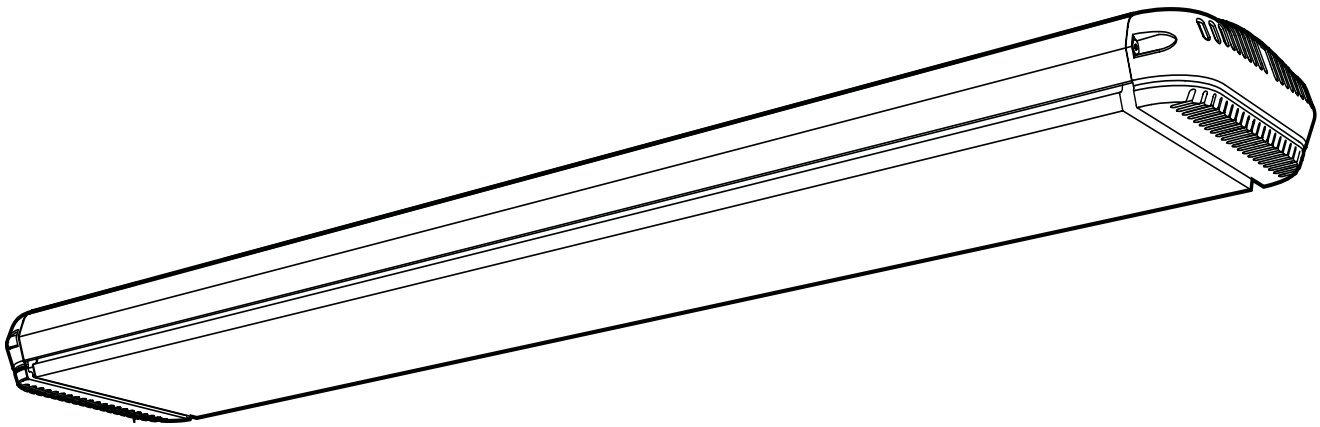
Original instructions

Darkztrip



EN ... 15 FR ... 18 DE ... 21 SE ... 25 NO ... 28

DK ... 31 FI ... 34 ES ... 37 NL ... 40 IT ... 44

PL .... 47 RU 50

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.

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.

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.** Regleringslösningar för installationer som inte omfattas av Ecodesignförordningen 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.

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.

FI Paikallisia tilalämmittimiä käsittelevä 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.

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.

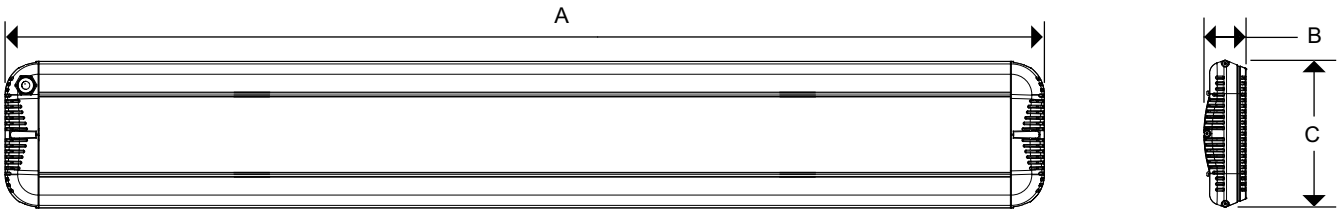
NL De ecodesignverordening (EU) 2015/1188 betreffende lokale ruimteverwarmers is niet van toepassing op alle toepassingsgebieden. De verordening is van toepassing in het geval een installatie bedoeld is om mensen in het pand te voorzien van verwarmingscomfort. De verordening is niet van toepassing op 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.

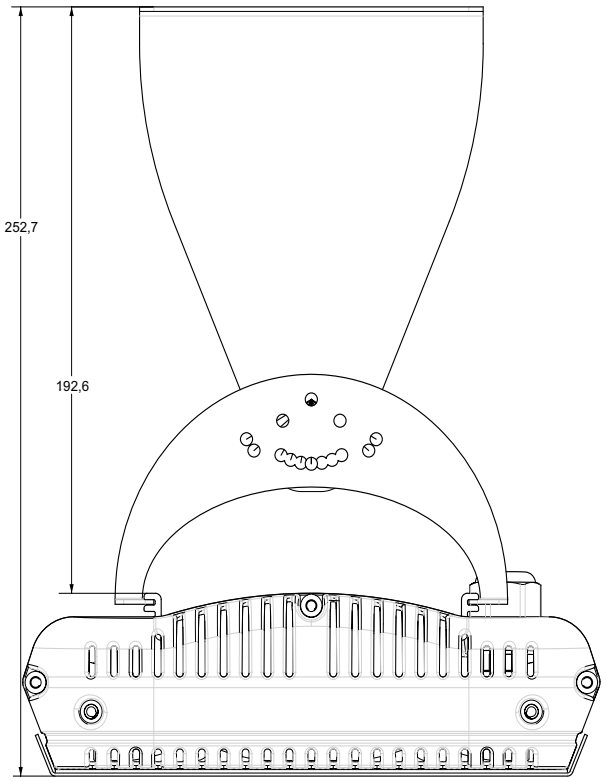
Veel van de Frico-producten kunnen zowel gebruikt worden als lokale ruimteverwarmers (zoals gedefinieerd in (EU) 2015/1188) als ten behoeve van technische verwarmingsdoeleinden. **Het is de taak van de installateur die verantwoordelijk is voor de installatie om te bepalen of de ecodesignverordening wel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

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.

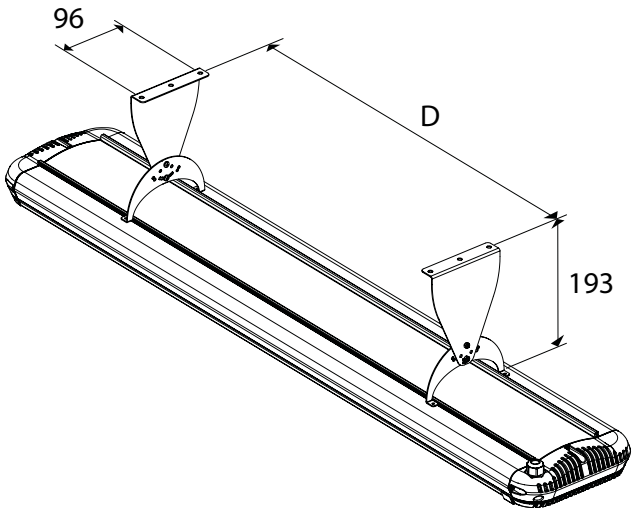
Wiele produktów firmy Frico może być używanych zarówno jako miejscowe ogrzewacze pomieszczeń (zgodnie z definicją w Rozporządzeniu (UE) 2015/1188), jak i w technicznych instalacjach grzewczych. **Do instalatora odpowiedzialnego za instalację należy ocena, czy Rozporządzenie dotyczące ekoprojektu ma zastosowanie 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.

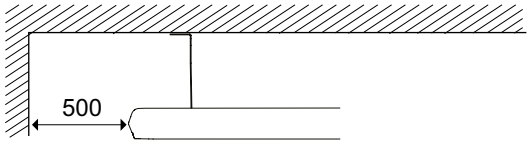


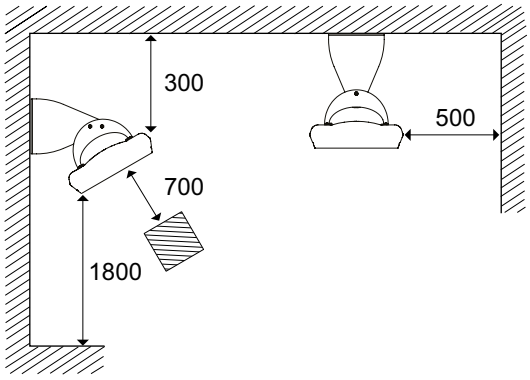


	A [mm]	B [mm]	C [mm]	D [mm]
DKZ15	1150	70	205	800
DKZ18	1290	70	205	950
DKZ24	1580	70	205	1250
DKZ303	1560	70	250	1000
DKZ32	1965	70	205	1800
DKZ453	2150	70	250	1500
DKZD15	1290	70	205	800
DKZD18	1440	70	205	950
DKZD24	1730	70	205	1250
DKZD32	2110	70	205	1800



Minimum distances



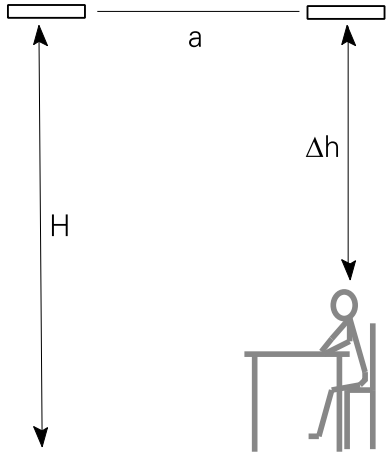


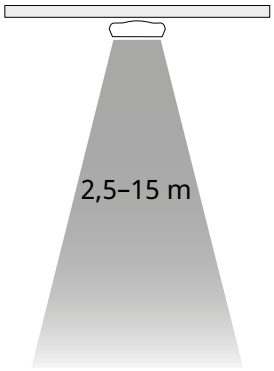
Flammable material

FR: Distances minimales, Matériau inflammable
DE: Mindestabstand, Entflammbares Material
SE: Minimiavstånd, Brännbart material
NO: Minsteavstand, Brennbart materiale
DK: Minimumsafstande, Brændbart materiale
FI: Minimietäisyydet, Tulenarka materiaali
ES: Distancias mínimas, Material inflamable
NL: Minimale afstand, Brandbaar materiaal
IT: Distanze minime, Materiali infiammabili
PL: Minimalne odległości, Materiał łatwopalny
RU: Минимальные расстояния при установке, Легковоспламеняемые материалы

Positioning

Indoors



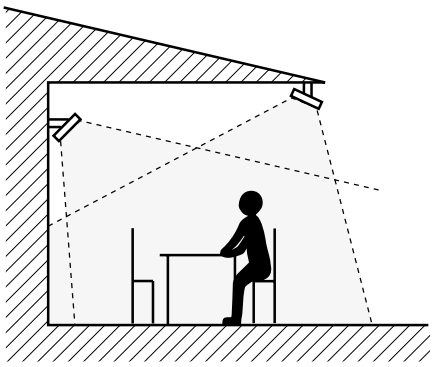


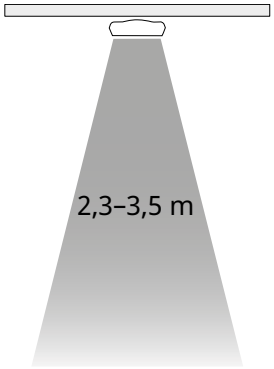
SE: Placering
NO: Plassering
DE: Aufstellung
RU: Расположение
FR: Positionnement
ES: Ubicación
NL: Plaatsing
PL: Lokalizacja
IT: Posizionamento
FI: Sijoitus
DK: Placering

SE: Inomhus
NO: Innendørs
DE: Innenbereich
RU: В помещении
FR: A l'intérieur
ES: En interiores
NL: Binnen
PL: Wewnątrz
IT: All'interno
FI: Sisätiloissa
DK: Indendørs

a < H
Δh = 1,5 - 2 m

Outdoors





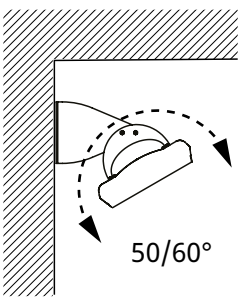
SE: Utomhus
NO: Utendørs
DE: Im Freien
RU: на открытом воздухе
FR: À l'extérieur
ES: Exteriores
NL: Buiten
PL: Na zewnątrz
IT: All'aperto
FI: Ulkona
DK: Udendørs

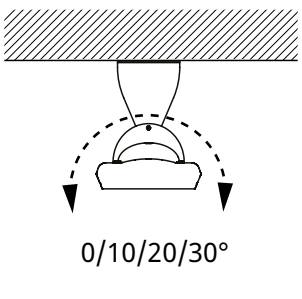
Fig.1: The heaters should heat from at least two directions for even heating

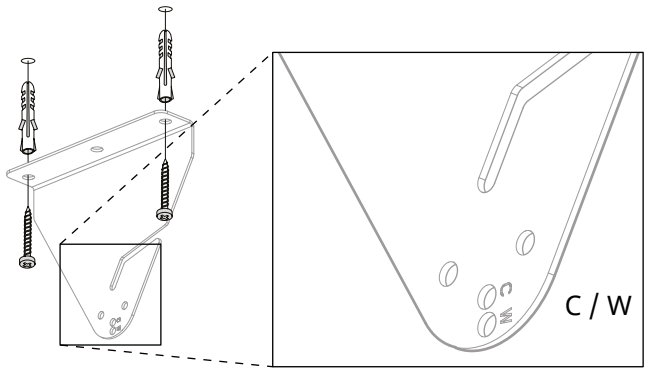
FR: Pour un chauffage uniforme, les émetteurs doivent chauffer dans au moins deux directions.
DE: Für eine gleichmäßige Wärmeleistung sollten die Strahler aus mindestens zwei Richtungen heizen.
SE: För jämn uppvärmning bör infrorna värma från minst två håll.
NO: For jevn oppvarming bør infraene varme fra minst to sider.
DK: Terrassevarmere bør varme fra mindst to retninger for at give jævn varme.
FI: Tasaisen lämmityksen varmistamiseksi lämmittimien tulisi lämmittää vähintään kahdesta suunnasta.

ES: Para garantizar una calefacción uniforme, deben colocarse de modo que el calor llegue desde al menos dos direcciones.
NL: De stralers moeten voor een gelijkmatige verwarming vanuit minimaal twee richtingen werken.
IT: Per avere un riscaldamento uniforme, il calore deve provenire da almeno due direzioni.
PL: Aby zapewnić równomierne ogrzewanie, ciepło powinno pochodzić co najmniej z dwóch kierunków.
RU: Приборы должны располагаться по крайней мере с двух сторон от человека.

Wall/ceiling installation







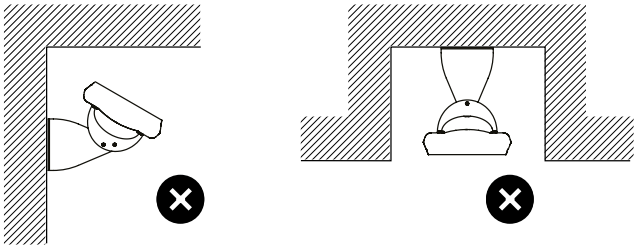


Fig.2

Darkztrip DKZ303/453

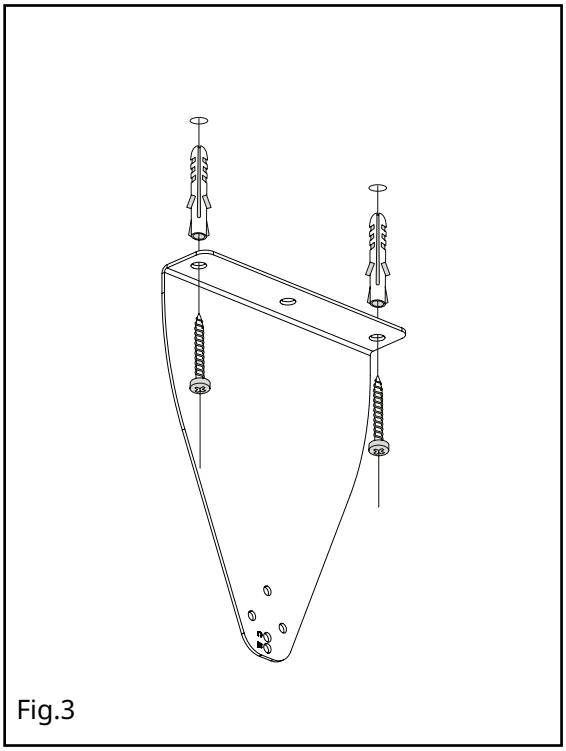


Fig.3

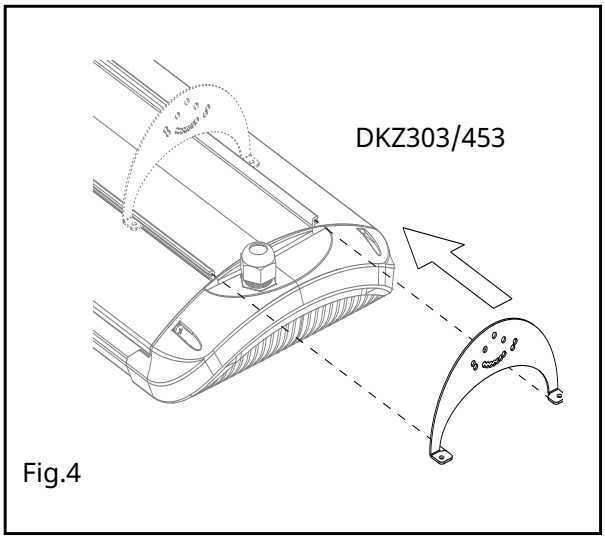


Fig.4

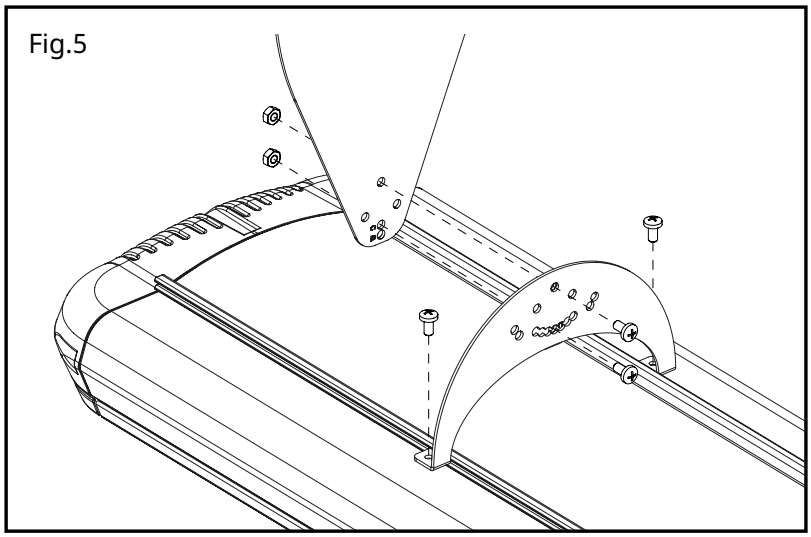
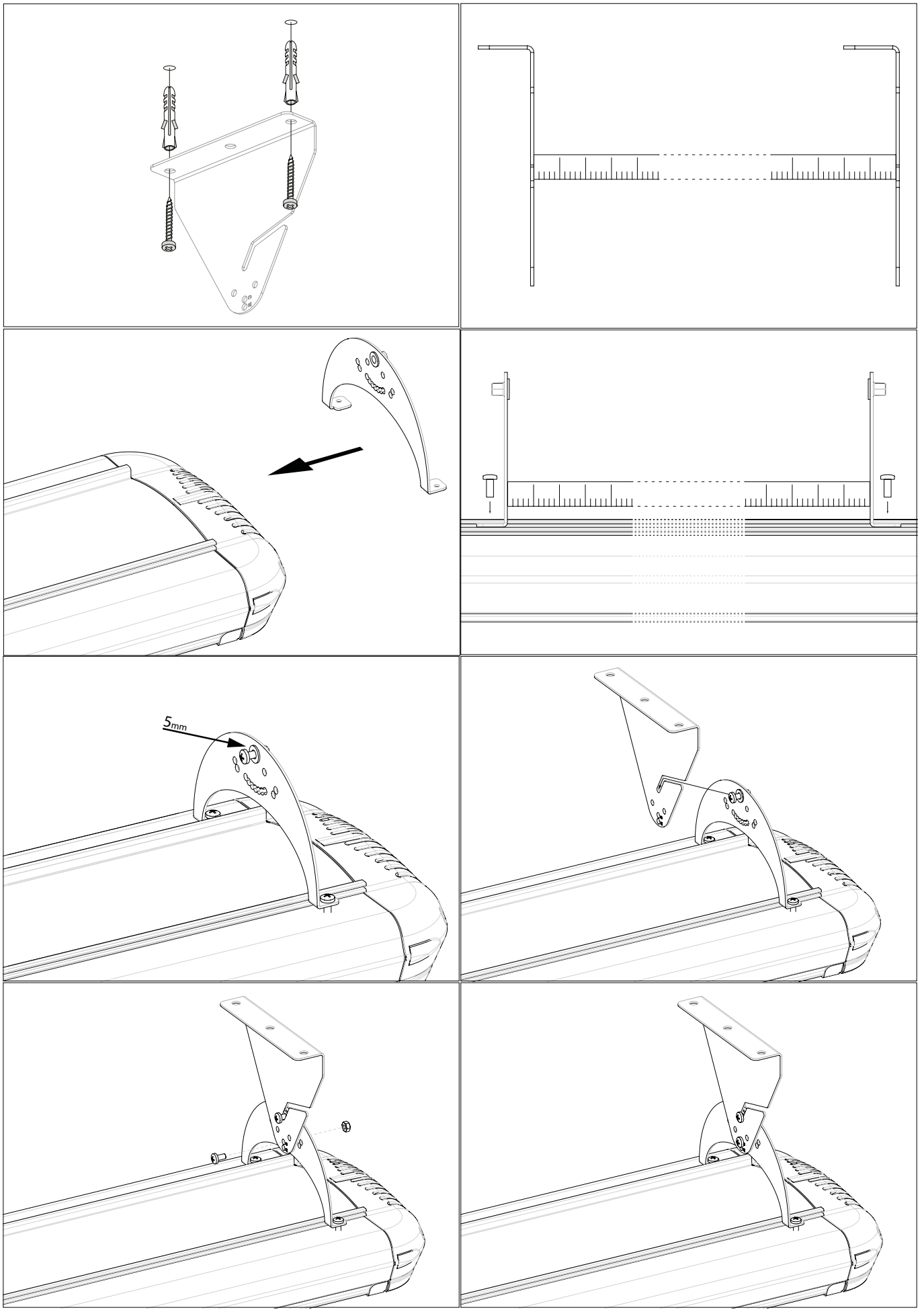


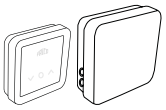
Fig.5

Darkztrip DKZ(D)15/18/24/32



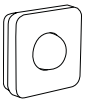
Controls Darkztrip

Item number	Type	HxBxD [mm]
74680	**FC111**	89x89x26 (FCCH)
74681	**FC113**	89x89x26
74692	**FCPOBH**	105x105x38
74693	**FCPOB3H**	149x149x43
74696	**FCBB**	89x89x43
74694	**FCRTX**	39x39x23
74695	**FCOTX**	39x39x23
74718	**FCBC05**	
74719	**FCBC10**	
74720	**FCBC25**	
74721	**FCSC10**	
74722	**FCSC25**	


FC111/113


FCPOBH


FCPOB3H

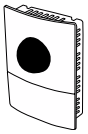

FCBB


FCRTX

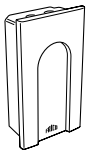

FCOTX

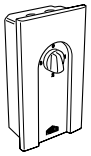
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398190	**TPT16**	87x87x39
398191	**TPT16WF**	87x87x39
205550	**SKG30**	85x115x40
93044	**RTX54**	82x88x25
93012	**RB3**	155x87x43
205688	**RB123**	155x87x43
10250	**RTS01**	


TPT16/WF


SKG30


RTX54

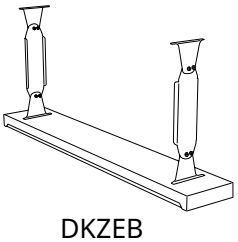

RB3

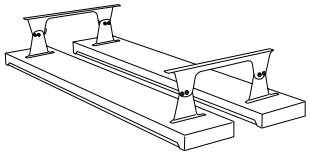

RB123


RTS01

Accessories

Item number	Type	HxWxD [mm]
477352	**DKZEB**	263x75x15
477705	**DKZTB**	400x80x30


DKZEB


DKZTB

Darkztrip (IP55)

Item number	Type	Output [W]	Voltage [V]	Amperage [A]	Max. surface temperature [°C]	Weight [kg]
477702	**DKZ15**	1500	220-240V~	6,5	340	6,1
477703	**DKZ18**	1800	220-240V~	7,8	340	6,7
476797	**DKZ24**	2400	220-240V~	10,5	340	8,1
477704	**DKZ32**	3200	220-240V~	14	340	10,1

Darkztrip 400V~ (IP55)

Item number	Type	Output steps [W]	Voltage [V]	Amperage [A]	Max. surface temperature [°C]	Weight [kg]
477839	**DKZ303**	3000	380-415V3N~	3×4,3	340	10,6
476798	**DKZ453**	4500	380-415V3N~	3×6,5	340	14,3

Darkztrip Dimmer with remote control, for outdoors (IP55)

Item number	Type	Output steps [W]	Voltage [V]	Amperage [A]	Max. surface temperature [°C]	Weight [kg]
476799	**DKZD15**	1500	220-240V~	6,5	340	6,7
476800	**DKZD18**	1800	220-240V~	7,8	340	7,3
476801	**DKZD24**	2400	220-240V~	10,5	340	8,9
476802	**DKZD32**	3200	220-240V~	14	340	10,6

CE

EN: Output steps
FR: Etages de puissance
DE: Leistungsstufen
SE: Effektsteg
NO: Effekttrinn
DK: Effekttrin
FI: Tehoportaat
ES: Niveles de potencia
NL: Capaciteitsstappen
IT: Stadi potenza
PL: Stopnie mocy
RU: Ступени мощности

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

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

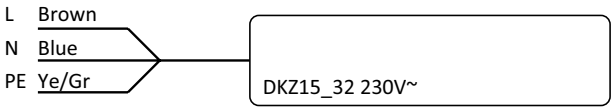
EN: Max. surface temperature
FR: Température max. de surface
DE: Max. Oberflächentemperatur
SE: Maximal yttemperatur
NO: Maksimal overflatetemp
DK: Maksimal overfladetemperatur
FI: Suurin pintalämpötila
ES: Temperatura superficial máxima
NL: Max. oppervlaktetemperatuur
IT: Temperatura max. superficiale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

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

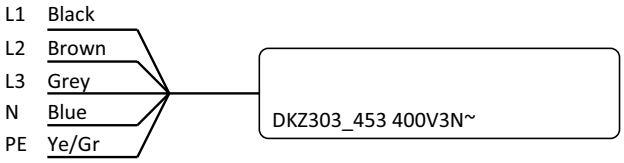
Wiring diagrams

Internal wiring diagram

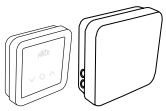
DKZ15-32
230V~



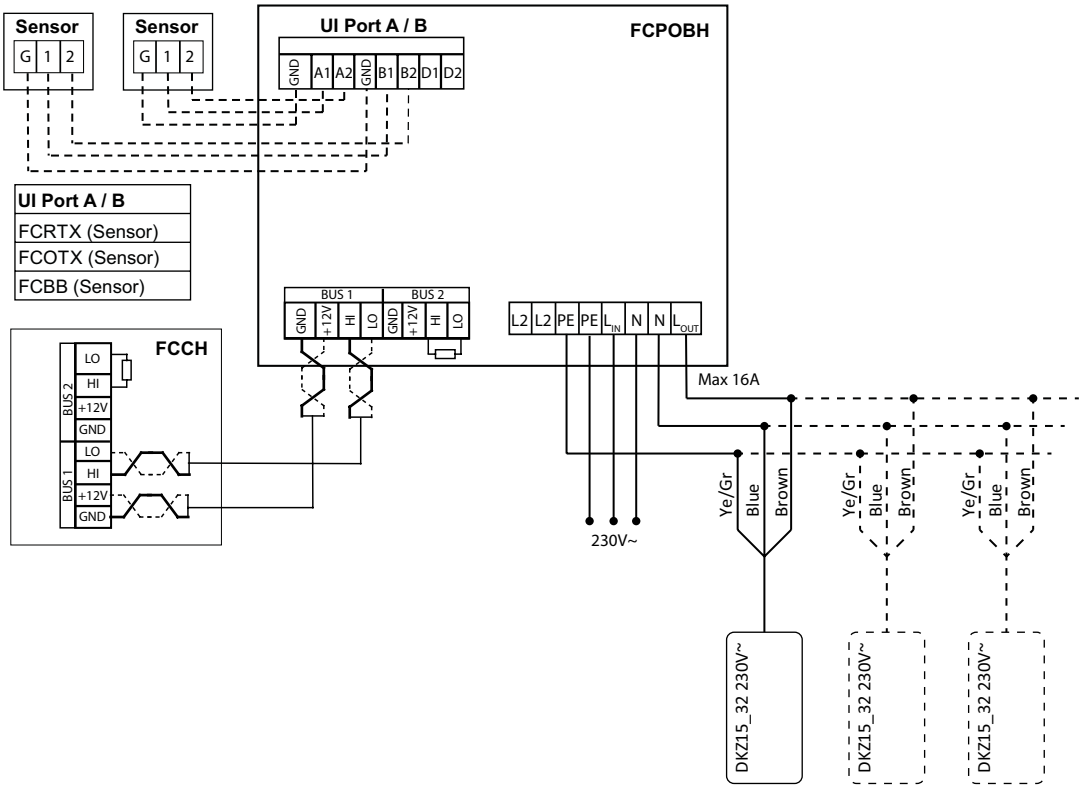
DKZ303-453
400V3N~



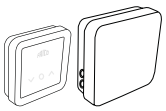
DKZ15-32



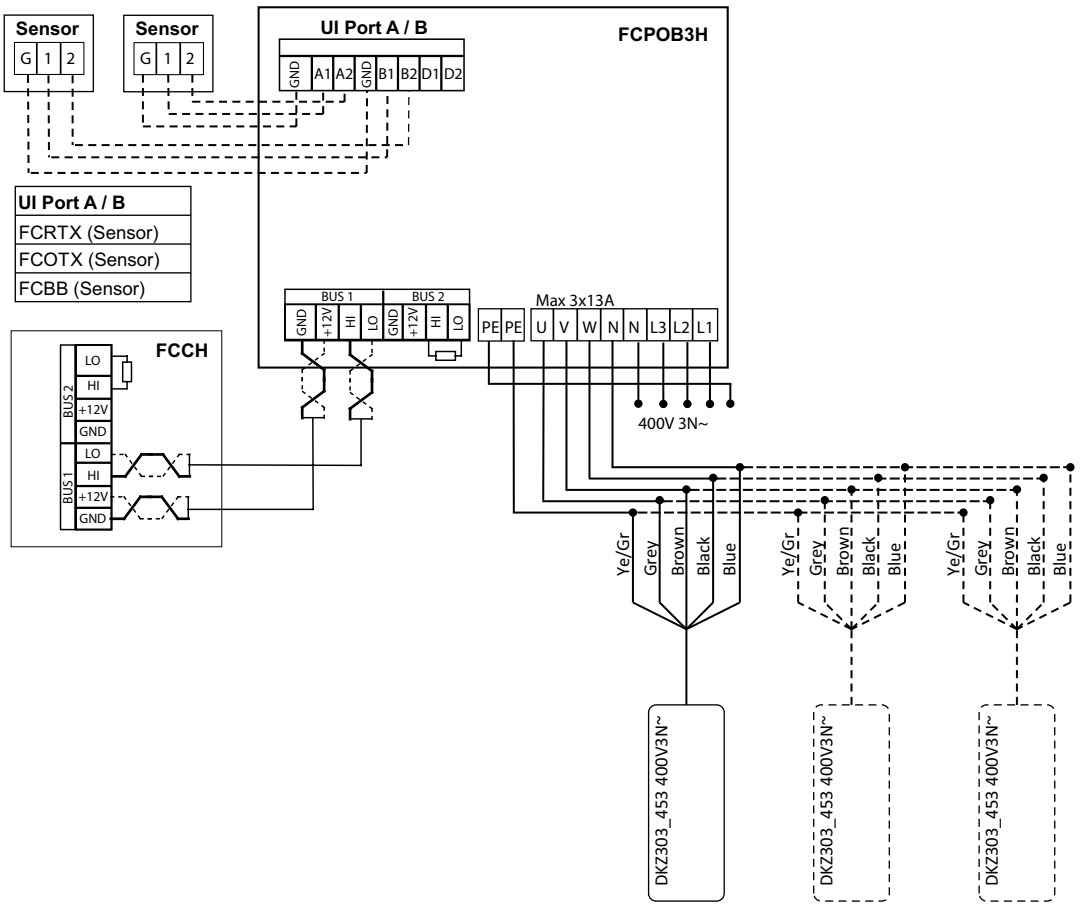
FC111



DKZ303-453



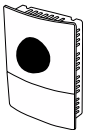
FC113



DKZ15-32



TPT16/WF



SKG30

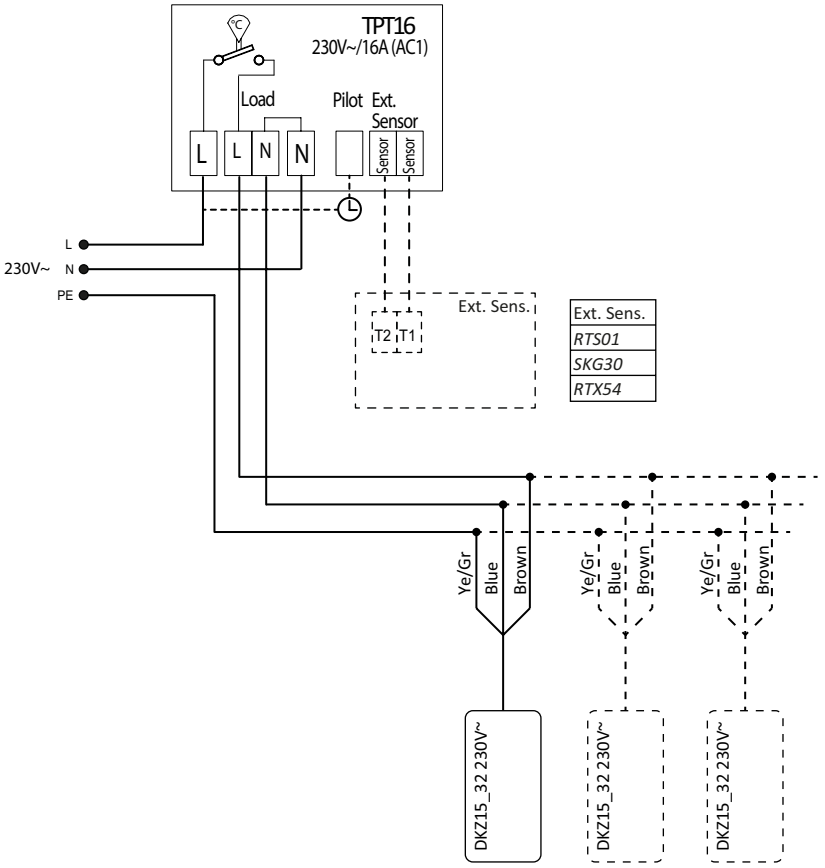


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RTS01

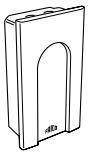
230V~ TPT16(WF) / SKG30



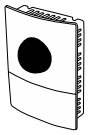
DKZ303-453



TPT16/WF



RB3



SKG30

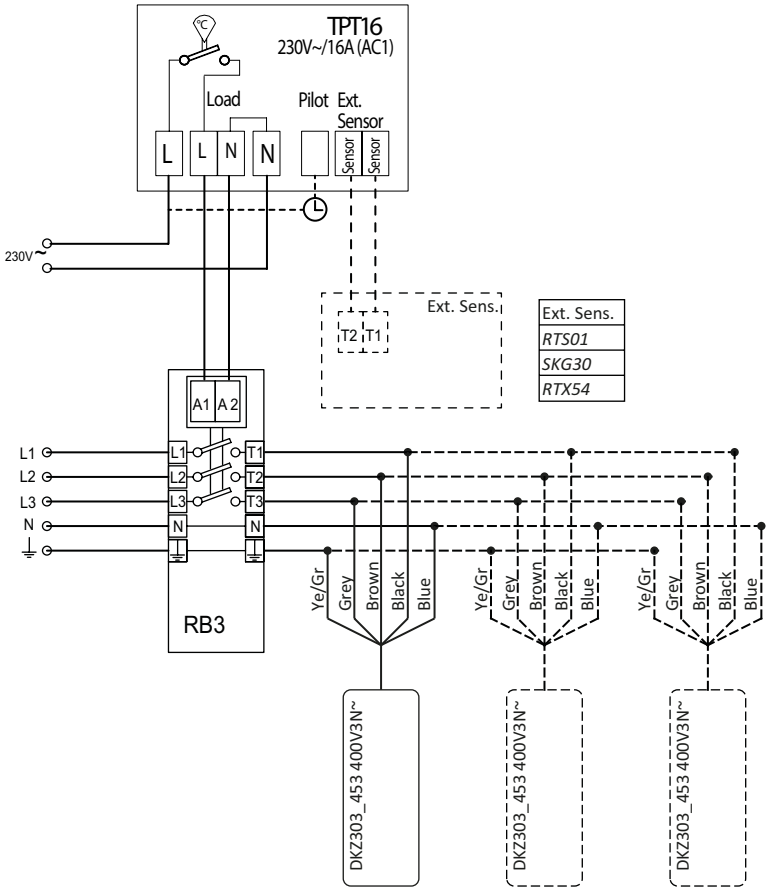


RTX54



RTS01

400V3N~ TPT16(WF) / SKG30 / RB3

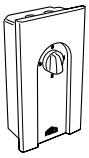


DKZ303-453

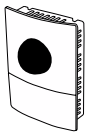
400V3N~ TPT16(WF) / SKG30 / RB123



TPT16/WF



RB123



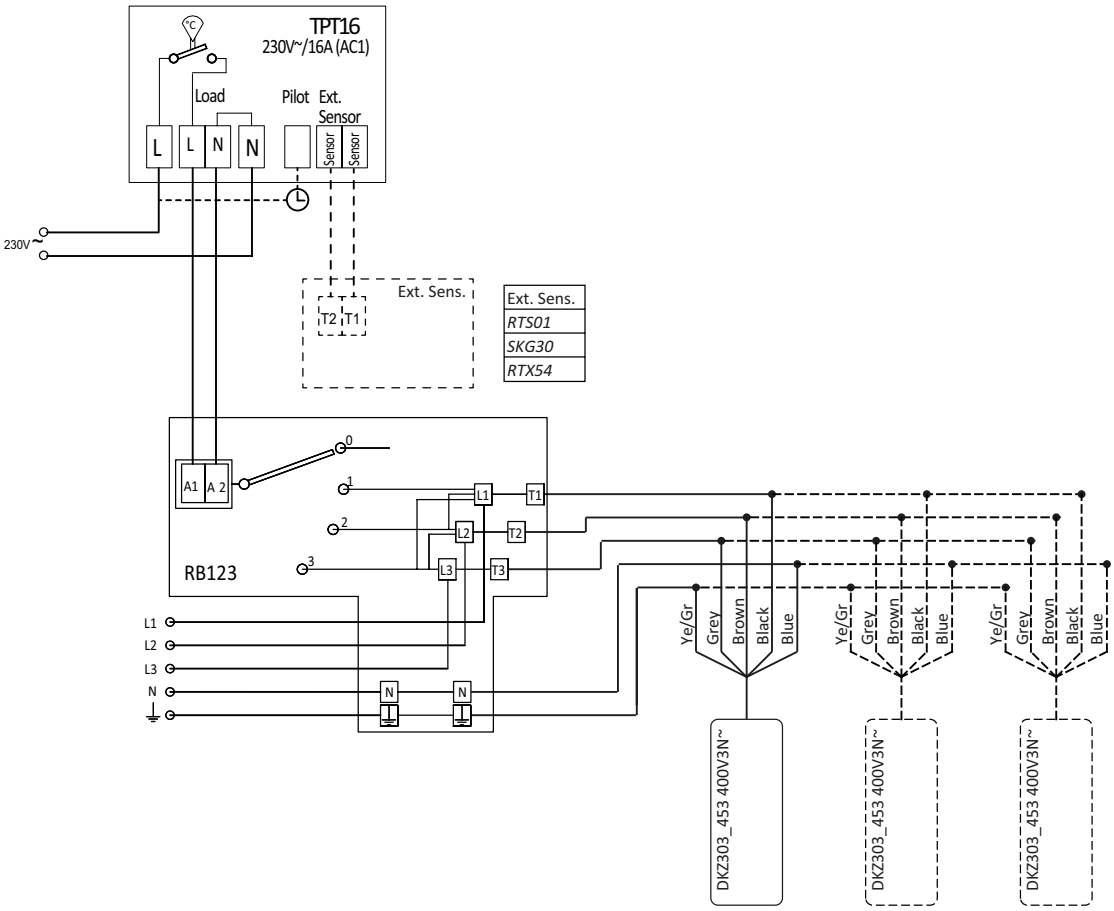
SKG30



RTX54



RTS01



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

Darkztrip is a powerful panel heater designed for total heating, supplementary heating and patios. Available in several versions with and without dimmer, all in a stylish design in black anodised aluminium. Models with a dimmer are ideal for wind-protective outdoor applications. These can be operated at 1/3, 2/3 or full power. Protection class: IP55.

Positioning

The heaters must be placed so that they cover the area to be heated.
Indoors
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.
Outdoors
Optimum comfort is achieved if the heat is distributed from at least two directions. Fig.1. 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. For enclosed areas, the output demand must be calculated. The recommended installation heights for the heater are shown on the introduction pages.

Mounting

Darkztrip is best mounted on the ceiling with the supplied brackets or optional accessories. The heater can also be wall-mounted in several different fixed positions. Depending on the angle to the wall, part of the radiation is then converted into convection. The heater can be angled in several fixed positions.

The heater must not be directed towards the ceiling or flammable materials or be mounted into the ceiling. Fig.2.
For minimum distance, see diagrams on the introduction pages.

Mounting DKZ303/453

1. Drill four holes in the wall/ceiling.
2. Mount the two brackets. Fig.3.
3. Insert the arch-shaped brackets in the special rail on the top of the heater. Fig.4.
4. Align the holes of the brackets and join them together using the supplied bolts, setting the desired inclination. Fig.5.
5. Firmly tighten the screws when finished.

Mounting DKZ(D)15/18/24/32

1. Drill four holes in the wall/ceiling. See Fig. A and table on page 4.
2. Secure the brackets with appropriately sized screws and anchors.
3. Measure the distance between the two brackets.
4. Insert the arched brackets into the appropriate track on the top of the appliance.
5. Lock the brackets at the same distance as the wall/ceiling brackets.
6. Insert a screw into the arched bracket, leaving the head protruding by 5 mm.
7. Slide the screw into the groove of the wall/ ceiling bracket.
8. Insert the screw to lock in the desired angle.
9. Tighten the four screws.

Electrical installation

Darkztrip is intended for permanent 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.

Connection

DKZ15, DKZ18 and DKZ24 are equipped with a 1.9 metre cord with plug for connection to an earthed outlet socket. Other models are equipped with a 3-meter cord without a plug.

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 following type or the like should be used:

- DKZ(D)15, DKZ(D)18: H05SS-F 3x1mm²

- DKZ(D)24, DKZ(D)32: H05SS-F 3x1,5mm²
- DKZ303, DKZ453: H05SS-F 5x1,5mm²

In the event of uncertainty contact an electrician.

Control

Models without dimmer

When using a model without dimmer 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 required for 400V~ products when using TPT16(WF).

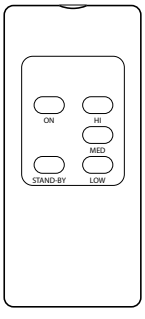
- FC, control system that includes:
  - Electronic room temperature control plus week timer
  - Room temperature control with open window detection
  - Adaptive start control
  - Working time limitation
- FC and FCBB black bulb sensor that include:
  - Electronic room temperature control plus week timer
  - Room temperature control with open window detection
  - Adaptive start control
  - Working time limitation
  - Black bulb sensor
- TPT16, electronic thermostat that includes:
  - Electronic room temperature control plus week timer
  - Room temperature control with open window detection
- TPT16 and SKG30, black bulb sensor that include:
  - Electronic room temperature control plus week timer
  - Room temperature control with open window detection
  - Black bulb sensor

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.

Models with dimmer

The heater is equipped with a dimmer to adjust the heat output in three steps by the included remote control. The remote control can activate several heaters. After each restart, the product will return to the setting selected before it was turned off.

- Use included 1 x 12V A23 battery for the remote control. Remove batteries when not in use for an extended period in order to preserve battery life.
- Always use the same type of batteries when changing them.
- The remote control may not function should there be a loss of signal between the remote control and the heater.



	Output	Colour (LED)
On		-
Stand-by	0	-
High	1	Red
Med	2/3	Purple
Low	1/3	Blue

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.

The heater will reach the maximum temperature 15-20 minutes after power up.

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. To clean the unit, wipe it with a soft, dry cloth. If it is very dirty, use a slightly damp cloth and, if necessary, a mild detergent. Wipe afterwards with a dry cloth to remove moisture.

- 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 must 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.

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 about your local contact: www.frico.net

2026-01-23 KT