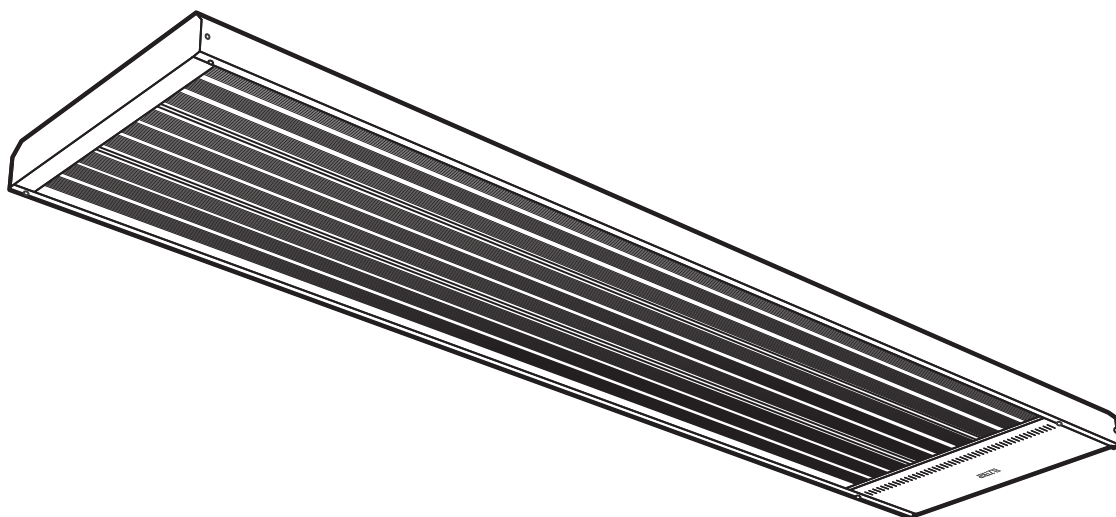


Original instructions
Elztrip EZ300



EN ... 12

SE ... 14

NO ... 16

FR ... 18

DE ... 21

NL ... 24

ES ... 27

PL ... 30

RU ... 33

FI ... 36

DK ... 38

Elztrip EZ300

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.** Control solutions for installations not covered by the Ecodesign Regulation are listed in a separate table.

SE EU-kommissionens Ecodesignförförordning (EU) 2015/1188 för rumsvärmare skiljer på användningsområden för olika installationer. Förförordningen gäller då installationen är avsedd att skapa värmekomfort för människor som vistas i lokalen. Förförordningen gäller inte för installationer som är avsedda för värmebehov av mer teknisk art såsom grundvärme i maskinrum, värmebehov i produktionsprocesser, frostskydd, etc. Förförordningen 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 Ecodesignförförordningen är applicerbar eller inte.** Regleringslösningar för installationer som inte omfattas av Ecodesignförförordningen redovisas i separat tabell.

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.** Regulerings-løsninger for installasjoner som ikke dekkes av Økodesigndirektivet står oppført i en separat tabell.

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.** Les solutions de contrôle pour les installations qui ne sont pas couvertes par la réglementation relative à l'écoconception sont présentées dans un tableau distinct.

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.** Steuerungslösungen für Installationen, die nicht unter die Ökodesign-Verordnung fallen, sind in einer separaten Tabelle aufgelistet.

FI Paikallisia tilalämmittämiä käsittlevä Ecodesign-asetus (EU) 2015/1188 ei kata kaikkia käyttökohteita. Asetus on voimassa ainoastaan silloin, kun lämmittimellä halutaan parantaa tiloissa olevien ihmisten lämpömukavuutta. Asetus ei koske teknisempiä lämmitysjärjestelmiä esim. konehuoneissa/kodinhoitohuoneissa, tuotantoprosesseissa, pakkassuojausta, jne. Asetus ei myöskään koske ajoneuvoissa, laivoissa ja ulkona käytettäviä järjestelmiä.

Useita Frico-tuotteita voidaan käyttää sekä paikallisina tilalämmittiminä (asetuksen (EU) 2015/1188 mukaan) että teknisempiin lämmitystarkoituksiin. **Asentajan on määritettävä sovelletaanko asennukseen Ecodesign-asetusta vai ei.** Ohjausratkaisut asennuksiin, joita Ecodesign-asetus ei käsittele, on lueteltu erillisessä taulukossa.

NL De ecodesignverordening (EU) 2015/1188 betreffende lokale ruimteverwarmers is niet van toepassing op alle toepassingsgebieden. De verordening is van toepassing in het geval een installatie bedoeld is om mensen in het pand te voorzien van verwarmingscomfort. De verordening is niet van toepassing op verwarmingsinstallaties van een meer technische aard, bijv. in machinekamers/bijkeukens, in productieprocessen, ten behoeve van vorstbeveiliging, enz. De verordening is ook niet van toepassing op installaties in voertuigen, offshore of buiten.

Veel van de Frico-producten kunnen zowel gebruikt worden als lokale ruimteverwarmers (zoals gedefinieerd in (EU) 2015/1188) als ten behoeve van technische verwarmingsdoeleinden. **Het is de taak van de installateur die verantwoordelijk is voor de installatie om te bepalen of de ecodesignverordening wel of niet van toepassing is.** Regelsystemen voor installaties die niet vallen onder de ecodesignverordening worden vermeld in een aparte tabel.

ES El Reglamento (UE) 2015/1188 sobre diseño ecológico en relación con los aparatos de calefacción local no se aplica a todas las áreas de aplicación. El Reglamento se aplica cuando una instalación sirve para proporcionar confort térmico a las personas que están en el interior. El Reglamento no se aplica a instalaciones de calefacción de naturaleza más técnica, por ejemplo en salas de ingeniería o cuartos de servicio, en procesos de producción, protección contra heladas, etc. El Reglamento no se aplica a instalaciones en vehículos, en alta mar o al aire libre.

Muchos de los productos de Frico pueden utilizarse como aparatos de calefacción local (según se define en el Reglamento (UE) 2015/1188) y con fines de calefacción técnica. **Corresponde al instalador responsable de la instalación evaluar si se aplica el Reglamento sobre diseño ecológico o no.** Las soluciones de control para instalaciones no cubiertas por el Reglamento relativo a diseño ecológico se citan en otra tabla.

PL Jeśli chodzi o miejscowe ogrzewacze pomieszczeń, Rozporządzenie (UE) 2015/1188 dotyczące ekoprojektu nie ma zastosowania do wszystkich obszarów zastosowa. Rozporządzenie to ma zastosowanie, kiedy zadaniem instalacji jest zapewnienie komfortu termicznego dla ludzi przebywających w budynkach. Rozporządzenie nie ma zastosowania do instalacji grzewczych mających charakter bardziej techniczny, np. w pomieszczeniach przemysłowych/gospodarczych, w procesach wytwórczych, jako ochrona przed zamarzaniem itp. Rozporządzenie nie ma również zastosowania do instalacji w pojazdach, morskich lub na zewnątrz.

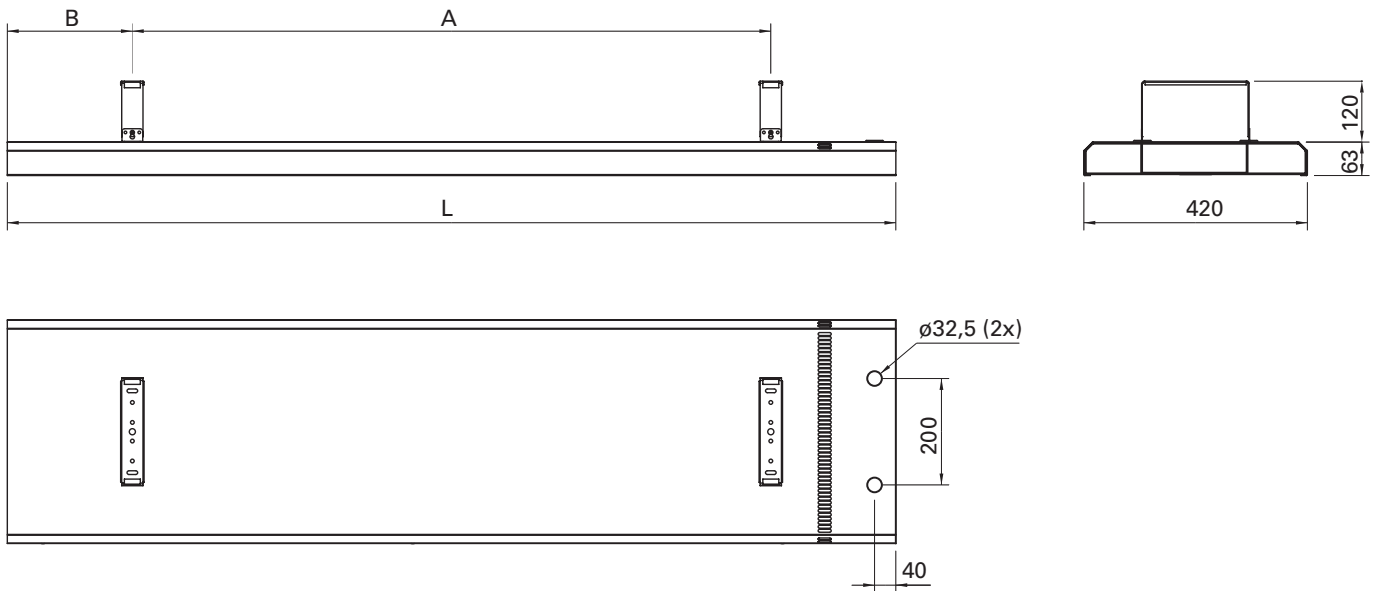
Wiele produktów firmy Frico może być używanych zarówno jako miejscowe ogrzewacze pomieszczeń (zgodnie z definicją w Rozporządzeniu (UE) 2015/1188), jak i w technicznych instalacjach grzewczych. **Do instalatora odpowiedzialnego za instalację należy ocena, czy Rozporządzenie dotyczące ekoprojektu ma zastosowanie czy nie.** Systemy sterowania dla instalacji nie objętych Rozporządzeniem dotyczącym ekoprojektu zostały podane w oddzielnej tabeli.

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. Приборы управления для установок оборудования, не подпадающих под положения требований Экодизайн, перечислены в отдельной таблице.

DK Ecodesign-regulativet (EU) 2015/1188 vedrørende produkter til lokal rumopvarmning gælder ikke for alle anvendelsesområder. Regulativet gælder, når en installation har til hensigt at give varmekomfort for personer i lokalerne. Regulativet gælder ikke for varmeinstallationer af en mere teknisk egenskab, f.eks. i teknikrum eller lign., i produktionsprocesser, til frostbeskyttelse etc. Regulativet gælder heller ikke for installation i køretøjer, offshore eller udendørs.

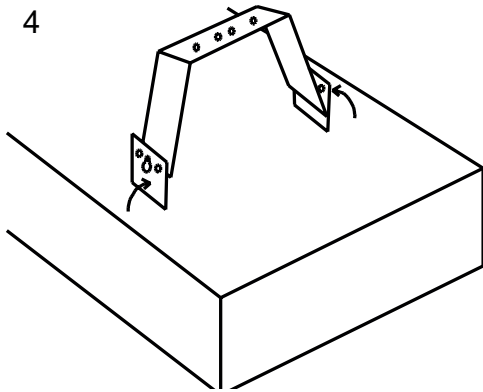
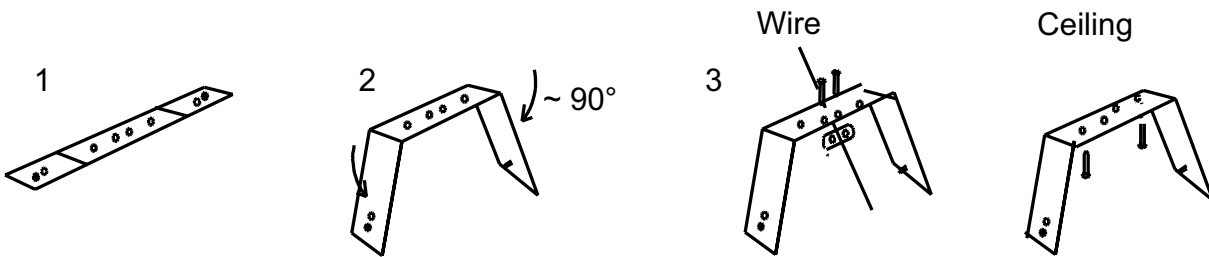
Mange af Fricos produkter kan benyttes både til lokal rumopvarmning (som defineret i (EU) 2015/1188) og til tekniske opvarmningsformål. **Det er op til den installatør, som er ansvarlig for installationen, at vurdere om Ecodesign-regulativet er gældende eller ej.** Styringsløsninger til installationer, der ikke er omfattet af Ecodesign-regulativet er anført i en separat tabel.

Elztrip EZ300



	L [mm]	A [mm]	B [mm]
EZ336	1670	1200	235
EZ345	2030	1500	265

Fig.1. Mounting



EN: Wires (not supplied)

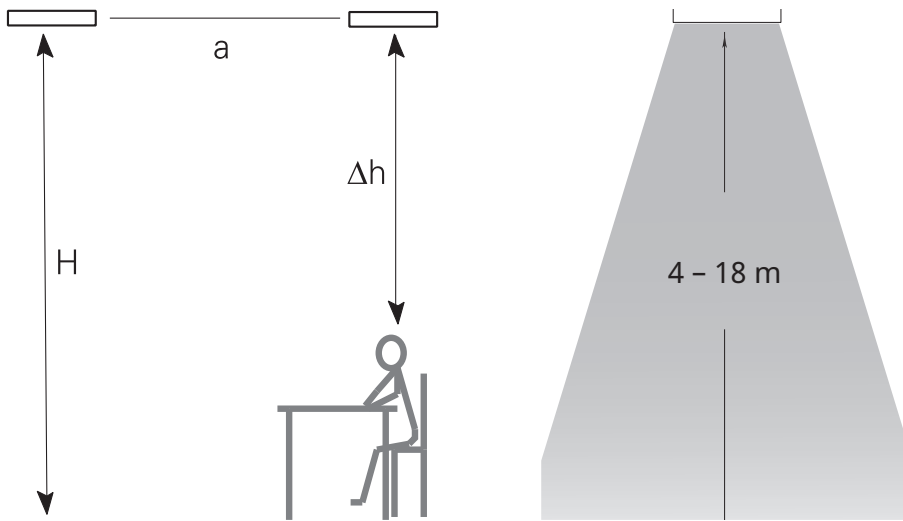
SE: Vajer (medfølger ej)
 NO: Vaier (medfølger ikke)
 DE: Drahtseile (nicht im Lieferumfang)
 RU: Тросы (не поставляются)
 FR: Câbles (non fournis)
 ES: Cables (no incluidos)
 NL: Draden (niet bijgeleverd)
 PL: Przewody (nie jest dostarczany)
 FI: Vaijeri (ei toimitettu)
 DK: Wires (medfølger ikke)

EN: Ceiling

SE: Tak
 NO: Tak
 DE: Decke
 RU: Потолок
 FR: Plafond
 ES: Techo
 NL: Plafond
 PL: Sufit
 FI: Katto
 DK: Loft

Elztrip EZ300

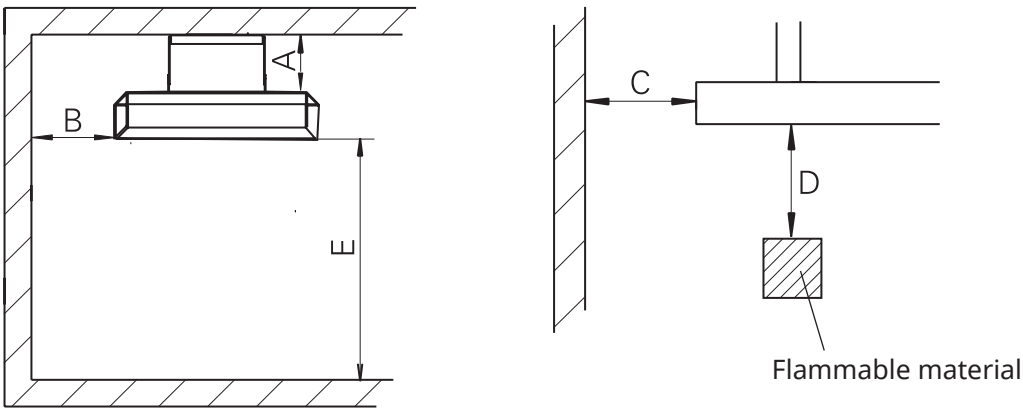
Fig.2. Positioning



$a < H$
 $\Delta h = 1,5 - 2 \text{ m}$

- SE: Placering
- NO: Plassering
- DE: Aufstellung
- RU: Расположение
- FR: Positionnement
- ES: Ubicación
- NL: Plaatsing
- PL: Lokalizacja
- IT: Posizionamento
- FI: Sijoitus
- DK: Placering

Fig.3. Minimum distances



	EZ300 [mm]
A	120
B	250
C	250
D	700
E	1800

- SE: Minimiavstånd, Brännbart material
- NO: Minsteavstand, Brennbart materiale
- FR: Distances minimales, Matériau inflammable
- DE: Mindestabstand, Entflammbares Material
- NL: Minimale afstand, Brandbaar materiaal
- ES: Distancias mínimas, Material inflamable

- PL: Minimalne odległości, Materiał łatwopalny
- IT: Distanze minime, Materiali infiammabili
- RU: Минимальные расстояния при установке, Легковоспламеняемые материалы
- FI: Minimietäisyydet, Tulenarka materiaali
- DK: Minimumsafstande, Brændbart materiale

Elztrip EZ300

Controls

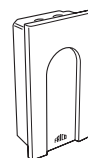
Item number	Type	HxWxD [mm]
92790	TAP16R	87x87x53
205540	TEP44	87x87x55
93012	RB3	155x87x43
205688	RB123	155x87x43
93044	RTX54	82x88x25
205550	SKG30	115x85x40
211780	PDK65	102x70x50



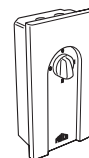
TAP16R



TEP44



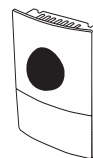
RB3



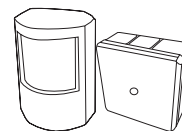
RB123



RTX54



SKG30



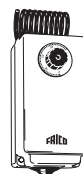
PDK65

Controls for installations not covered by the Ecodesign Regulation (EU) 2015/1188

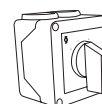
Item number	Type	HxWxD [mm]
5999	KRT1900	165x57x60
10214	KRTV19	165x57x60
11733	S123	72x64x46



KRT1900



KRTV19



S123

SE: Regleringar för installationer som inte omfattas av Ecodesign, förordning (EU) 2015/1188

NO: Reguleringsløsninger for installasjoner som ikke dekkes av Økodesigndirektivet (EU) 2015/1188

FR: Régulations pour les installations non couvertes par la réglementation relative à l'écoconception (UE) 2015/1188

DE: Steuerungen für Installationen, die nicht unter die Ökodesign-Verordnung (EU) 2015/1188 fallen

NL: Regelaars voor installaties die niet vallen onder de codesignverordening (EG) 2015/1188

ES: Controles para instalaciones no cubiertas por el Reglamento (UE) 2015/1188 sobre diseño ecológico

PL: Systemy sterowania dla instalacji nie objętych Rozporządzeniem (UE) 2015/1188 dotyczącym ekoprojektu

RU: Приборы управления для установок оборудования, не подпадающих под нормы требований Экодизайн (EU) 2015/1188

FI: Ohjausratkaisut asennuksiin, joita Ecodesign-asetus (EU) 2015/1188 ei käsittele

DK: Stylinger til installationer der ikke er omfattet af Ecodesign-regulativet (EU) 2015/1188

Elztrip EZ300

Elztrip EZ300 (IP44)

Item number	Type	Heat output [W]	Voltage [V]	Amperage [A]	Max. surface temperature [°C]	Dimensions LxHxW [mm]	Weight [kg]
11070	EZ336	3600	230V3~/400V3N~	9,0/5,2	320	1670x63x420	19,8
11071	EZ345	4500	230V3~/400V3N~	11,3/6,5	320	2030x63x420	24,2



EN: Heat output

SE: Värmeeffekt
 NO: Varmeeffekt
 FR: Puissance
 DE: Heizleistung
 NL: Verwarmingscapaciteit
 ES: Potencia calorífica
 PL: Moc grzewcza
 IT: Stadi potenza
 RU: Выходная мощность
 FI: Lämmitysteho
 DK: Varmeeffekt

EN: Voltage

SE: Spänning
 NO: Spenning
 FR: Tension
 DE: Spannung
 NL: Voltage
 ES: Tensión
 PL: Napięcie
 IT: Tensione
 RU: Напряжение
 FI: Jännite
 DK: Spænding

EN: Amperage

SE: Ström
 NO: Strøm
 FR: Intensité
 DE: Stromstärke
 NL: Stroomsterkte
 ES: Intensidad
 PL: Natężenie
 IT: Corrente
 RU: Tok
 FI: Virta
 DK: Strømstyrke

EN: Max. surface temperature

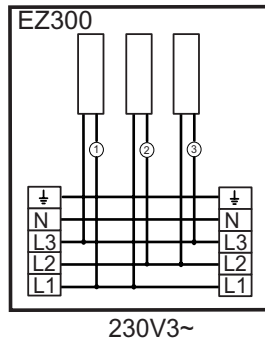
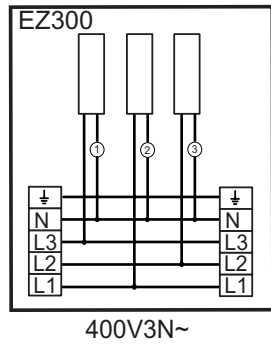
SE: Maximal yttemperatur
 NO: Maksimal overflatetemp.
 FR: Température max. de surface
 DE: Max. Oberflächentemperatur
 NL: Max. oppervlaktetemperatuur
 ES: Temperatura superficial máxima
 PL: Maksymalna temp. elementu grzejnego
 IT: Temperatura max. superficiale
 RU: Max. температура поверхности
 FI: Suurin pintalämpötila
 DK: Maksimal overfladetemperatur

EN: Weight

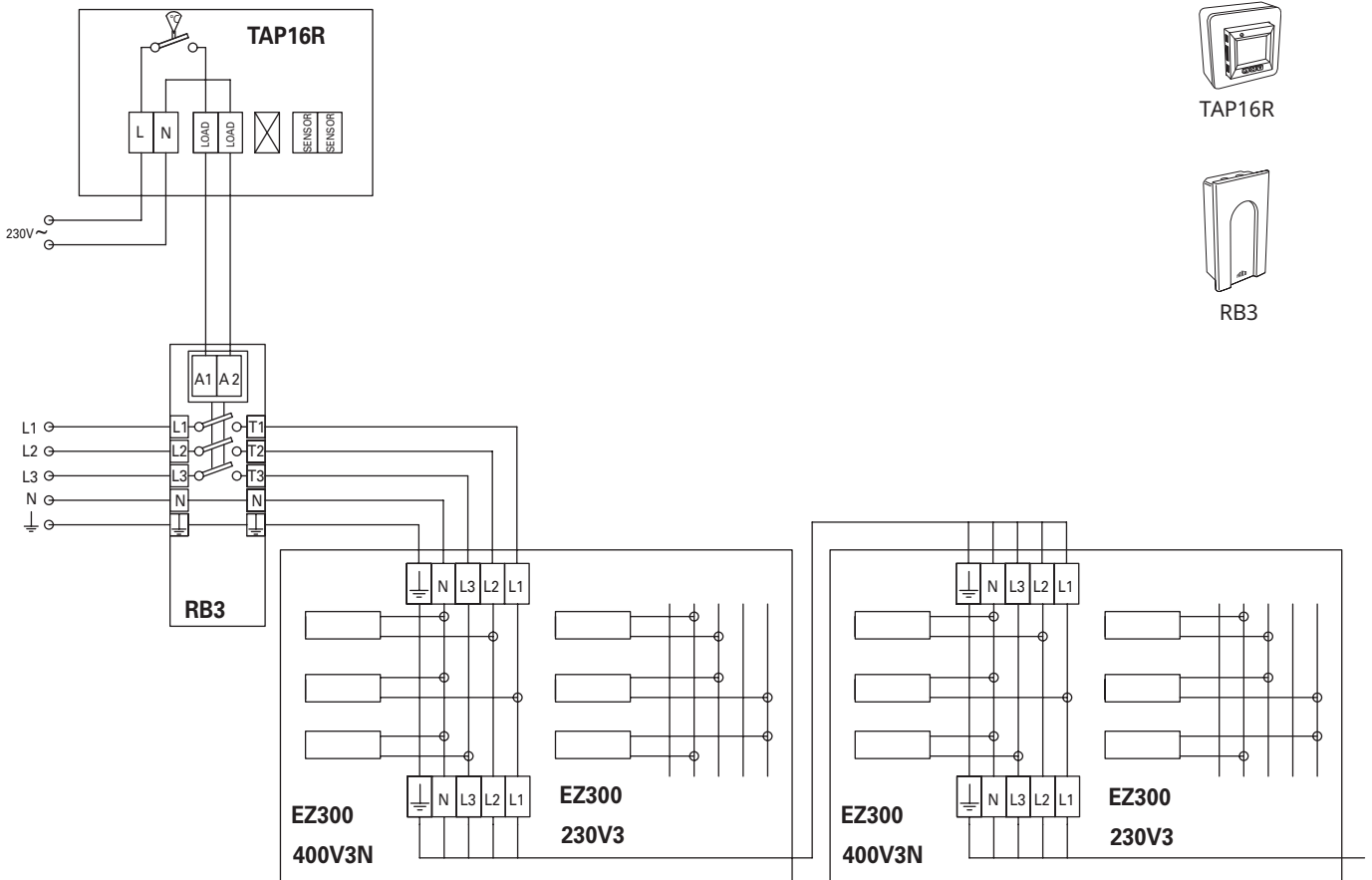
SE: Vikt
 NO: Vekt
 FR: Poids
 DE: Gewicht
 NL: Gewicht
 ES: Peso
 PL: Masa
 IT: Peso
 RU: Bec
 FI: Paino
 DK: Vægt

Elztrip EZ300

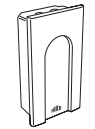
Wiring diagrams



Control with thermostat and relaybox



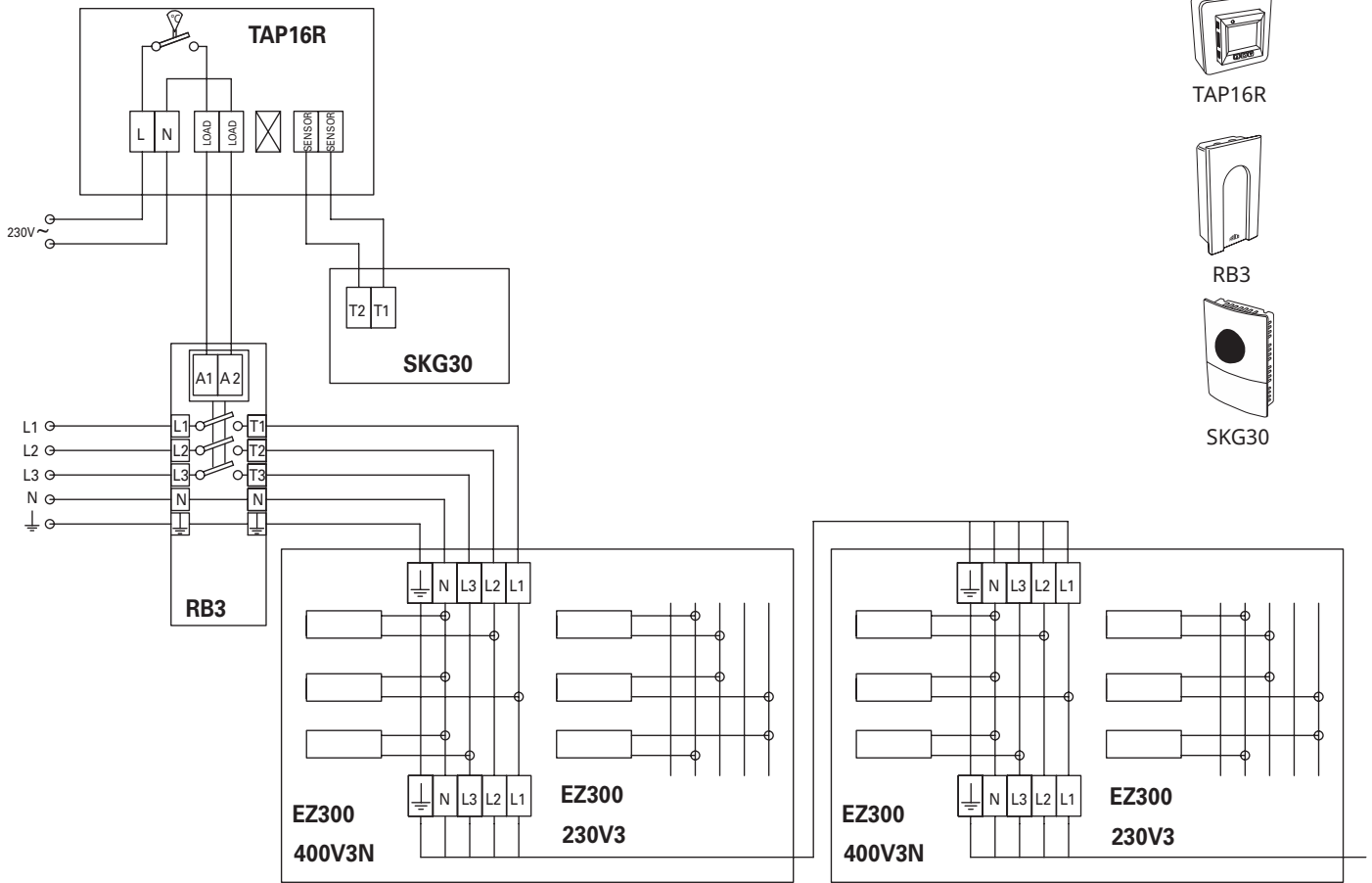
TAP16R



RB3

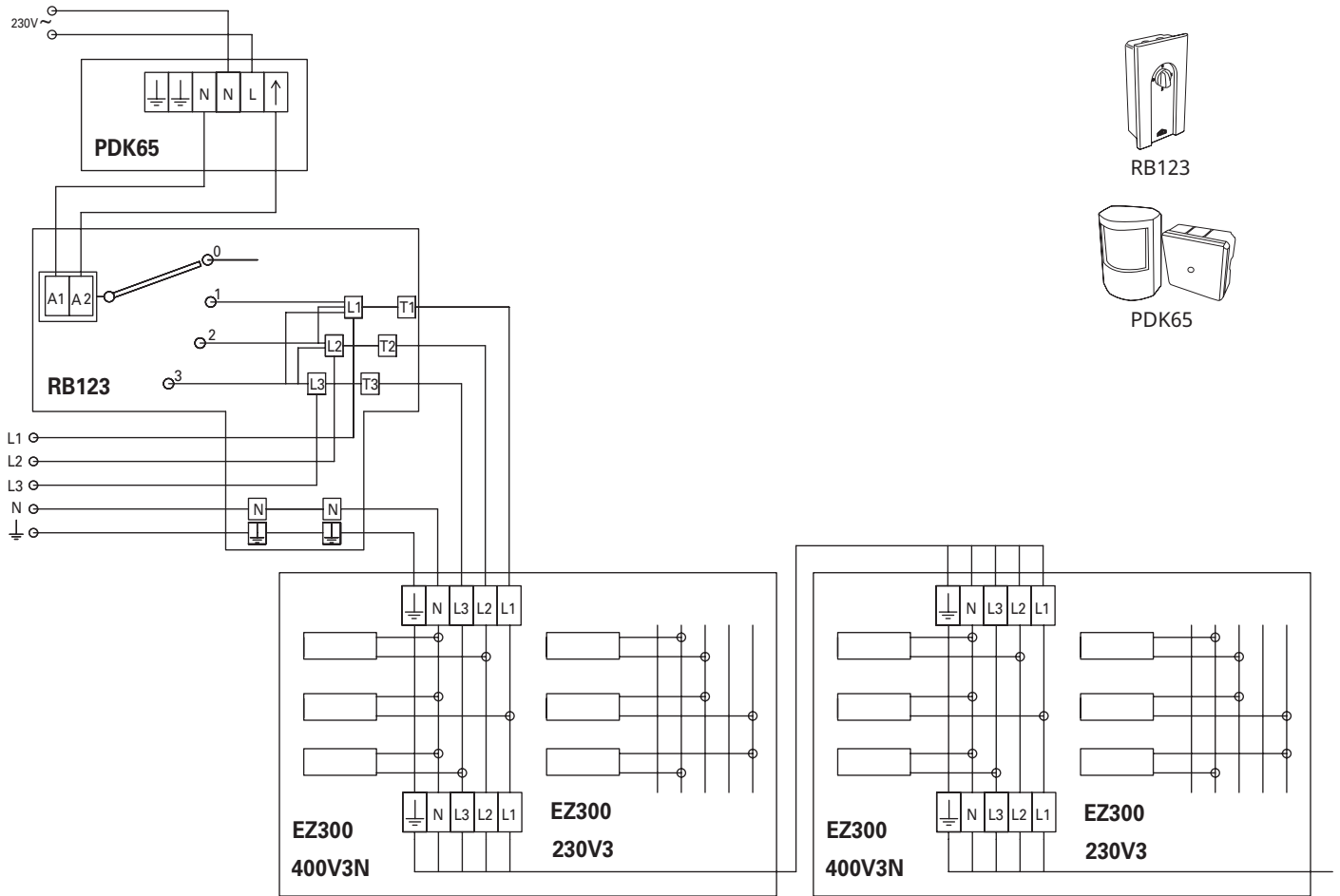
Elztrip EZ300

Control by thermostat, relaybox and black bulb sensor



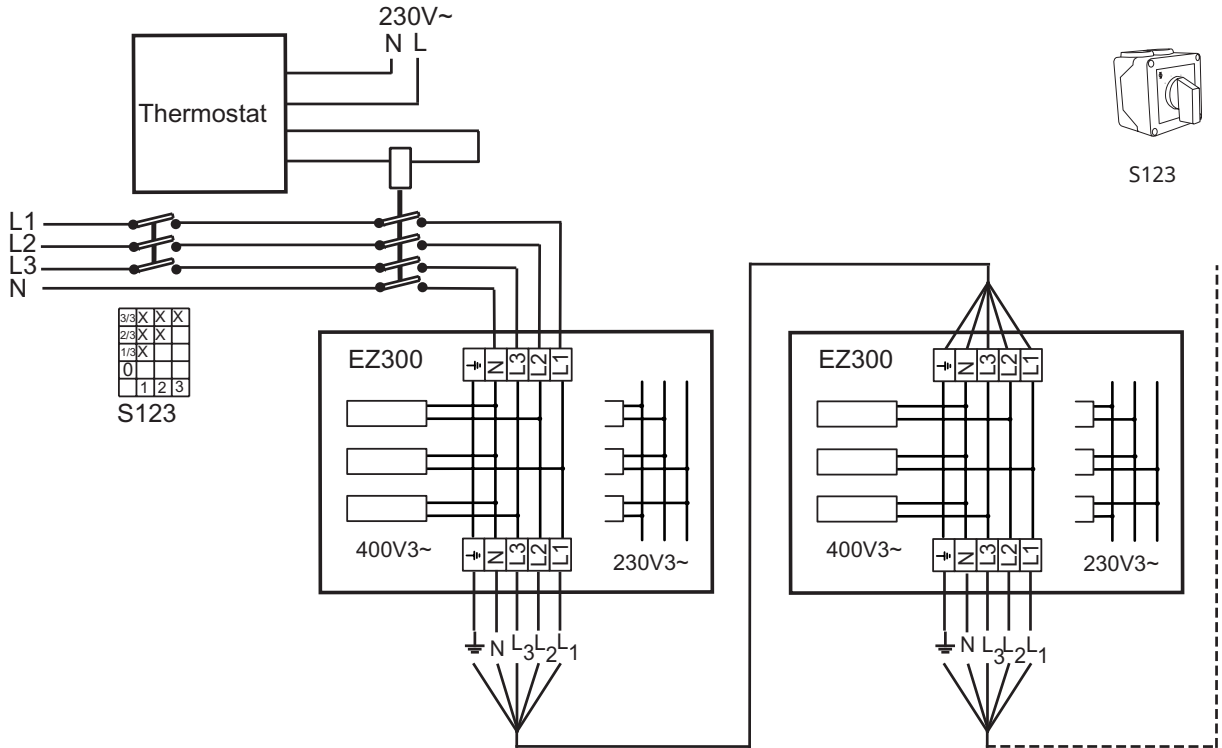
Elztrip EZ300

Control by relaybox with 3 step output control and presence detector



Elztrip EZ300

Control with thermostat, contactor and switch - for installations not covered by the Ecodesign Regulation (EU) 2015/1188



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

EZ300 is a triple panel radiant heater with discreet and robust design that blends well with electrical fittings.

EZ300 is intended for total and supplementary heating in industrial environments such as warehouses, workshops etc.

The recommended installation heights for the heater are shown on the introduction pages.

Protection class: IP44.

Operation

The panels have an operating temperature of up to 320 °C and the heat is radiated to cold surfaces. Max. surrounding temperature +30 °C.

Mounting

Elztrip is installed horizontally on ceilings, in armature rails, on cables, suspended, etc. Standard fittings for mounting are included and are found inside the connection box. If the heater is suspended by wires, use the four mounting points on the heater. The distance between panels should not be greater than the height between panel and floor; i.e. (a) should be less than (H), see illustration on introductory page. For minimum distance, see diagrams on introductory pages.

1. Determine the position of the panel on the ceiling.
2. Bend the "legs" of the brackets approximately 90° (fig 1.1, 1.2).
3. Mount the brackets with an internal distance according to dimensional drawing page 4, on the ceiling or on a wire (fig 1.3). When the panel is mounted on a wire put the bracket on top of wire.
4. Mount the panel according to fig 1.4, start with one end and then assemble the other one.
5. Make sure that the screws are tightened.
6. When mounting on wire, use clips that prevent the panel from sliding.

Electrical installation

EZ300 is delivered prewired for 400 V3N~ and permanent installation, can be converted for 230 V3~. Elztrip is intended for permanent installation. The heaters are approved for serial connection. 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.

Electrical installation is performed via cable glands in the junction box on top of the unit (2 x Ø32,5 mm). The cable glands used must meet the protection class requirements. The largest cable diameter for the terminal block is 16 mm². For serial connection the maximum fuse size is 35A.

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 RB is also required.

- TAP16R, electronic thermostat that includes:
 - Electronic room temperature control plus week timer
 - Room temperature control with open window detection
- TAP16R and SKG30, black bulb sensor that include:
 - Electronic room temperature control plus week timer
 - Room temperature control with open window detection
 - Black bulb sensor
- RB123, relaybox with 3 step output control and PDK65, presence detector that include:
 - Two or more manual stages, no temperature control
 - Working time limitation
 - Room temperature control with presence detection

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.

Start-up

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

Maintenance

The power supply to the unit must be disconnected during all service, repair and maintenance work. Wait until the unit is cold. The unit has no moving parts so the maintenance requirement is small, but it must be kept clean and free from dust and dirt.

- There might be a rattling noise the first time of use when the surface coating of the panels is settling.
- In all electrical heating appliances, small clicks can occur due to movement when the material expands and contracts with changes in temperature.
- The product should always be handled with clean gloves. Make sure the product is clean before it is switched on.
- Presence of aerosols, lacquer, solvents, dust and similar may cause a coating on the product and discolor them.
- A slight change of colour of the product over time is normal. Incorrect installation or uncommonly high ambient temperature can cause increased discoloration. The output is not affected.

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 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!*
- *The unit must not be used if the unit or the cord is damaged. Risk of injury!*
- *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.



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