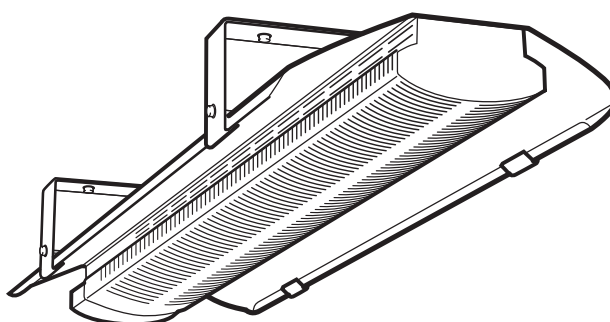


Original instructions
Bench heater SH



EN 8

SE ... 10

NO ...12

FR ... 14

DE ...16

RU ...18

Bench heater SH

EN Ecodesign Regulation (EU) 2015/1188 concerning local space heaters does not apply to all application areas. The Regulation applies when an installation is intended to provide thermal comfort for people in the premises. The Regulation does not apply to heating installations of a more technical nature e.g. in engineering/utility rooms, in production processes, frost protection, etc. The Regulation also does not apply to installations in vehicles, offshore or outdoors.

Many of Frico's products can be used as both local space heaters (as defined in (EU) 2015/1188) and for technical heating purposes. **It is up to the installer responsible for the installation to assess whether the Ecodesign Regulation is applicable or not.**

SE EU-kommissionens Ecodesignförordning (EU) 2015/1188 för rumsvärmare skiljer på användningsområden för olika installationer. Förordningen gäller då installationen är avsedd att skapa värmekomfort för människor som vistas i lokalen. Förordningen gäller inte för installationer som är avsedda för värmebehov av mer teknisk art såsom grundvärme i maskinrum, värmebehov i produktionsprocesser, frostskydd, etc. Förordningen gäller heller inte installationer i fordon, offshore eller utomhus.

Många av Fricos produkter kan användas både som rumsvärmare (definierade enligt (EU) 2015/1188) och som värmare för tekniska behov. **Vid installationstillfället är det upp till ansvarig installatör att bedöma om Ecodesignförordningen är applicerbar eller inte.**

NO Økodesigndirektivet (EU) 2015/1188 som gjelder varmeovner, gjelder ikke alle bruksområder. Direktivet gjelder når en installasjon har som formål å skape en komfortabel temperatur for personene på stedet. Direktivet gjelder ikke til oppvarmingsinstallasjoner av det mer tekniske slaget, som i produktutviklingsrom, bruksområder, i produksjonsprosesser, frostbeskyttelse etc. Direktivet gjelder heller ikke installasjoner som befinner seg i kjøretøy, offshore eller utendørs.

Mange av Fricos produkter kan brukes både som varmeovner (som definert i 2015/1188) og til formål innen teknisk oppvarming. **Det er opp til installatøren som er ansvarlig for installasjonen å vurdere hvorvidt Økodesigndirektivet er gjeldende eller ikke.**

FR La réglementation relative à l'écoconception (UE) 2015/1188 concernant les dispositifs de chauffage décentralisés ne s'applique pas à tous les cas. Elle s'applique lorsqu'une installation est destinée à assurer un confort thermique à des personnes dans les locaux. Elle ne s'applique pas au chauffage d'installations d'une nature plus technique (salles des machines/de service, processus de production, protection contre le gel, etc.). Elle ne s'applique pas non plus aux installations qui se trouvent à bord de véhicules, offshore ou en extérieur.

De nombreux produits Frico peuvent être utilisés comme des dispositifs de chauffage décentralisés (tel que défini dans la réglementation (UE) 2015/1188) et à des fins de chauffage technique. **Il appartient à l'installateur de déterminer si la réglementation relative à l'écoconception s'applique ou non.**

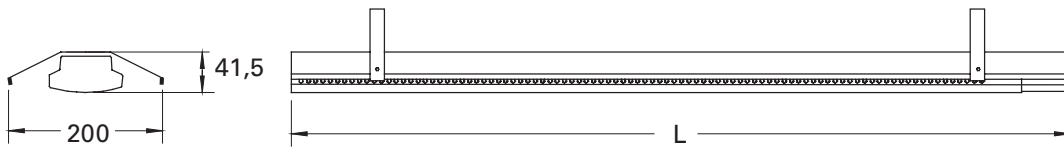
DE Die Ökodesign-Verordnung (EU) 2015/1188 über Einzelraumheizgeräte trifft nicht auf alle Anwendungsgebiete zu. Die Verordnung findet Anwendung, wenn eine Installation dazu bestimmt ist, innerhalb eines Raumes ein für den Menschen angenehmes Temperaturniveau zu erreichen. Die Verordnung findet keine Anwendung auf Heizungsinstallationen technischer Natur, z. B. in Technik-/Wirtschaftsräumen, bei Produktionsprozessen, für Frostschutz usw. Die Verordnung findet ebenfalls keine Anwendung bei Installationen in Fahrzeugen, Offshoreanlagen und Außenbereichen.

Viele Frico-Produkte können sowohl als Einzelraumheizgerät (gemäß Definition nach (EU) 2015/1188) als auch für technische Heizprozesse eingesetzt werden. **Der Monteur, der für die Installation verantwortlich ist, muss beurteilen, ob die Ökodesign-Verordnung anwendbar ist oder nicht.**

RU Положения требований Экодизайн (EU) 2015/1188 по приборам локального обогрева не охватывают все возможные области их применения. Требования Экодизайн применяются, когда установка предназначена для обеспечения теплового комфорта людей в помещениях. Эти Требования не распространяются на установки и системы обогрева более сложного технического характера, например, при обогреве технических, служебных и производственных помещений, при организации защиты от замерзания и т. д. Также требования Экодизайн не применяются в случае установки оборудования в транспортных средствах, сооружениях на море и на открытых площадках.

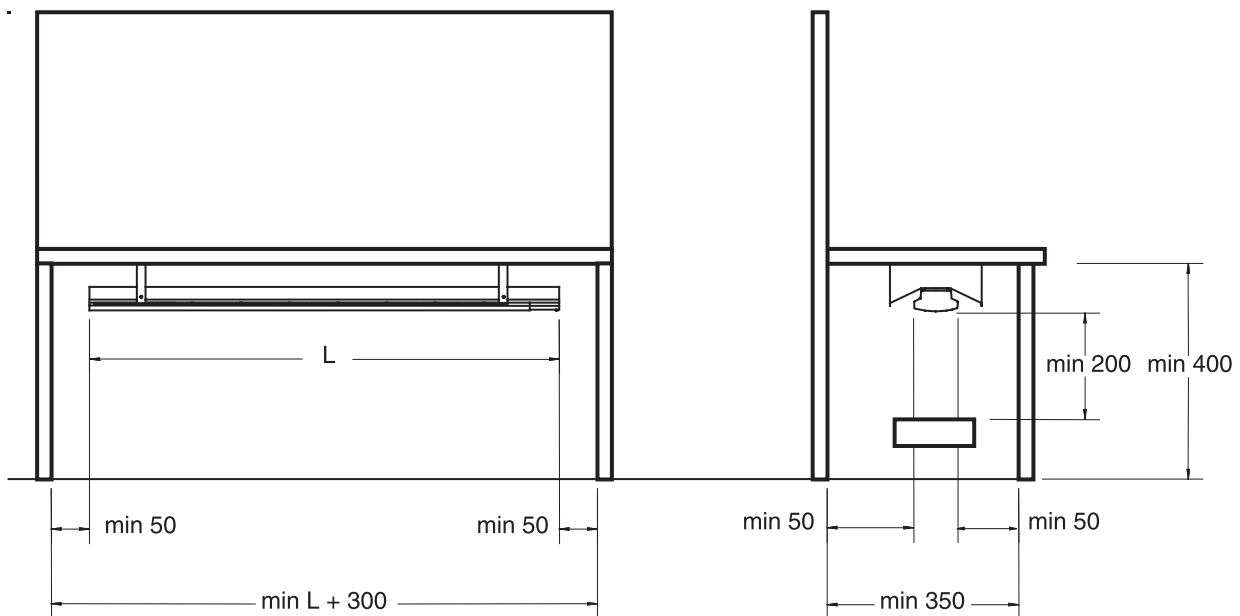
Многие виды оборудования Frico могут применяться как в качестве приборов локального обогрева (как определено нормативами (EU) 2015/1188) так и в качестве составных частей обогревательных систем общественных и производственных зданий. **Ответственность за определение необходимости применения или не применения требований Экодизайн несет организация, осуществляющая монтаж данного оборудования.**

Bench heater SH



	L [mm]
SH17521/SH17531	700
SH25021/SH25031	1000
SH37521/SH37531	1500

Minimum distances



- EN: Minimum distances**
 SE: Minimiavstånd
 NO: Minsteavstand
 FR: Distances minimales
 DE: Mindestabstand
 RU: Минимальные расстояния при установке

Bench heater SH

Bench heater SH (IP21)

Item number	Type	Output [W]	Voltage [V]	Amperage [A]	LxH*xW [mm]	Weight [kg]
10201	SH17521	175	230V~	0,8	700x110x200	1,4
10202	SH17531	175	400V~	0,4	700x110x200	1,4
10203	SH25021	250	230V~	1,1	1000x110x200	1,9
10204	SH25031	250	400V~	0,6	1000x110x200	1,9
10206	SH37521	375	230V~	1,6	1500x110x200	2,9
10207	SH37531	375	400V~	0,9	1500x110x200	2,9

*) Height with brackets

EN: Height with brackets
SE: Höjd med fästkonsoler
NO: Høyde med festebraketter
FR: Hauteur avec consoles.
DE: Höhe mit Halterungen
RU: Высота со скобами.



EN: Output	EN: Voltage	EN: Amperage	EN: Weight
SE: Effekt	SE: Spänning	SE: Ström	SE: Vikt
NO: Effekt	NO: Spenning	NO: Strøm	NO: Vekt
FR: Puissance	FR: Tension	FR: Intensité	FR: Poids
DE: Heizleistung	DE: Spannung	DE: Stromstärke	DE: Gewicht
RU: Мощность	RU: Напряжение	RU: Ток	RU: Вес

Controls



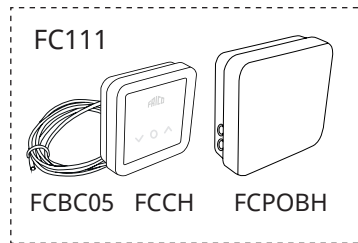
TAP16R



TEP44



RTX54

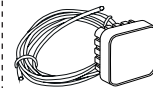


FC111

FCBC05

FCCH

FCPOBH



FCRTX



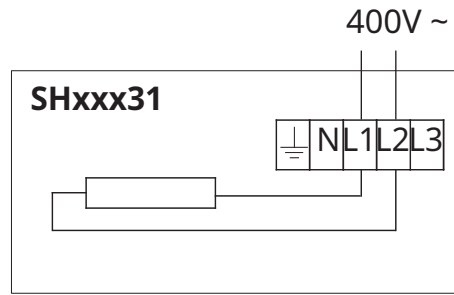
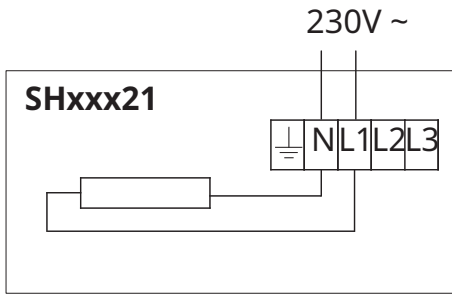
FCOTX

Item number	Type	Dimensions
92790	TAP16R	87x87x53 mm
205540	TEP44	87x87x53 mm
93044	RTX54	82x88x25 mm

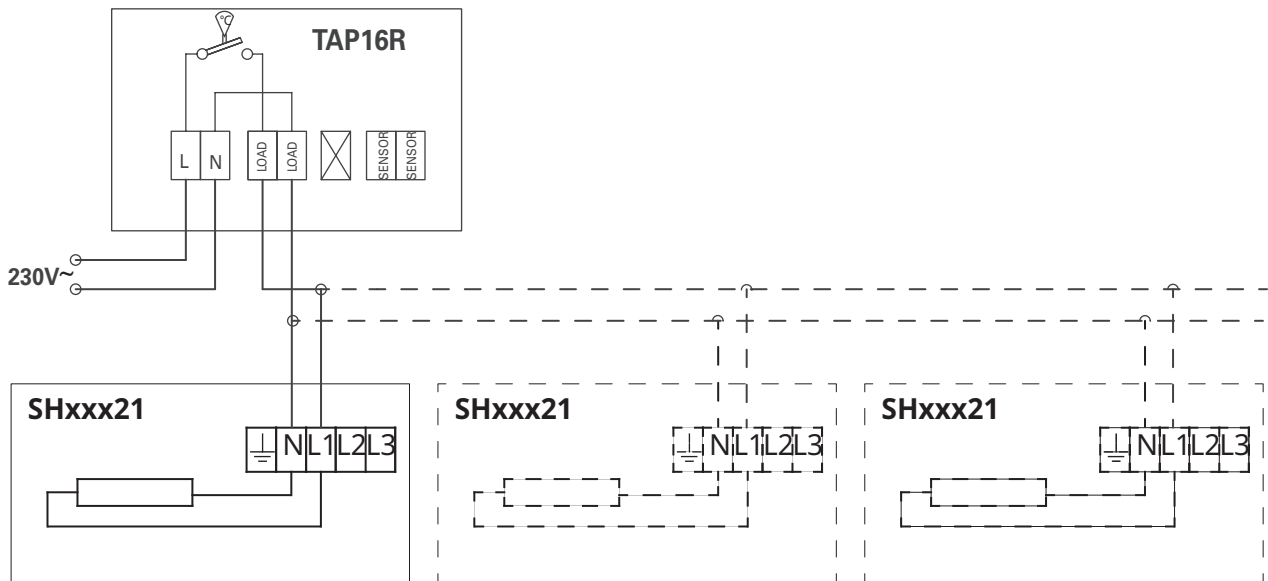
Item number	Type	Dimensions
74680	FC111	89x89x26 mm , 105x105x38 mm
74694	FCRTX	39x39x23 mm
74695	FCOTX	39x39x23 mm

Bench heater SH

Wiring diagrams
Internal wiring diagrams

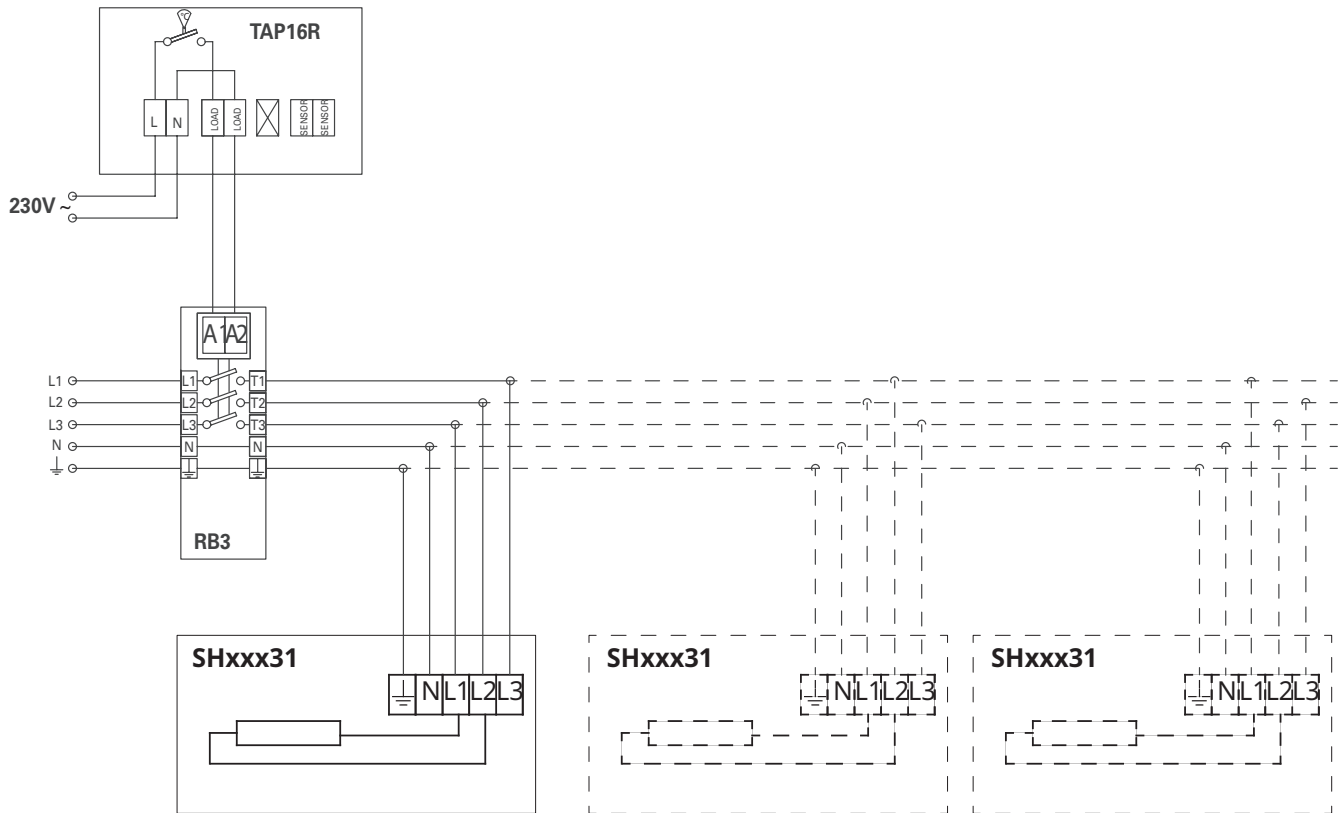


Control by thermostat
230V~



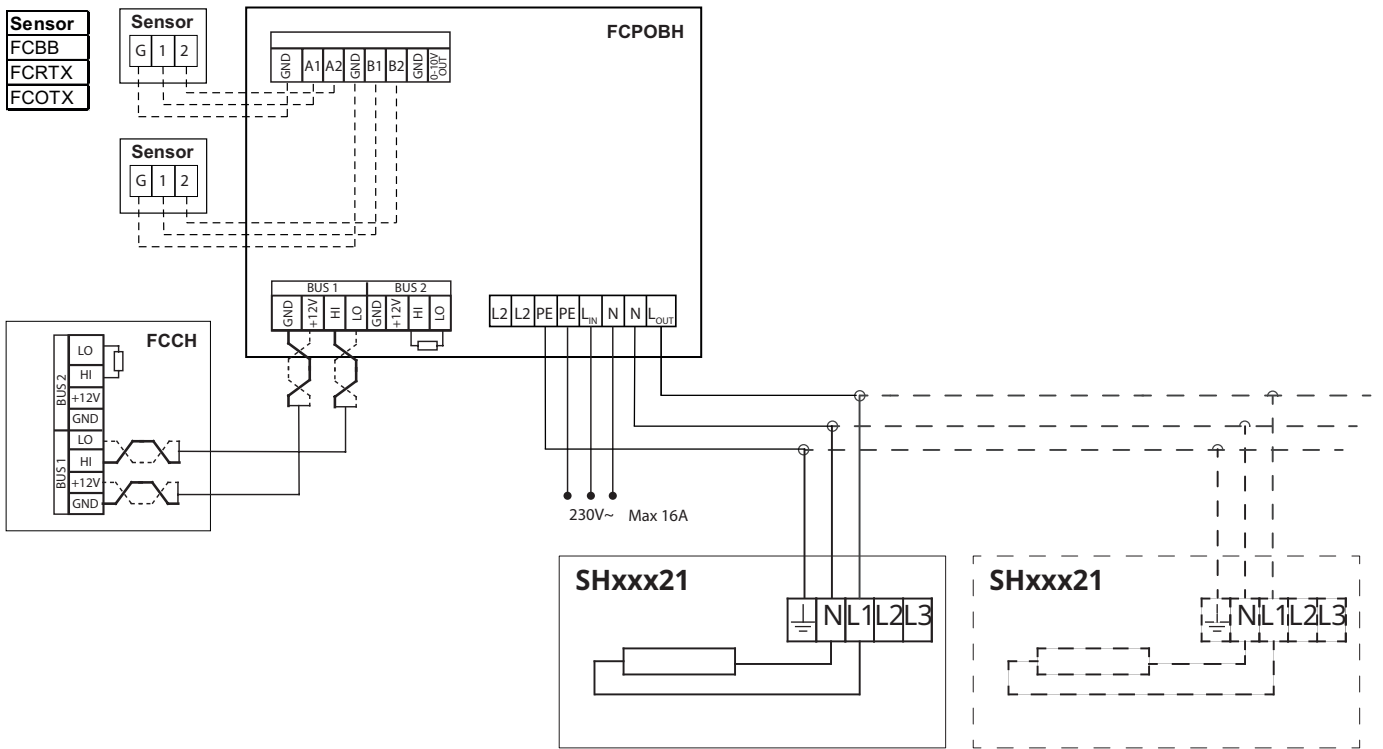
Bench heater SH

Control by thermostat
400V~

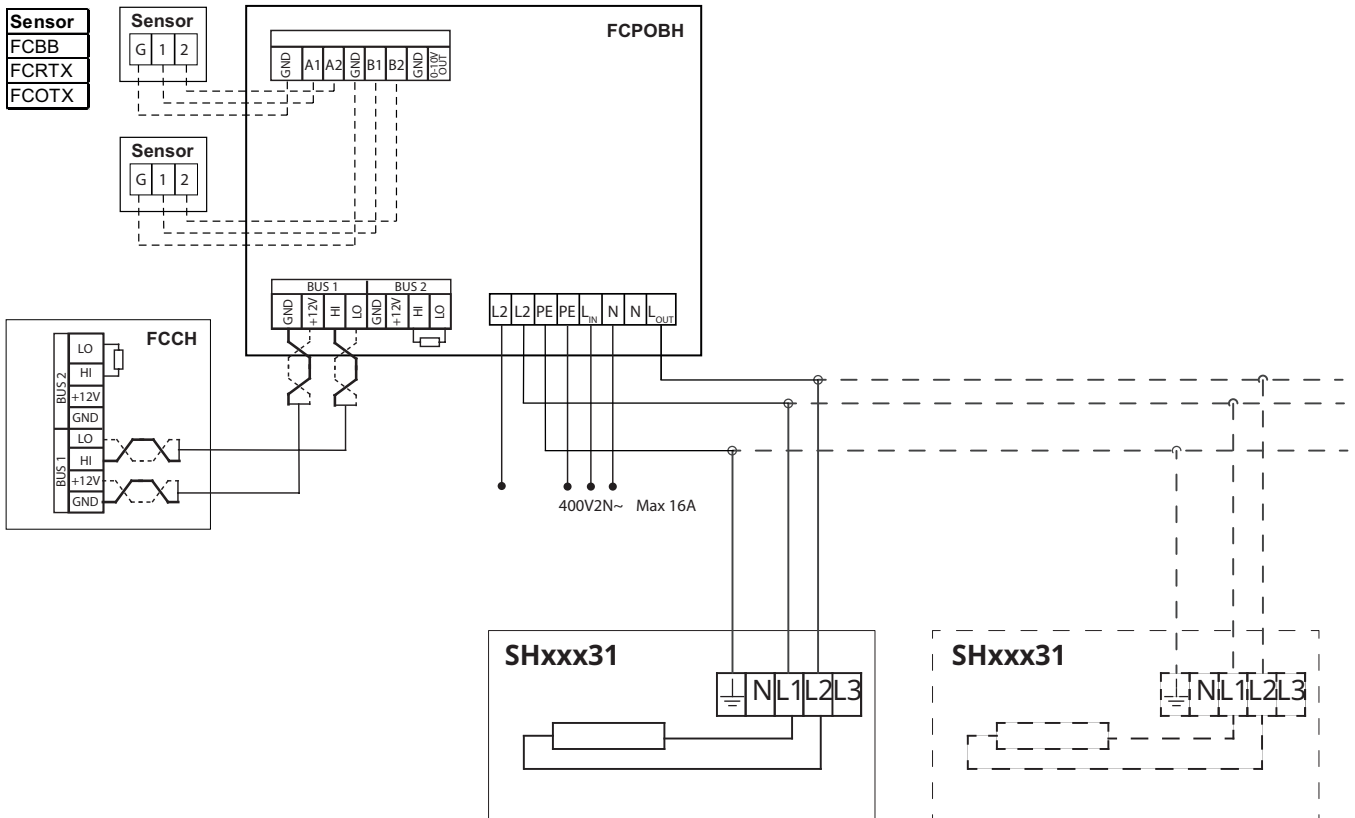


Bench heater SH

Frico control
230V~



Frico control
400V~



Installation and operating instructions

General Instructions

Read these instructions carefully prior to 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 should the product be used in the manner intended and in accordance with the instructions.

Application

Bench heater SH is designed for use with church pews, waiting room benches and the like. The bench heater is installed under the seat and distributes heat in the occupied zone through convection and radiant heat.

Protection class: IP21.

Mounting

Bench heater SH is installed horizontally underneath benches, mounting brackets are included. The holes in the brackets are $\varnothing 6$ mm with a c-c distance of 90 mm. The space under the bench may only be completely covered on two sides.

1. Mount the brackets underneath the bench and then fit the heater into the brackets.
2. Fix the heater to the brackets by using the premounted screws on the bracket. The brackets can be mounted with a flexible c-c distance.

Note! The heater may not be angled or pointing upwards. For minimum distance, see diagrams on introductory pages.

Electrical installation

The installation, which should be preceded by an isolator switch with a contact separation of at least 3 mm, should only be wired by a competent electrician and in accordance with the latest edition of IEE wiring regulations.

Bench heater SH is intended for permanent installation and is approved for parallel connection. The connection box contains terminal blocks, 5×4 mm² making it possible to connect several heaters in parallel, via two cable glands $\varnothing 18$ mm.

Control

When using this product as a local space heater according to Ecodesign Regulation (EU) 2015/1188, it must be supplemented with one of the following approved controls. Please note that a relaybox RB3 is required for 400V~ products.

- TAP16R, electronic thermostat that includes:
 - Electronic room temperature control plus week timer
 - Room temperature control with open window detection
 - Adaptive start control

The product can be controlled in a different way, e.g. by an overall control system (BMS), but in that case the responsibility lies with the installer to ensure that the control system is programmed to make the installation meet the requirements of Ecodesign Regulation (EU) 2015/1188.

Maintenance

In all electrical heating appliances, small clicks can occur due to movement when the material expands and contracts with changes in temperature.

As the components are maintenance-free, no maintenance other than cleaning is necessary. The frequency of cleaning can vary depending on local conditions, although it should be at least twice a year. Grilles and elements can be vacuum cleaned or wiped using a damp cloth. Use a brush when vacuuming to prevent damaging sensitive parts.

Packaging

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

Handling of product at end of working life

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

Safety

- *For all installations of electrically heated products a residual current circuit breaker 300 mA for fire protection should 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!*
- *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.



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