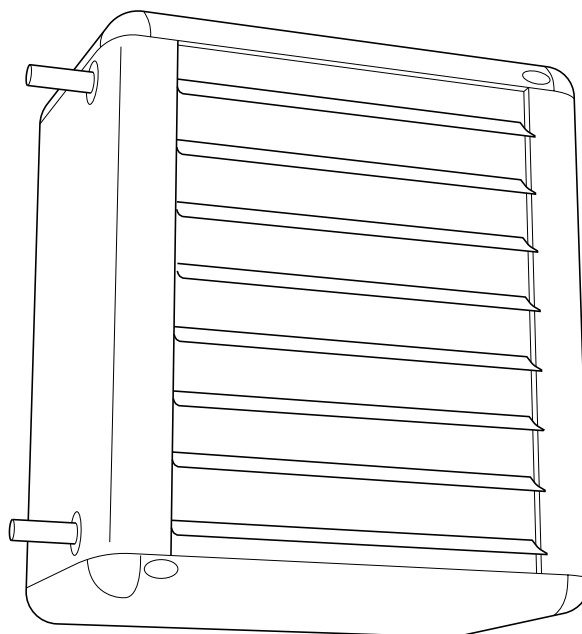


Original instructions
Champ



EN ... 12

FR ... 15

DE ... 19

SE ... 24

NO ... 28

DK ... 32

FI ... 36

NL ... 40

ES ... 45

IT ... 49

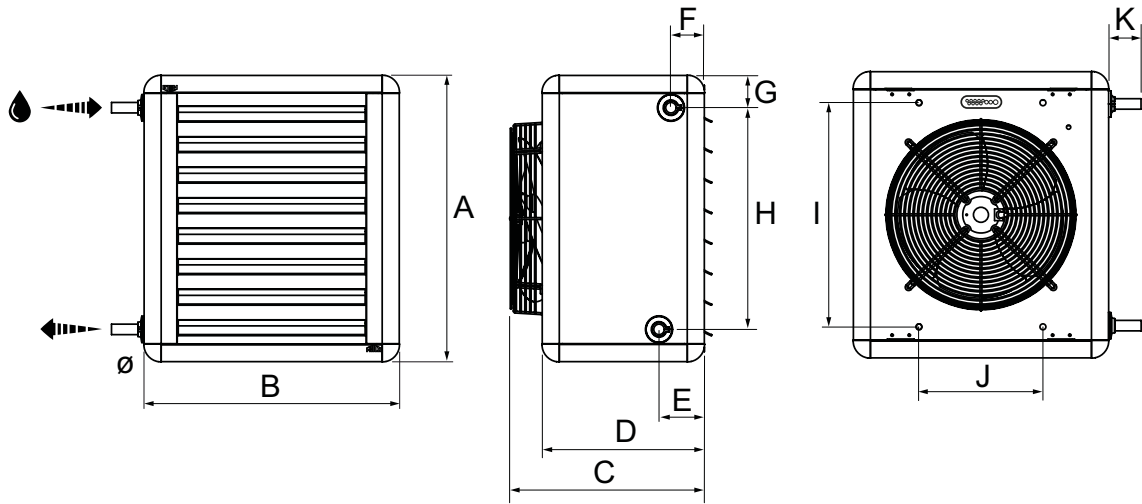
PL ... 53

RU ... 57

Champ

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

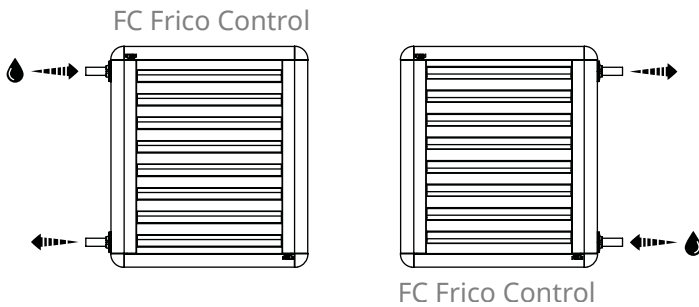
Champ



Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	Ø [mm]
CPF02	525	515	430	320	95	70	70	390	405	260	70	22
CPF12	600	535	425	340	95	70	70	465	470	260	70	22
CPF22	725	680	405	370	100	70	70	585	580	400	75	28
CPF32/33	850	820	550	450	100	70	70	710	700	530	75	28

Wall mounting

Ceiling mounting



Minimum mounting distance

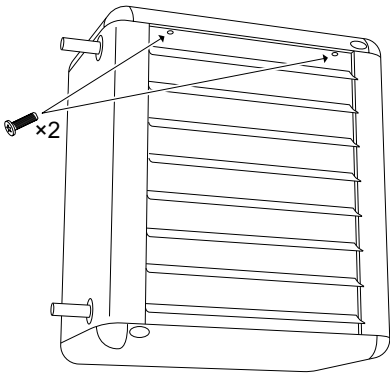
Diagram showing minimum mounting distance A from a wall and B from the ceiling.

Type	A [mm]
CPF02	195
CPF12	195
CPF22	250
CPF32/33	335

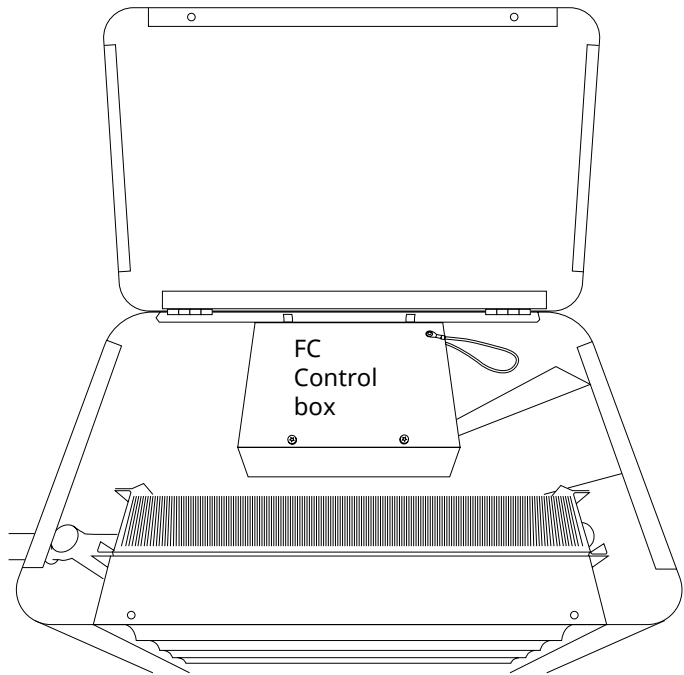
Type	B [mm]
CPF02	340
CPF12	360
CPF22	390
CPF32/33	470

Open the unit

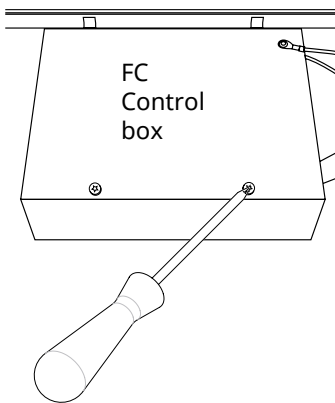
1 Opening the unit



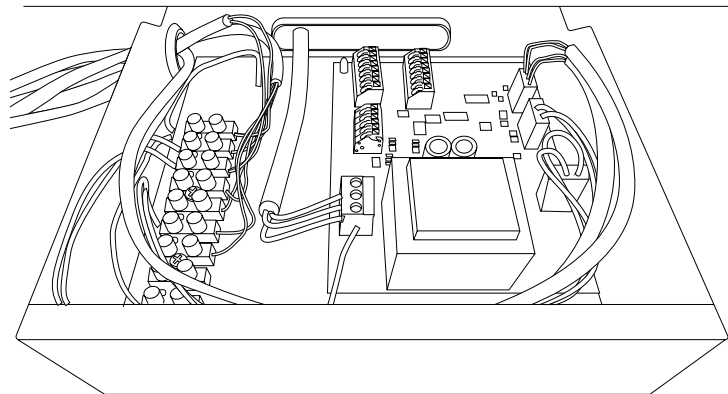
2 FC control box



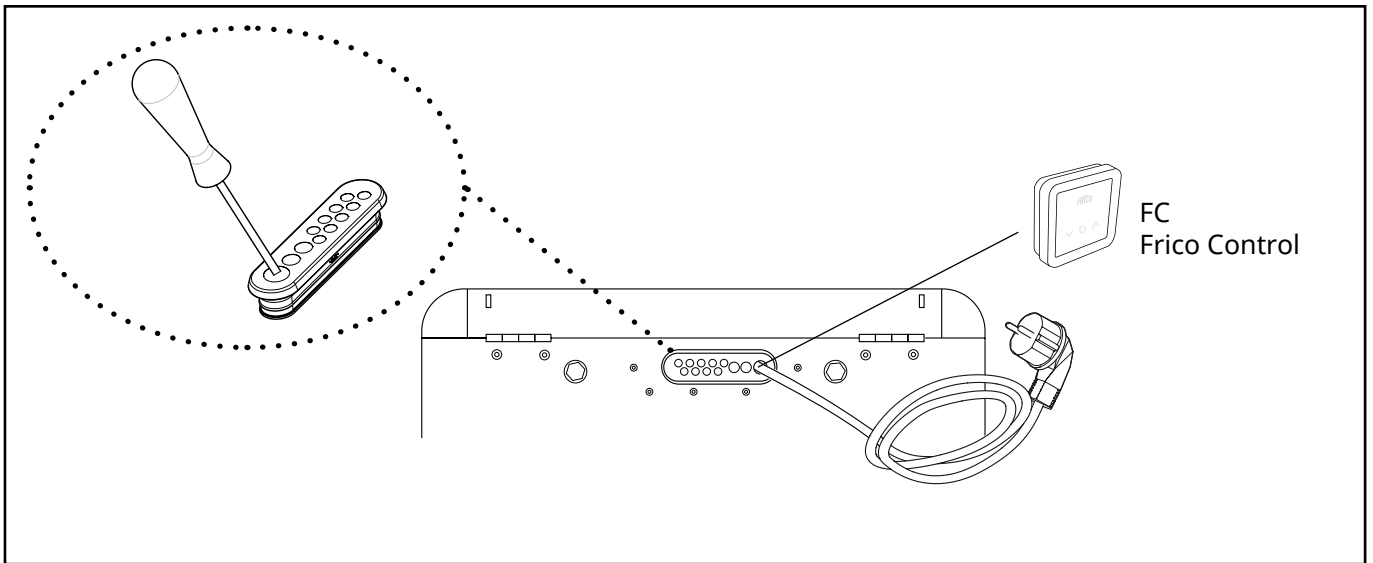
3 FC control box



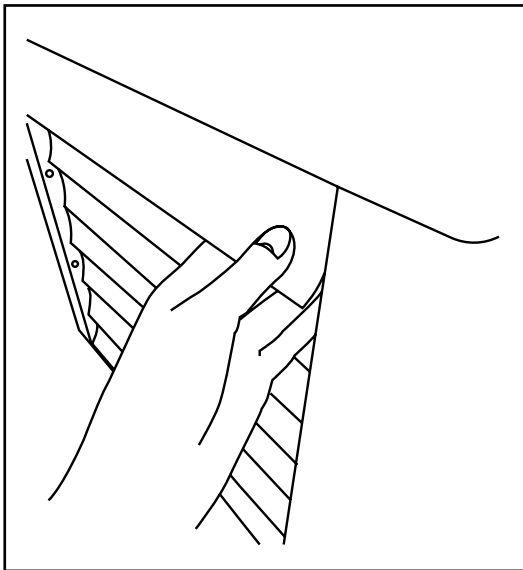
4 FC control box



Connection



Adjustment louvres



EN: The louvres are manually adjusted to the desired angle.

FR: Les ailettes peuvent être réglées manuellement à l'angle souhaité.

DE: Die Lamellen werden manuell auf den gewünschten Winkel eingestellt.

SE: Lamellerna justeras manuellt till önskad vinkel.

NO: Luftventilene reguleres manuelt til ønsket vinkel.

DK: Lamellerne justeres manuelt til den ønskede vinkel.

FI: Ilmanohjaimet säädetään käsin haluttuun kulmaan.

NL: De lamellen worden handmatig afgesteld in de gewenste hoek.

ES: Las persianas se ajustan manualmente al ángulo deseado.

IT: Le alette sono regolate manualmente all'angolazione desiderata.

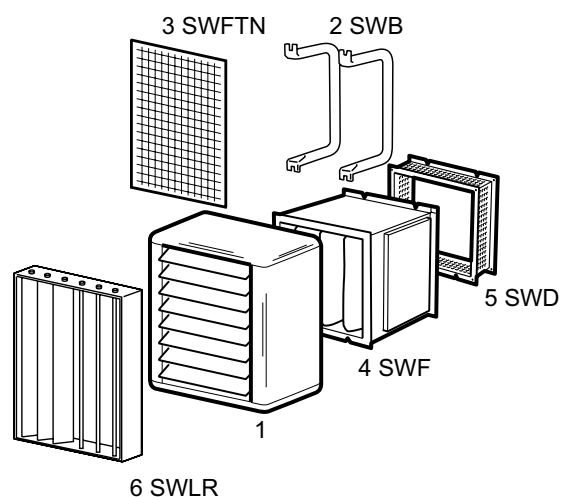
PL: Żaluzje można ręcznie ustawić pod żądanym kątem.

RU: Регулировка угла наклона лопастей жалюзи производится вручную.

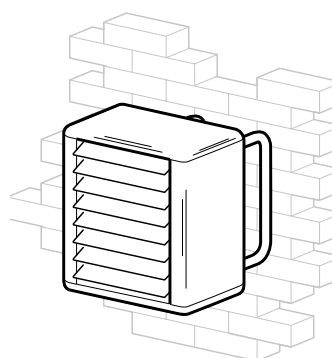
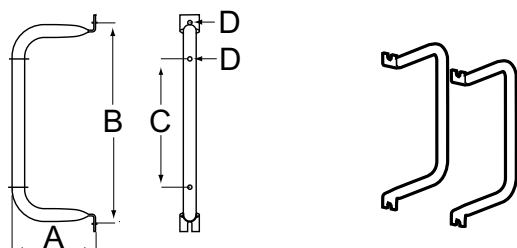
Accessories

1. Fan heater Champ
2. Mounting brackets SWB
3. Basic filter SWFTN
4. Filter section, deep-pleated bagfilter EU3 SWF
5. Return air intake SWD
6. Extra air director SWLR

1. Fläktluftvärmare Champ
2. Monteringskonsoler SWB
3. Trådnätsfilter SWFTN
4. Filterskåp, djupveckad filterkassett EU3 SWF
5. Distansdel för filterskåp SWD
6. Extra luftriktare SWLR

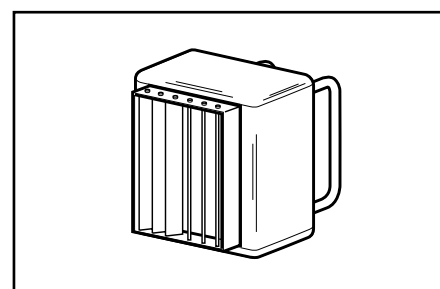
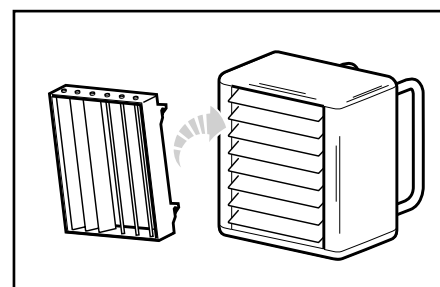
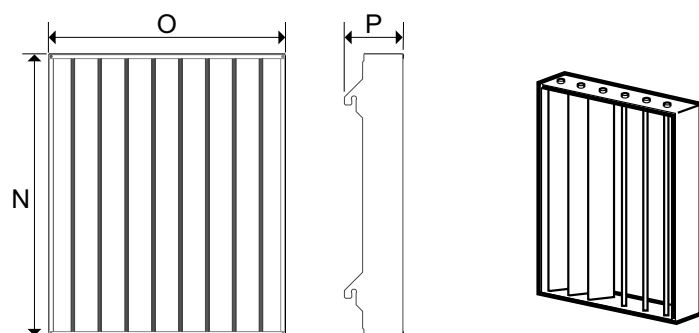


Mounting brackets SWB



Item no	Type	A [mm]	B [mm]	C [mm]	D [mm]	Used for
17577	SWB0	195	405	235	10	CPF02
17578	SWB1	195	470	300	10	CPF12
17579	SWB2	250	580	410	10	CPF22
17580	SWB3	335	700	530	10	CPF32/33

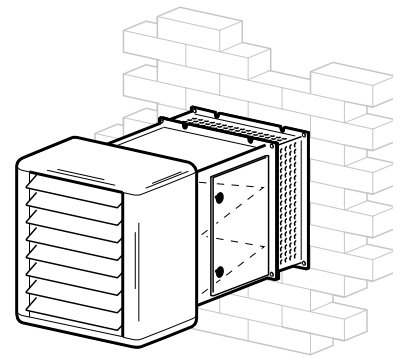
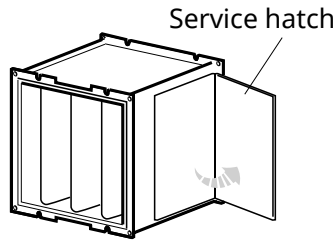
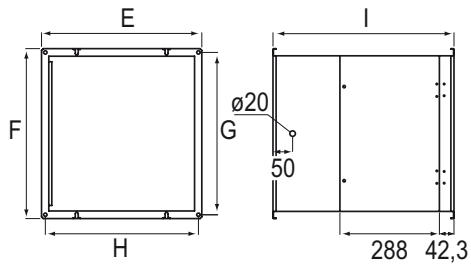
Extra air director SWLR



Item no	Type	N [mm]	O [mm]	P [mm]	Used for
10132	SWLR1	527	398	136	CPF12
10133	SWLR2	652	547	136	CPF22
10134	SWLR3	779	676	136	CPF32/33

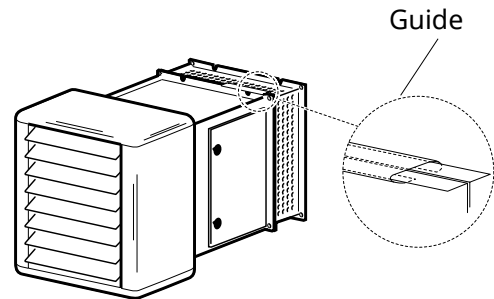
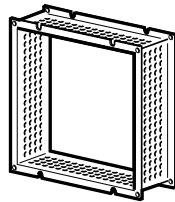
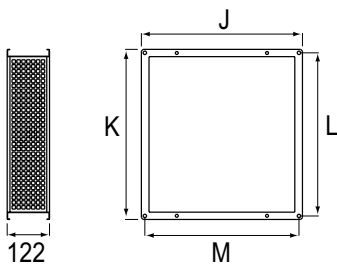
Champ

Filter section, SWF



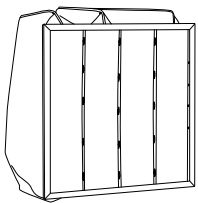
Item no	Type	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	Used for
10113	SWF1	466	492	470	444	524	CPF12
10115	SWF2	616	602	580	594	524	CPF22
10117	SWF3	746	722	700	724	524	CPF32/33

Return air intake, SWD



Item no	Type	J [mm]	K [mm]	L [mm]	M [mm]	Used for
10099	SWD1	464	490	470	444	SWF12
10102	SWD2	614	600	580	594	SWF22
10103	SWD3	676	720	700	656	SWF32/33

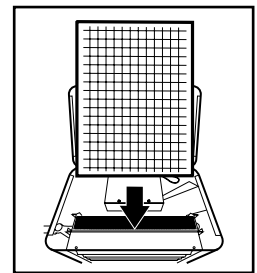
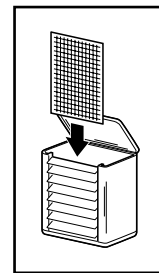
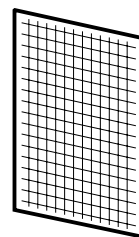
Extra filter cassette, SWEF



$\Delta P \geq 75 \text{ Pa}$

Item no	Type	W [mm]	H [mm]	D [mm]	# bags	Used for
10108	SWEF1	420	446	350	4	SWF12
10110	SWEF2	552	558	400	4	SWF22
10111	SWEF3	630	680	400	5	SWF32/33

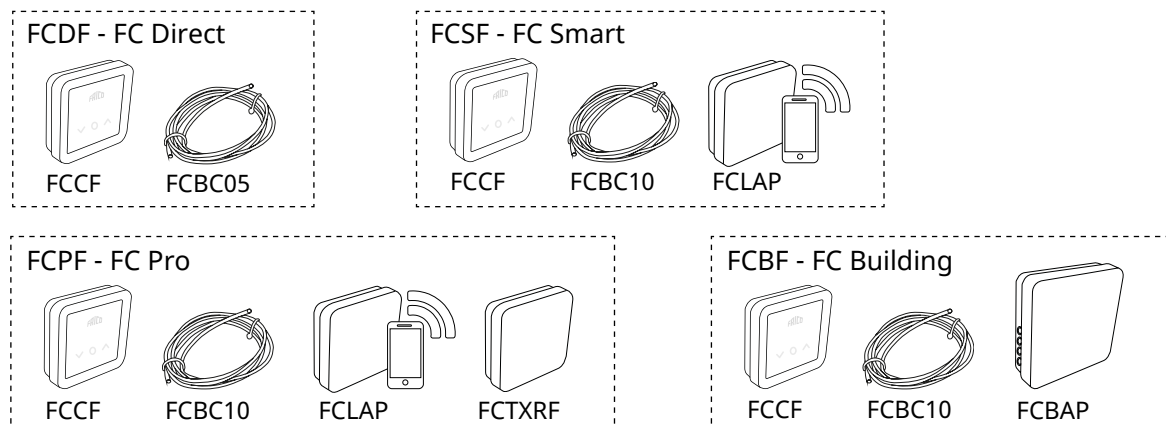
Basic filter SWFTN



Item no	Type	Used for
111307	SWFTN02	CPF02
111300	SWFTN1	CPF12
111301	SWFTN2	CPF22
111302	SWFTN3	CPF32/33

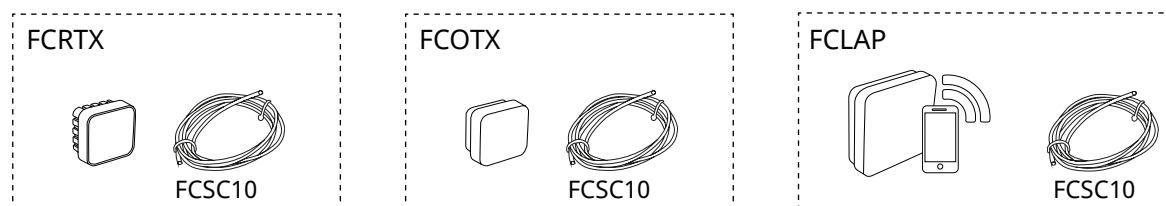
Control systems FC Frico control

The fan heater must be supplemented with a FC control system.

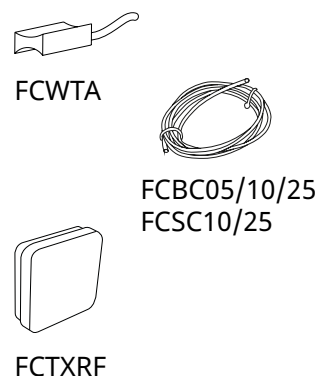


Item number	Type	Name	Dimensions
74688	FCDF	FC Direct	89x89x26 mm (FCCF)
74689	FCSF	FC Smart	89x89x26 mm (FCCF)
74690	FCPF	FC Pro	89x89x26 mm (FCCF)
74691	FCBF	FC Building	89x89x26 mm (FCCF)

Accessories



Item number	Type	Dimensions
74694	FCRTX	39x39x23 mm
74695	FCOTX	39x39x23 mm
74699	FCLAP	89x89x26 mm
74702	FCWTA	
74718	FCBC05	5 m
74719	FCBC10	10 m
74720	FCBC25	25 m
74721	FCSC10	10 m
74722	FCSC25	25 m
74703	FCTXRF	for FC Smart, FC Pro 89x89x26 mm



See separate manual for FC.

FR: L'aérotherme nécessite également un système de régulation FC.

DE: Der Heizlüfter muss durch ein FC-Steuerungssystem ergänzt werden.

SE: Värmeflåkten måste kompletteras med FC styrsystem.

NO: Varmluftsviften må suppleres med et FC-styringssystem.

DK: Varmeblåseren skal suppleres med en FC-styring.

FI: Puhallinlämmitin on varustettava FC-ohjausjärjestelmällä.

NL: De luchtverhitter moet worden aangevuld met een FC regelsysteem.

ES: El aerotermino debe complementarse con un sistema de control FC.

IT: Occorre integrare il termoventilatore con un sistema di regolazione FC.

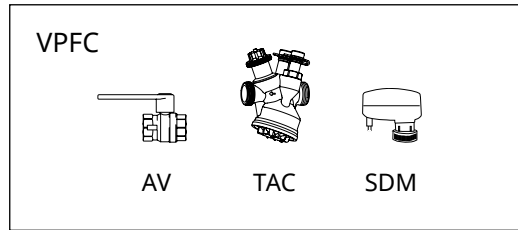
PL: Nagrzewnicę należy wyposażyć w układ sterowania FC.

RU: Тепловентилятор должен быть дополнен системой управления FC.

Valve systems

Item number	Type	DN	Flow range [l/s]
238293	VPFC15LF	DN15	0,012-0,068
238294	VPFC15NF	DN15	0,024-0,13
238295	VPFC20	DN20	0,058-0,32
238296	VPFC25	DN25	0,10-0,60
238297	VPFC32	DN32	0,22-1,03

See separate manual.



Item number	Type	
333340	UNSG20R15	G20 x R15
333341	UNSG25R20	G25 x R20
333342	UNSG32R25	G32 x R25
333343	UNSG40R32	G40 x R32
333344	UNSG2015	G20 x 15mm
333345	UNSG2518	G25 x 18mm
333346	UNSG2522	G25 x 22mm
333347	UNSG3228	G32 x 28mm
333348	UNSG4035	G40 x 35mm
333349	ANS1515	R15
333350	ANS2018	R20
333351	ANS2022	R20
333352	ANS2528	R25
333353	ANS3235	R32



UNSG



UNSG-R



ANS

Technical specifications

Champ (IP44)

Item number	Type	Heat output* ^{1,2} [kW]	Airflow* ² [m ³ /h]	Sound power* ³ [dB(A)]	Sound pressure [dB(A)]* ^{2,4}	Δt * ^{1,2,5} [°C]	Water volume [l]* ⁶	Air throw [m]* ^{2,7}	Voltage motor: 230V~	
									Amperage* ² [A]	Weight [kg]
333750	CPF02	5,5/14	400/1480	68	18/49	40/18	1,3	3/10	0,05/0,48	20
333751	CPF12	7/17	600/2400	72	21/52	34/21	1,5	4/16	0,07/0,68	24
333752	CPF22	9,1/25	700/3050	71	22/54	38/24	2,7	7/18	0,08/0,67	34
333753	CPF32	19/50	1500/6450	77	22/58	37/23	3,8	9/30	0,16/1,43	55
333755	CPF33	21/64	1380/5950	77	22/58	45/32	5,2	8/28	0,16/1,48	59

*1) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

*2) Applicable at control signal 20%/80%.

*3) Sound power (L_{WA}) measurements according to ISO 27327-2: 2014, Installation type E.

*4) Sound pressure (L_{pA}). Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

*5) Δt = temperature rise of passing air.

*6) Water volume inside water coil.

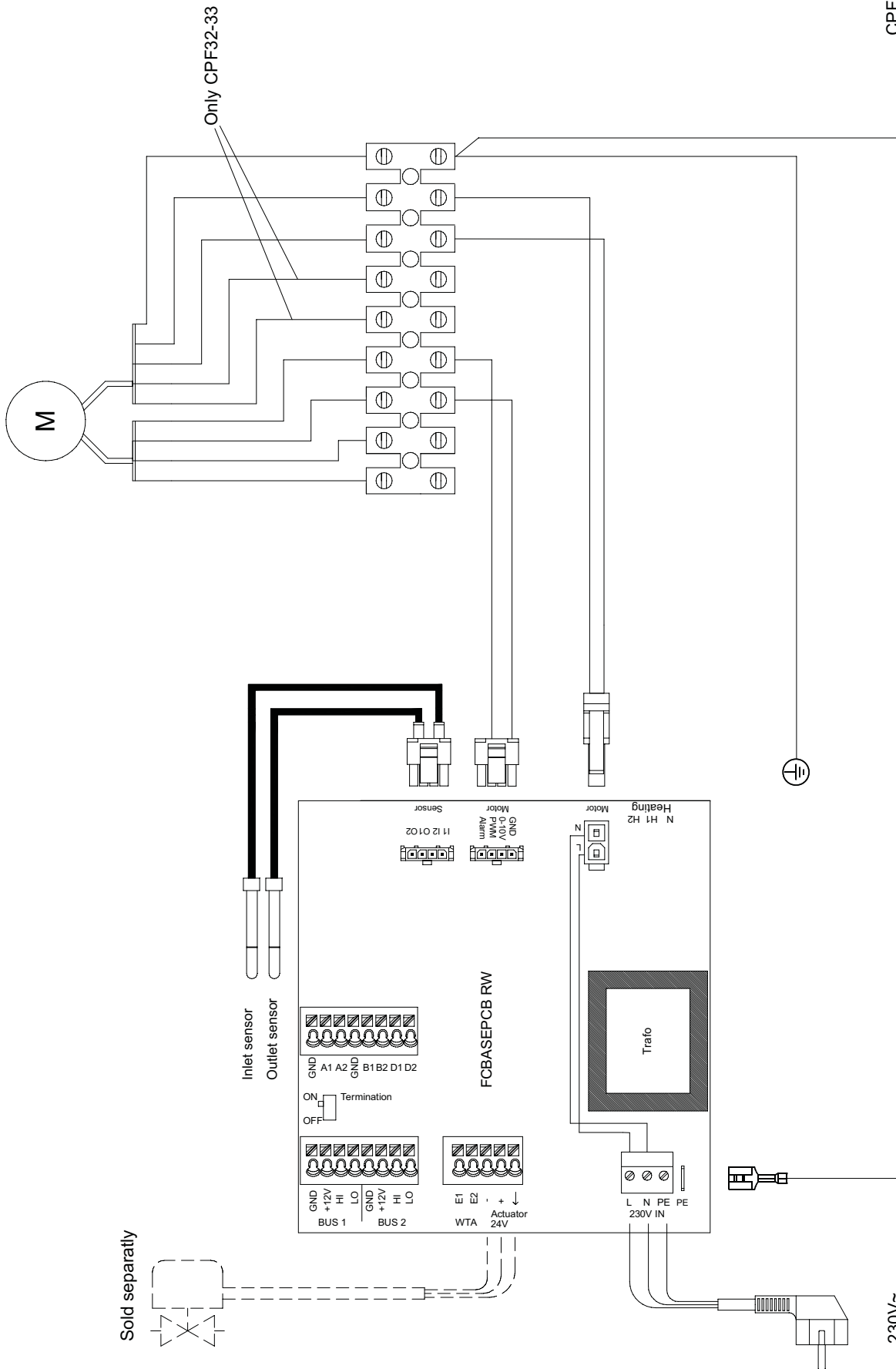
*7) The air throw data is valid at room temperature. The air throw is defined as the distance in a straight angle from the fan heater to the point where the average air speed has dropped to 0,5 m/s.



Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.

Internal wiring diagram

CPF02
CPF12
CPF22
CPF32
CPF33



Wiring diagrams for control system in the FC manual.

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

Champ is a quiet running fan heater which, together with the FC control system, can provide fully automatic room heating, adaptable to every unique application. Champ is suitable for use in industrial buildings, but also in any environment that requires low sound level. The fan heater can be mounted on the wall or the ceiling.
Protection class: IP44.

Description

The unit consists of housing, fan, heating coil and air director.

- Corrosion proof housing made of hot zinc-plate and powder coated steel panels. Colour: white, RAL 9016. The top and the bottom are easy to open and fitted with hinges for simple installation and maintenance.
- Fully enclosed single-phase 230V, 50Hz, integrated EC motor with an axial fan. Max. surrounding temperature +40 °C. The motor has an integrated motor protection.
- The heating coil is equipped with aluminum fins and copper pipes with smooth connections, for soldering or compression fittings. Fin distance 2 mm. Intended for water temperatures up to +150 °C and 10 bar in standard design.
- Supplied with air director with individually adjustable louvres that direct the air flow on one plane. The louvres are manually adjusted to the desired angle.

Mounting

The fan heaters can be permanently mounted on a wall for horizontal air distribution, or on the ceiling for vertical air distribution. Mounting brackets are extra. If the filter section SWF is used, there is no need for brackets.

By turning the fan heater, pipe connections are possible on both sides. The FC control box is found under the top lid of the unit when the



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

water pipes are to the left, seen from the front.

The product must be mounted in such a way as to allow future service and maintenance. For minimum distance, see diagrams on the introduction pages.

Mounting with brackets

The fan heater is mounted on the wall or the ceiling with mounting brackets SWB. The brackets are ordered separately.

1. Mark and drill the holes for the bracket on the wall or the ceiling. Use screws and plugs suitable for the surface.
2. Mount the unit on the brackets with the supplied set of screws.
3. Mount the bracket on the wall or the ceiling with suitable fasteners.
4. Tighten all screws.

Mounting with the filter section SWF

When the filter section is used, it must be equipped with the return air intake SWD for air inlet when mounted directly against a wall or ceiling. Consider the pipework in relation to the service hatch of the filter section. The return air intake is mounted together with the filter section with screws or guides.

The filter section is mounted on the fan heater with suitable screws. There is a cut-out in the filter section that corresponds to the grommet on the back of the fan heater. The return air intake is mounted on the wall or ceiling with suitable fasteners.

Verify the connections between the parts, in case of air leakage use a suitable strip seal. The parts can be assembled on the floor and lifted up as one unit before mounting to the wall or the ceiling.

Mounting of the basic filter SWFTN

The fan heater can be provided with a basic filter to protect the heating coil. Open the top or bottom lid and slide the filter down behind the coil in the tracks for this purpose. See pictures in the introduction pages. The filter is accessible from both the top and the bottom of the unit.

Mounting of the extra air director SWLR

The extra air director makes it possible to direct the air sideways. It is mounted to the unit by hooking it onto the existing air director.

Connection of heating coil

The installation must be carried out by an authorized installer. By turning the fan heater, pipe connections are possible on both sides. The heating coil is equipped with aluminum fins and copper pipes with smooth connections, for soldering or compression fittings. For correct inlet and outlet connection of the heating coil, see dimension drawing.



NOTE: Care must be taken when connecting the pipes. Use a pipe wrench or a similar tool to grip the air curtain connections to prevent straining of the pipes and subsequent water leakage during connection to the water supply pipe-work.

The connections to the heating coil must be equipped with shut off valves to allow trouble-free removal. The heating coil must not be connected to a mains pressure water system or an open water system.

Prior to use, the coil must be vented. An air valve should be connected at a high point in the pipe system. Vent- and drain valves are not included.

Electrical installation

The Champ fan heater 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.

Champ is fitted with a 1.8 m cable with plug for connection to earthed outlet sockets. The wiring diagram can be found on the inside of the lid.

Control

Champ is prepared for FC control system, available in several packages for different requirements. The FC packages are ordered separately. The fan heater has an integrated PC board which is connected to the selected external control system FC. Communication and sensor cables are connected to the PC board via grommets on the back of the unit. The FC PC-board is placed in a box inside the unit. The box is opened by removing the two screws and unhook the lid. The cable will prevent the lid from falling.

Should more than one fan heater be controlled by a single FC, an additional communication cable FCBC per unit will be required.

Settings are made on the FC control panel. See manual for FC. FC will activate the after-run: when the heat is switched off, the fan will continue to run for a short while to cool the elements.

Opening the unit

The top and the bottom are easy to open and fitted with hinges for simple installation and maintenance. Remove the two screws to open the top or the bottom. The FC control box is found under the top lid of the unit when the water pipes are to the left, seen from the front.

Cleaning/maintenance

To ensure the performance and reliability of the unit, regular inspection and cleaning must be carried out. Inspection must be carried out at least twice a year and cleaning when needed. Filters require maintenance at least 4 times a year.

Inlet and exhaust grilles, fans and elements can be vacuum cleaned or wiped using a damp cloth. Use a brush when vacuuming to prevent damaging sensitive parts. Avoid the use of strong alkaline or acidic cleaning agents.

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

Fan

Cleaning intervals of the fan depends on local conditions and the filter used (if any). When the filter section SWF is used and indoor air quality is normal, cleaning once a year is usually sufficient. If the fan blades are not cleaned, noises and vibrations may occur, which may damage the bearings of the fan. If vibrations/noises persist after cleaning, contact an authorized technician. When the filter section is used, inspection can be carried out by the service hatch on the side of the filter section.

Basic filter SWFTN

If used, the basic filter SWFNT must be checked at least 4 times a year and vacuum cleaned when necessary. The filter is accessible from both the top and the bottom of the unit. See Opening the unit and pictures in introduction pages.

Filter section SWF

The filter in the filter section SWF is a deep-pleated bag filter, type EU3 (G85). It must be replaced when the pressure drop reaches or exceeds 75 Pa. Verify the pressure drop at least 4 times a year. Extra filter cassettes SWEF are available as accessories.

Heating coil

Inspect the coil for water leakage and corrosion. Dust on the surface of the heating coil can be vacuum cleaned.

Troubleshooting

If the fans are not running or do not perform properly, check the following:

- The power supply.
- That the intake grille/filter is not dirty.
- That the fan blades can rotate freely.
- Functions and settings of the FC control system, see the FC manual.

If there is no heat, check the following:

- Functions and settings of the FC control system, see the FC manual.
- That the water coil is vented.
- That there is sufficient water flow and pressure.
- That the incoming water is heated adequately.
- That the valves and the actuators are correctly installed and working.

If the fault cannot be rectified, please contact a qualified service technician.

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

- *Keep the areas around the air intake and exhaust grilles free from possible obstructions!*
- *Lifting aids should be used to lift the appliance.*
- *When adjusting the louvers, please note that the water heating coil may have sharp edges.*
- *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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