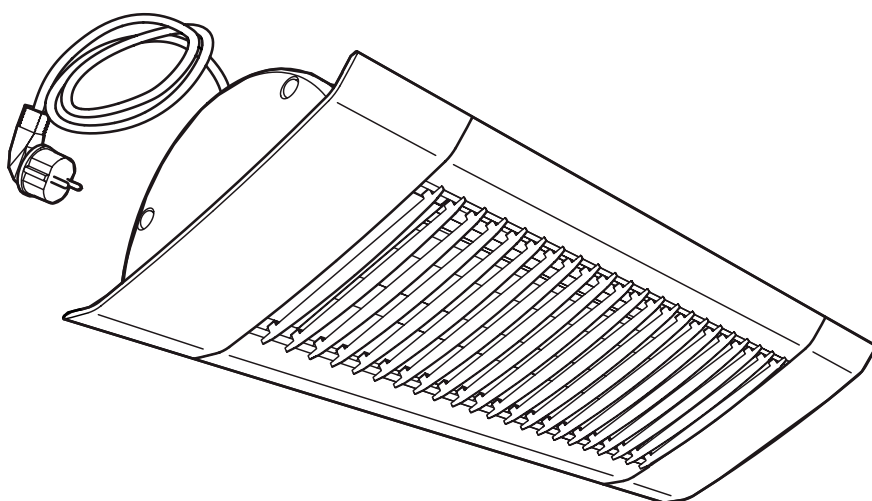


Original instructions

## IH



EN ... 7

SE ... 10

NO ... 13

FR ... 16

DE ... 20

ES ... 24

NL ... 28

IT ... 32

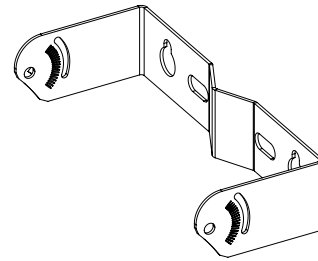
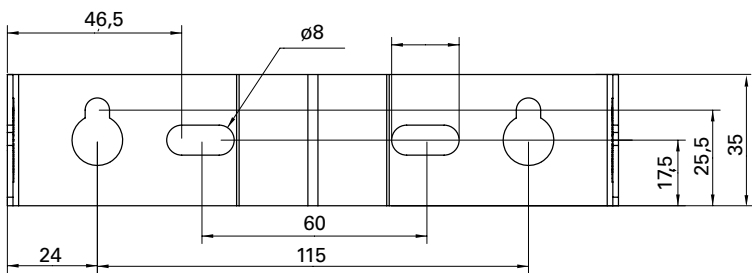
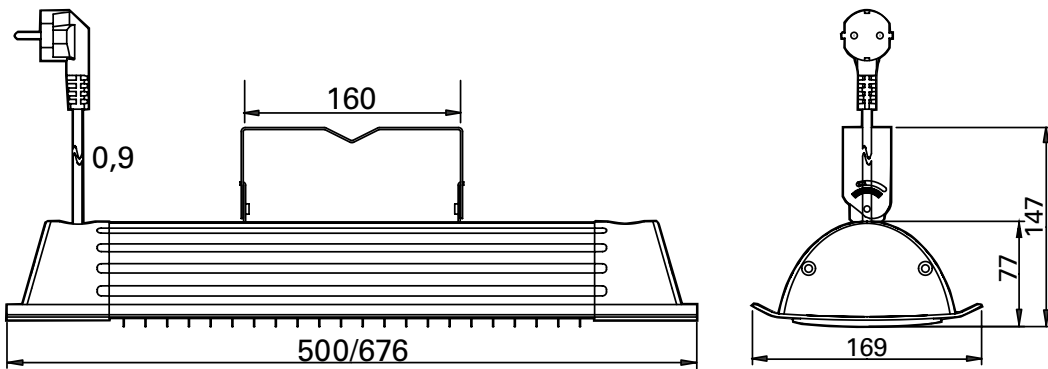
PL ... 36

RU ... 40

FI ... 44

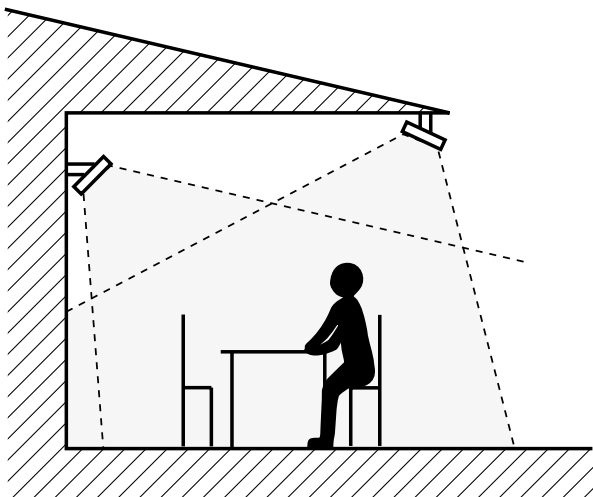
- (EN) The introduction pages consist mainly of pictures. For translation of the English texts used, see the respective language pages.
- (SE) Introduktionssidorna består huvudsakligen av bilder. För översättning av de engelska texter som används, se respektive språksidor.
- (NO) Introduksjonssidene består hovedsakelig av bilder. For oversettelse av de engelske tekstene, se de respektive språksidene.
- (FR) Les pages de présentation contiennent principalement des images. Consulter la page correspondant à la langue souhaitée.
- (DE) Die Einleitungsseiten bestehen hauptsächlich aus Bildern. Für die Übersetzung der verwendeten Texte in englischer Sprache, siehe die entsprechenden Sprachseiten.
- (ES) Las páginas introductorias contienen básicamente imágenes. Consulte la traducción de los textos en inglés que las acompañan en las páginas del idioma correspondiente.
- (NL) De inleidende pagina's bevatten hoofdzakelijk afbeeldingen. Voor een vertaling van de gebruikte Engelse teksten, zie de pagina's van de resp. taal.
- (IT) Le pagine introduttive contengono prevalentemente immagini. Per le traduzioni dei testi scritti in inglese, vedere le pagine nelle diverse lingue.
- (PL) Początkowe strony zawierają głównie rysunki. Tłumaczenie wykorzystanych tekstów angielskich znajduje się na odpowiednich stronach językowych.
- (RU) Страницы в начале Инструкции состоят в основном из рисунков, схем и таблиц. Перевод встречающегося там текста приведен в разделе RU.
- (FI) Esittelysivut koostuvat lähinnä kuvista. Suvuilla olevien englanninkielisten sanojen käännökset löytyvät ko. kielisivuilta.

## Dimensions



Wallbracket

## Positioning



## Installation height

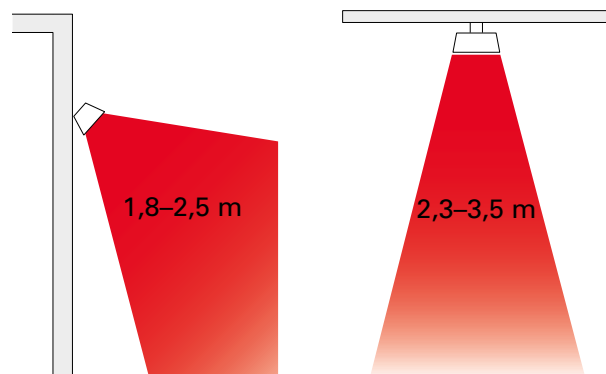
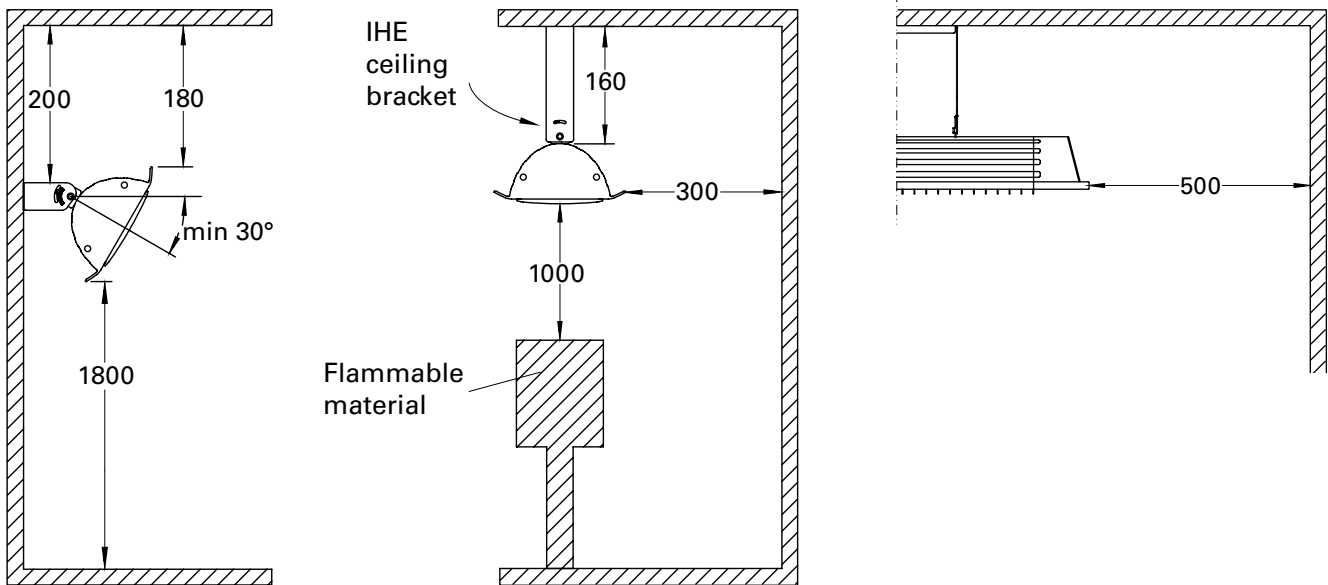
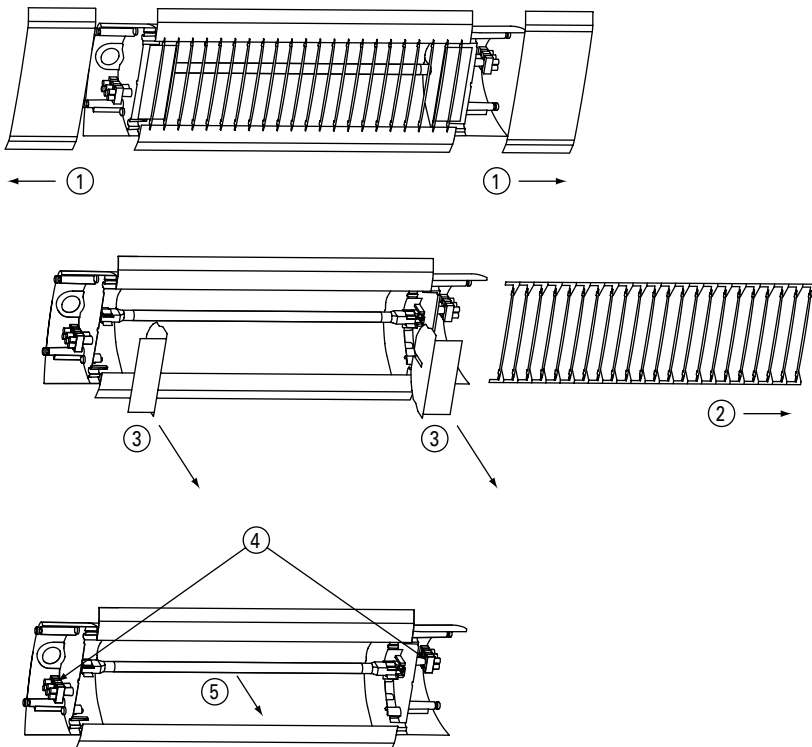


Fig.1: The heaters should heat from at least two directions for even heating

## Minimum mounting distance



## Replacing the lamp



# IH

## Accessories

11884	<b>IHUB*</b>
18050	<b>IHE</b>
16975	<b>IHXH*</b>
16976	<b>IHXL*</b>
11887	<b>IHT*</b>
16974	<b>IHTW*</b>
16970	<b>IHP*</b>
92865	<b>KLS1KS</b>
93272	<b>IHAF</b>
220646	<b>IHL1000</b>
220647	<b>IHL1500</b>
206496	<b>IHL2000</b>

\*) See separate manual.



## Controls

92867	<b>IHBD3*</b>
10740	<b>CBT</b>

\*) See separate manual.



## Technical specifications

### Infrared heater IHW with wide heat distribution (IP44)

Item number	Type	Heat output [W]	Voltage [V]	Amperage [A]	Max. filament temperature [°C]	Length [mm]	Weight [kg]
11878	IHW10	1000	230V~	4,3	2200	500	1,9
11879	IHW15	1500	230V~	6,5	2200	500	1,9
11880	IHW20	2000	230V~	8,7	2200	676	2,5

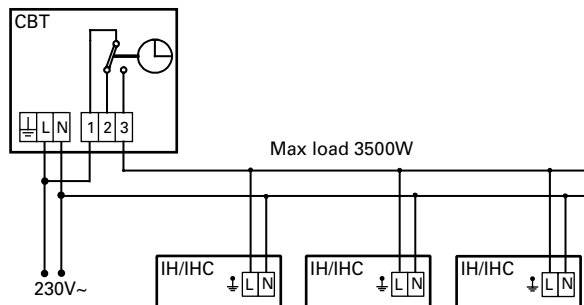
### Infrared heater IHF with directed heat distribution (IP44)

Item number	Type	Heat output [W]	Voltage [V]	Amperage [A]	Max. filament temperature [°C]	Length [mm]	Weight [kg]
11881	IHF10	1000	230V~	4,3	2200	500	1,9
11882	IHF15	1500	230V~	6,5	2200	500	1,9
11883	IHF20	2000	230V~ </tr				

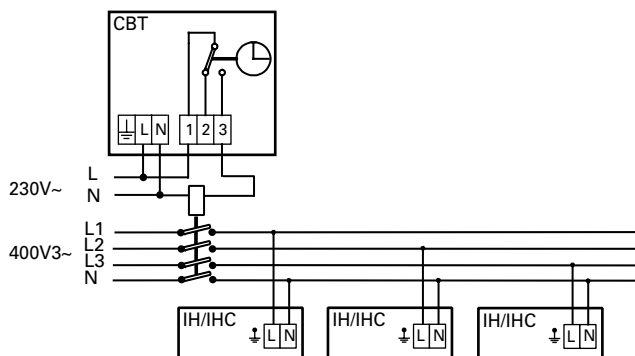


## Wiring diagrams

### Timer control



### Timer control with contactor



## Installation and operating instructions

### General Instructions

Read these instructions carefully before installation and use. Keep this manual for future reference.

*The product may only be used as set out in the assembly and operating instructions. The guarantee is only valid if the product is used in the manner intended and in accordance with the instructions.*

### Application

The infrared heater IH is powerful with a high filament temperature of 2200 °C and is the perfect choice for exposed outdoor environments where design is important. IH is available in two different designs. IHW gives a comfortable heat in the occupied zone from close range and also wider heat distribution. IHF has more direct heat distribution and is designed to be installed higher up. Protection class: IP44.

### Positioning

The heaters must be placed so that they cover the area to be heated, see fig. 1. The normal mounting height is 2–3 metres above the ground/floor. A rule of thumb for infrared heaters is that 600–800 W/m<sup>2</sup> 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 800 W/m<sup>2</sup> should be installed. 600 W/m<sup>2</sup> is sufficient if the area has three walls. For enclosed areas, the output demand must be calculated. Optimum comfort is achieved if the heat is distributed from at least two directions.

IHW provides wide heat distribution (60°), recommended installation height 1.8 – 2.5 m. IHF provides directed heat distribution (40°), recommended installation height 2.3 – 3.5 m.

### Mounting

IH is installed horizontally on walls with supplied bracket. The heater can be angled up to 45°. The heater can also be mounted on e.g. a parasol or a post, a suitable U-bolt (not included) is used for this together with the supplied console. For ceiling installation use ceiling bracket IHE (accessory). For other mounting alternatives, see accessories. For minimum distances, see diagrams on introductory pages.

1. Secure the bracket on the wall with at least 2 screws. If the keyhole slots are used, an addition screw is needed to fix the bracket. See the introduction pages.
2. Remove the screws fixed to the unit's back on delivery.
3. Hook the unit on the bracket.
4. Lock in position with the screws.

### Connection

IH is equipped with a 0.9 metre cord with plug for connection to an earthed outlet socket.

The connection cord must not rest against the unit as the surface becomes hot or can be hit by thermal radiation. Contact an electrician if the cord needs to be changed. Note that due to the high temperatures in the heater, a cord of the type H05 RN-F 3G1 mm<sup>2</sup> or the like should be used.

As the halogen lamp has a high starting current the wall socket should be fuse protected by a slow burn fuse.

In the event of uncertainty contact an electrician.

### Start-up

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.

## Replacing the lamp

The heat lamp is of the highest quality and unless it is subjected to mechanical strains in the form of vibrations and impact it will last for a long time. The service life is dependent on the ambient temperature and how the heater is installed. When the heater is installed freely and outdoors the temperature will be low and the life of the lamp can be expected to be in the region of 3000 hours.

The lamp must be replaced by an installer or other skilled person.

1. Disconnect the power supply.
2. Wait until the unit is cold.
3. Remove the covers at both ends (four screws).
4. Pull the grille to one side.
5. Remove both reflector ends (two screws).
6. Loosen the connections on the terminal block.
7. Pull the lamp out of the lamp holders.
8. Check that the replacement lamp has the correct output and voltage.
9. Fit the new lamp. Note do not touch the lamp with your fingers, wear gloves or the like.
10. The protective tube must be refitted to the cables, so that the cables are not damaged when the grille is fitted.
11. Reassemble the unit again.

See the introduction pages.

## Maintenance

The power supply to the unit must be disconnected during all service, repair and maintenance work.

The unit has no moving parts so the maintenance requirement is small, but it must be kept clean and free from dust and dirt. If the reflector is not clean the thermal radiation from the unit will decrease and the heater will become hotter. A large amount of dirt can cause overheating.

The surface of the reflector is sensitive and must be cleaned with care. If the reflector is dirty it must be cleaned or replaced by a specialist.

## Residual current circuit breaker

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.

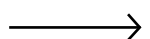
This should not be seen as a fault, but is simply rectified by connecting the appliance to the main supply via a socket without a safety cut-out, so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should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

## Packaging

Packaging materials are chosen with consideration to environment and are therefore recyclable.

## Handling of product at end of working life

This product may contain substances necessary for functionality of product but potentially dangerous for the environment. The product should not be disposed mixed with general household waste but delivered to a designated collection point for environmental recycling. Please contact local authority for further details of your nearest designated collection point.





## 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 fully or partially covered as overheating can result in a fire risk!*
- *The unit must not be placed directly under fixed wall sockets!*
- *The unit must not be used if the unit or the cord is damaged. Risk of injury!*
- *The heater is equipped with a protective grille to prevent contact or to prevent large objects from touching the hot lamp. The unit must not be used without this protective grille.*
- *The cable and plug must not be placed inside the hot radiant area.*
- *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.*
- *Children of less than 3 years should be kept away unless continuously supervised.*
- *Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.*
- *Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.*

**CAUTION** — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.



**Main office**

Frico AB  
Industrivägen 41  
SE-433 61 Sävedalen  
Sweden

Tel: +46 31 336 86 00

mailbox@frico.se

www.frico.net

**For latest updated information and information  
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