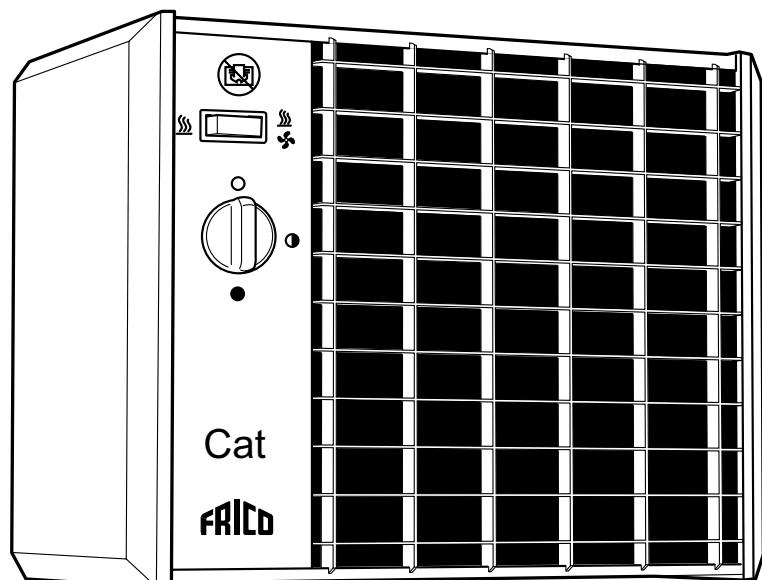


**FRICO**

Original instructions

**CAT**



(SE) ... 7

(GB) ... 9

(NO) ... 11

(FR) ... 13

(DE) ... 15

(FI) ... 18

(NL) ... 20

(RU) ... 23

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 aplicerbar eller inte.**

Regleringslösningar för installationer som inte omfattas av Ecodesignförordningen redovisas i separat tabell.

GB

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.

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.** Reguleringsløsninger 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 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/kodinhoitoihuoneissa, 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.

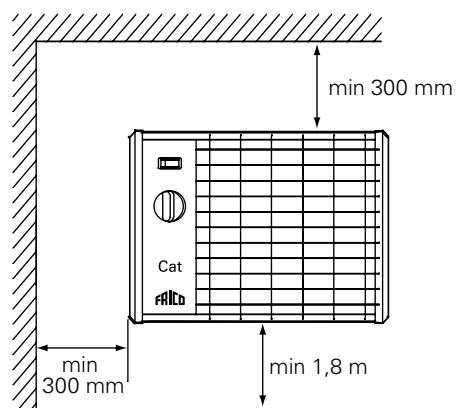
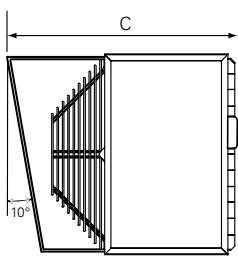
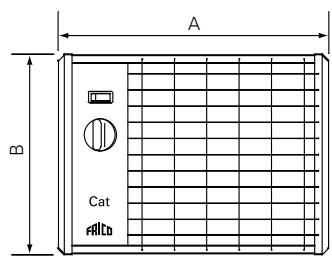
Veel van de Frico-producten kunnen zowel gebruikt worden als lokale ruimteverwarmers (zoals gedefinieerd in (EU) 2015/1188) als ten behoeve van technische verwarmingsdoeleinden. **Het is de taak van de installateur die verantwoordelijk is voor de installatie om te bepalen of de ecodesignverordening wel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

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.



	<b>A [mm]</b>	<b>B [mm]</b>	<b>C [mm]</b>
<b>C3N</b>	335	255	276
<b>C5N</b>	335	255	276
<b>C9N</b>	405	315	335

Minimum distances

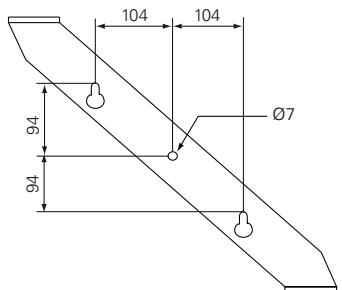
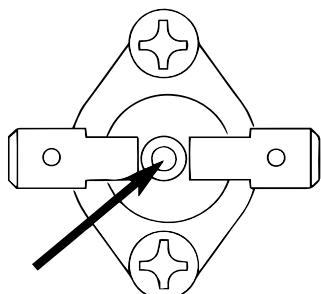
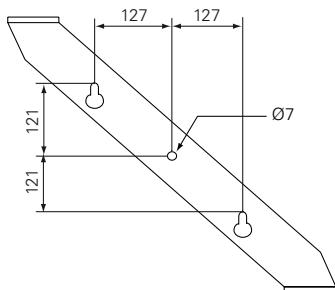
**C3N - C5N****C9N**

Fig. 1

## Technical data

Type	Output steps [kW]	Airflow [m³/h]	Sound level*¹ [dB(A)]	Δt*² [°C]	Motor [W]	Voltage [V]	Amperage [A]	Weight [kg]
C3N	0/1,5/3	280	41	32	28	230V~/400V3N~*³	13,2/4,4	6,3
C5N	0/2,5/5	480	40	31	34	400V3N~	7,3	6,7
C9N	0/4,5/9	720	44	37	52	400V3N~	13,1	10,2

\*¹) Conditions: Distance to the unit: 3 metres. Directional factor: 2. Equivalent absorption area: 200 m<sup>2</sup>.

\*²) Δt = temperature rise of passing air at maximum heat output.

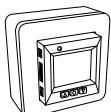
\*³) C3N can be connected for 230V~ and 400V3N~. Other models should not be connected for single phase, 230V~.

Protection class: IP44.

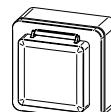
CE compliant.

## Controls

Type	HxWxD [mm]
TAP16R	87x87x53
TEP44	87x87x55
RTX54	82x88x25



TAP16R



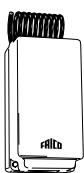
TEP44



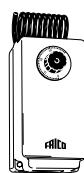
RTX54

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

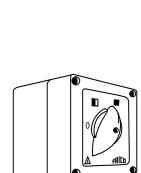
Type	HxWxD [mm]
KRT1900	165x57x60
KRTV19	165x57x60
EV300	100x80x90
CBT	155x87x43



KRT1900



KRTV19



EV300



CBT

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

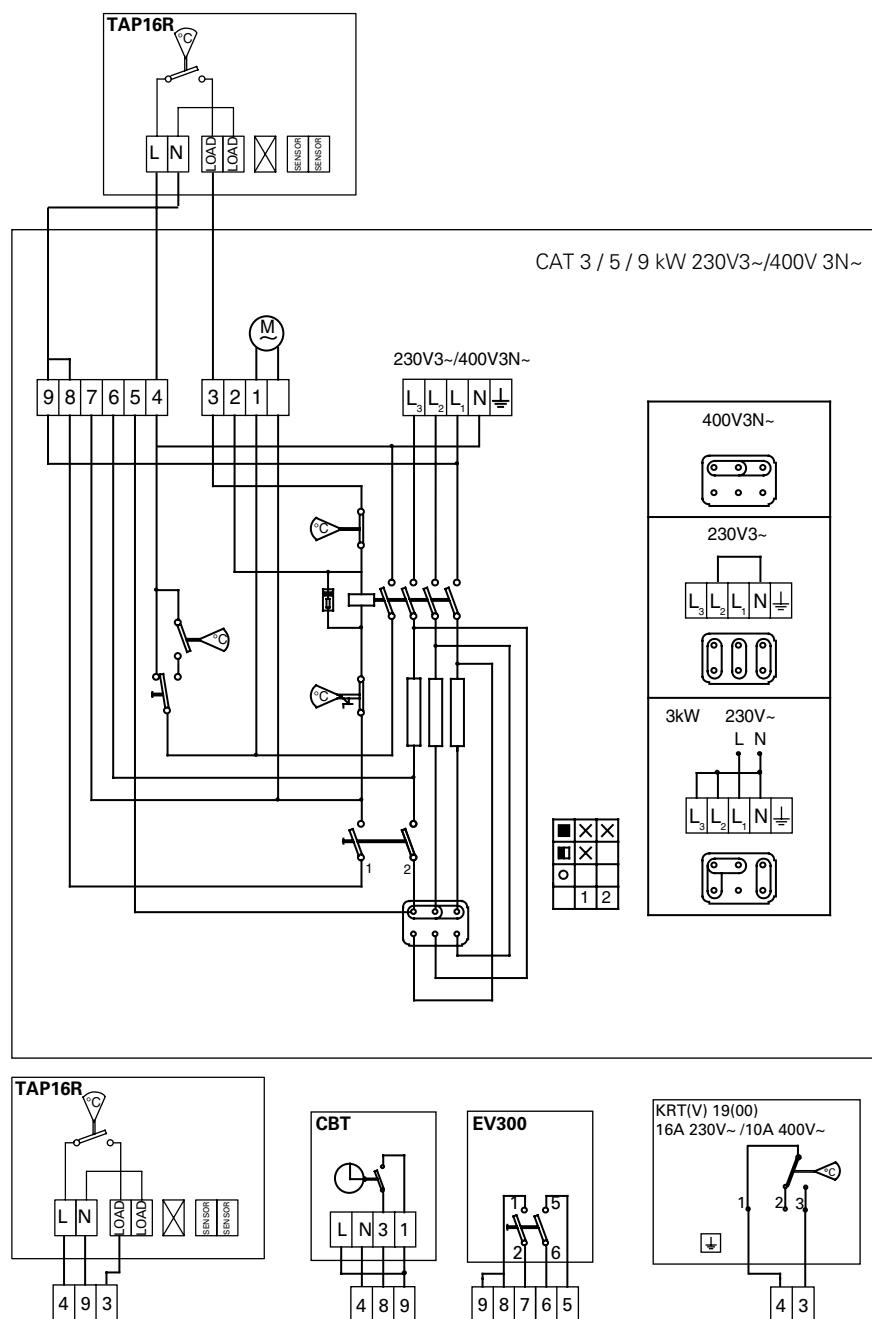
DE: Steuerungen für Installationen, die nicht unter die Ökodesign-Verordnung (EU) 2015/1188 fallen

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

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

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

## Wiring diagram



## 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 area

Cat is a range of compact and quiet fan heaters for stationary use. It is ideally suited for small stockrooms, in a garage, workshop or shop. Protection class: IP44.

### Assembly

The Cat fan heater is mounted on a wall and has a fixed tilt angle, 10° downwards, which gives balanced and good heat distribution

- Note that the minimum distances as set out in the figure on page 2 must be maintained.
- The unit must be installed with the connection area to the left, as seen from the front.
- Mark out and drill the holes for the screws as set out in the diagram on page 2.
- Screw in the screws for the keyholes so that approximately 10 mm remains.
- Hang-up the unit and tighten the screws.
- Screw in the last screw.

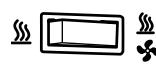
### Electrical Installation

The installation should be permanent and carried out by a qualified technician according to applicable directives. The installation should be preceded by a fully isolating switch with at least a 3 mm gap and preferably fitted with a status lamp.

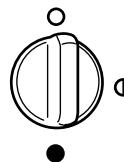
The Cat fan heater is intended for permanent installation. The knockouts at the rear of the unit are used to connect accessories. C3 can also be connected to single phase (230V~). On the back of the appliance there are knock-outs. Cable-glands used must guarantee the protection class requirements!

The heaters can be connected for either 230V3~ and 400V3N~. Note! Other models cannot be connected for single phase.

### Function



Switch for the external thermostat: control of heat only or both heating and fan.



Position of the output selector, see Technical data.

It is possible that the temperature limiter may have tripped during transport, if the unit does not function the first time it's switched on. Rectify as set out in the description under "Overheating". (Fig. 1)

### 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.

- 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.

### 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.

### Overheating

If the unit overheats the integrated temperature limiter will trip. Reset the temperature limiter after the unit has cooled and the fault rectified. (Fig. 1)

**NOTE!** All work inside the unit's connection area should be carried out by an authorized

technical and the unit must be dead.

The temperature limiter is reset by removing the cover and pressing the button on the temperature limiter. (Fig. 1)

## Maintenance

The motor and other components are maintenance-free. Dust and dirt may cause overheating and danger of fire. The appliance must therefore be cleaned regularly.

## 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. Recycling of used products saves earth's resources and reduces global footprint.

## Safety

- For all installations of electrically heated products should a residual current circuit breaker 300 mA for fire protection be used.
- Keep the areas around the air intake and exhaust grilles free from possible obstructions!
- The unit must not be fully or partially covered with clothing, or similar materials, as overheating can result in a fire risk! (E)
- 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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