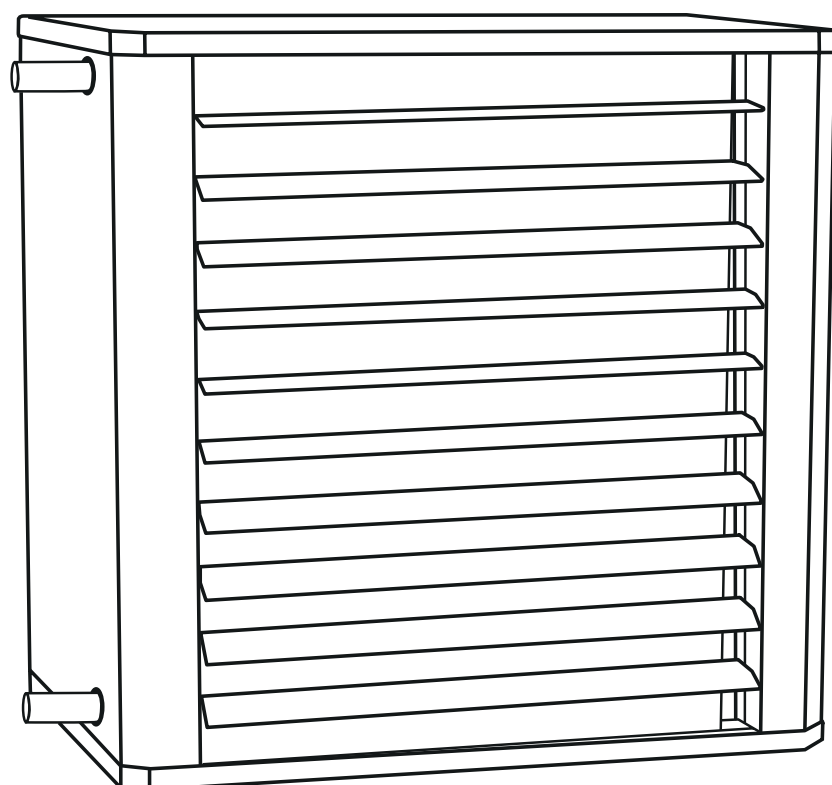


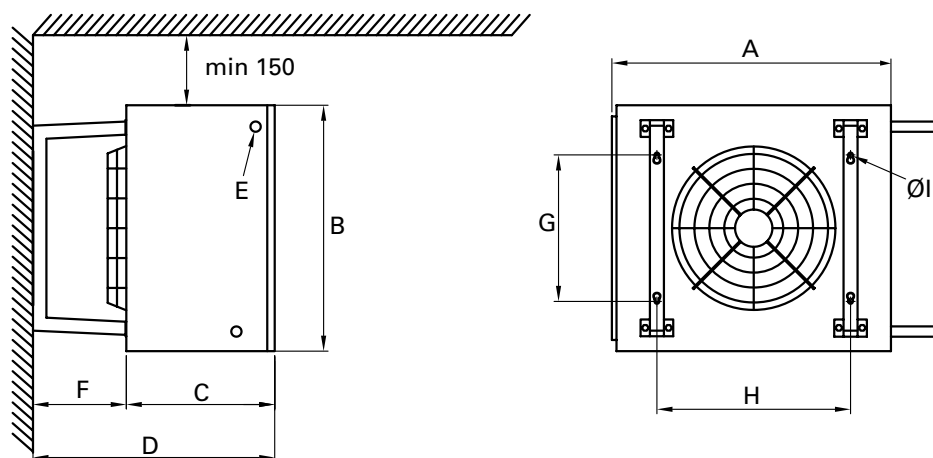
Original instructions

SWX CE



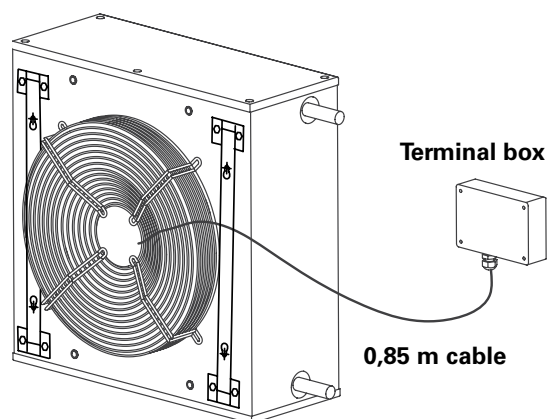
SE ... 7	GB ... 13	NO ... 19	DE ... 25	ES ... 31
FR ... 37	IT ... 43	NL ... 49	PL ... 55	RU ... 61

SWX CE



[mm]	A	B	C	D	E	F	G	H	ØI
SWXCE12	550	530	380	630	R3/4"	250	330	410	10
SWXCE22	705	655	430	700	R1"	270	420	505	10

Electrical installation 230V~



Accessories

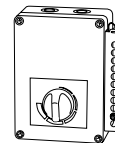
Type		HxWxD [mm]
SWXHFT1	SWXCE12	455x525x15
SWXHFT2	SWXCE22	595x650x15



SWXHFT

Controls SWX CE

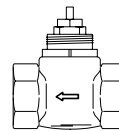
Type	RSK-nr (SE)	NRF-nr (NO)	HxWxD [mm]
SWXRT35			175x150x100



SWXRT35

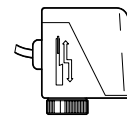
Water regulation SWX CE

Type	RSK-nr (SE)	NRF-nr (NO)
SD20*	672 70 37	85 021 57
TVV20*	672 70 35	85 021 47
TVV25*	672 70 36	85 021 48



TVV20/25

+

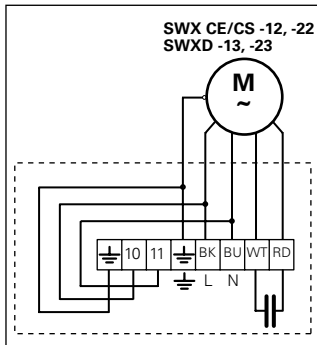


SD20

*) Note: Only for mounting outside corrosive environment.

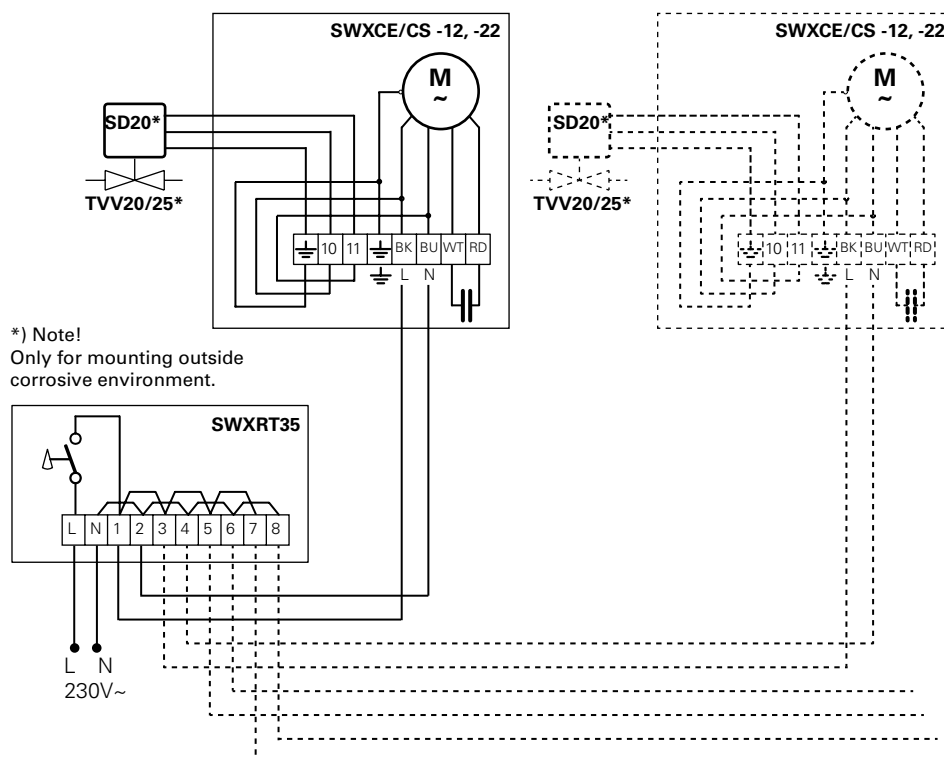
Wiring diagrams SWX CE

Internal



SWX CE

Control by thermostat only



SWX CE

Typ	Heat output* ¹ [kW]	Airflow [m ³ /h]	Airflow [m ³ /s]	Sound level* ² [dB(A)]	Δt * ^{1,3} [°C]	Air throw [m]	Water volume* ⁴ [l]	Voltage [V]	Amperage [A]	Weight [kg]
SWXCE12	12	2100	0,7	59	17	7	1,7	230V~	0,5	29
SWXCE22	24	4200	1,2	69	17	10	2,8	230V~	1,35	45

*¹) Applicable at water temperature 60/40 °C, air temperature, in +15 °C.

*²) Conditions: Distance to the unit 5 metres.

*³) Δt = temperature rise of passing air at maximum heat output.

*⁴) Water volume inside battery.

Intended for water temperatures up to +150 °C and 16 bar.

Max. surrounding temperature +70 °C.

Approved for 220V/1ph/60Hz (SWXCE22: max. surrounding temperature 40° C at 60Hz).

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

Protection class: IP65.

CE compliant.

GB: Heat output

SE: Värmeeffekt

NO: Varmeeffekt

FR: Puissance

RU: Выходная мощность

DE: Heizleistung

PL: Moc grzewcza

ES: Potencia calorífica

IT: Potenza

NL: Verwarmingscapaciteit

GB: Air throw

SE: Kastlängd

NO: Kastelengder

FR: Portée

RU: Длина струи

DE: Wurfweite

PL: Zasięg strumienia powietrza

ES: Distribución

IT: Lancio

NL: Luchtworp

GB: Amperage

SE: Ström

NO: Strøm

FR: Intensité

RU: Сила тока

DE: Stromstärke

PL: Natężenie

ES: Intensidad

IT: Corrente motore

NL: Stroom-sterkte

GB: Airflow

SE: Luftflöde

NO: Luftmengde

FR: Débit d'air

RU: Расход воздуха

DE: Volumenstrom

PL: Wydajność powietrza

ES: Caudal de aire

IT: Portata aria

NL: Luchtstroom

GB: Water volume

SE: Vattenvolym

NO: Vannvolum

FR: Volume d'eau

RU: Объем воды

DE: Wasser-menge

PL: Objętość

ES: Volumen de agua

IT: Volume acqua

NL: Water volume

GB: Weight

SE: Vikt

NO: Vekt

FR: Poids

RU: Bec

DE: Gewicht

PL: Waga

ES: Peso

IT: Peso

NL: Gewicht

GB: Sound level

SE: Ljudnivå

NO: Lydnivå

FR: Niveau sonore

RU: Уровень шума

DE: Geräuschpegel

PL: Poziom głośności

ES: Nivel de ruido

IT: Livello sonoro

NL: Geluidsniveau

GB: Voltage

SE: Spänning

NO: Spenning

FR: Tension

RU: Напряжение

DE: Spannung

PL: Napięcie

ES: Tensión

IT: Tensione motore

NL: Voltage

Output charts water

SWX CE

Incoming / outgoing water temperature 90/70 °C

Air temp. in = +5 °C						Air temp. in = +15 °C			
Type	Airflow [m³/h]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWXCE12	2100	29,5	45,2	0,37	11,9	24,8	50,1	0,31	8,6
SWXCE22	4200	56,6	43,6	0,70	30,3	47,7	48,8	0,59	22

Incoming / outgoing water temperature 80/60 °C

Air temp. in = +5 °C						Air temp. in = +15 °C			
Type	Airflow [m³/h]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWXCE12	2100	25,2	39,4	0,31	9,0	20,6	44,2	0,26	6,1
SWXCE22	4200	48,5	38,1	0,60	23,1	39,8	43,2	0,49	15,9

Incoming / outgoing water temperature 60/40 °C

Air temp. in = +5 °C						Air temp. in = +15 °C			
Type	Airflow [m³/h]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWXCE12	2100	16,4	27,4	0,20	4,2	11,9	31,9	0,15	2,3
SWXCE22	4200	32,2	26,9	0,40	11,2	23,7	31,8	0,29	6,4

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

SWX is a range of fan heaters suitable for environments with strict demands on materials and safety. Models are available for use in dusty or corrosive environments. Fan heater SWX has a robust design, adapted to the requirements of harsh environments.

Supplied with air director with individually adjustable louvres that direct the air flow on one plane.

SWX CE has an inspection hatch with quick release.

Protection class: IP65.

SWX CE

The fan heater is available in two sizes, SWXCE12 and SWXCE22. They have been adapted specifically for use in corrosive environments, such as offshore or chemical industry.

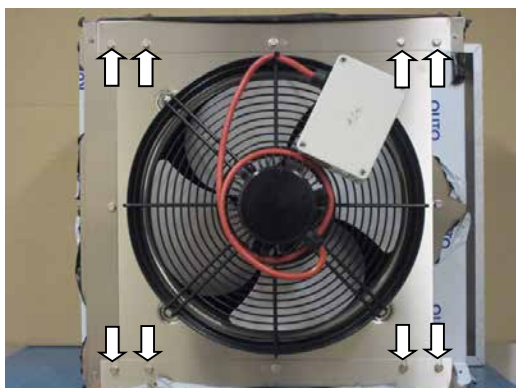
- Meets the requirements for corrosion class C5-M.
- Uses hot water as the energy medium.
- Casing, air director and brackets made of acid-proof stainless steel, EN 1.4404.
- Water coil with copper tube and aluminium fins coated with ElectroFin E-coat. This means that the entire coil is dip-coated with flexible epoxy polymer with 100% coverage. Thermal loss less than 1%.
- Protection class IP65 – protected against dust and water jets.
- Inspection hatch with quick release.
- Fitted with draining plugs for removing dirty water after spraying.
- Supplied without any automation and a single fan speed.
- Wall brackets supplied for mounting of the fan heater on the wall for a horizontal air stream, or in the ceiling for a vertical air stream.

Tip for installation

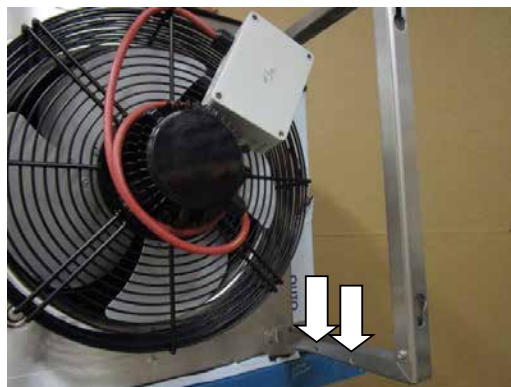
Leave the protective patch until the installation is complete or use gloves that do not imprint on the stainless steel plate.

Fitting the wall brackets

1. Remove the eight screws indicated by the arrows in picture A.



2. Install the brackets with the holes toward the fan motor, as shown in picture B.



3. The fan heater is fitted with a transport protection that is attached to the top and bottom. Loosen the four screws that have the Torx 20 head as shown in Figure C and remove the transport guard. Replace the screws, see figure D.

C



D



4. The fan heater may be mounted with the connection pipes facing left or right, as seen from the front. In rooms with high ceilings, the fan heater should be installed in a low position, but not so low that it intrudes on the working space. Make sure that the wall is able to support the weight of the fan heater.

5. The fan heaters are delivered with the air director installed for water connection on the left hand side. If the fan heater is mounted with the pipes facing right, the air director must be turned for the air to be deflected downward. Remove the six screws (Torx 20) attaching the air director as shown in picture E, lift out the air director and turn it 180°. Then reattach it.

E



6. Mount the fan heater as shown in photo F when mounting it on the ceiling for a vertical air stream. The minimum distance to the wall should be 700 mm. If the fan heater is mounted on a ceiling, near a corner, the minimum distance to one of the walls should be 700 mm and to the other 1000 mm. Make sure that the ceiling is able to support the weight of the fan heater.

F

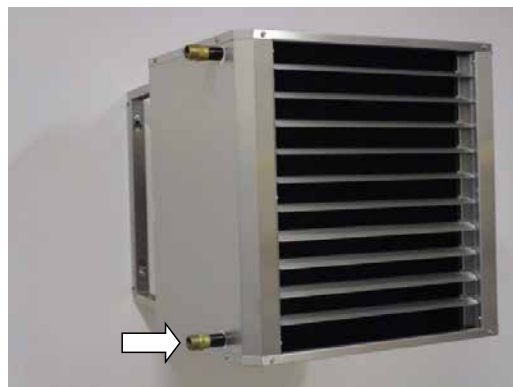


Connection of heating coil

The installation must be carried out by an authorised installer.

1. The fan heater must not be connected to the hot mains water or steam. The maximum permissible temperature and pressure are indicated on the fan heater type plate at the connection pipes.
 2. Output, water temperature, flow and pressure drop can be found in the table for the respective size.
 3. The fan heater must be connected so that the coil can drain water during shutdown when there is a freezing hazard.
 4. At the outlet of the fan heater or centrally in the installation, a venting valve is installed.
 5. A connected pipe system to the fan heater must be set so that they do not load the inlet and outlet pipes of the fan heater.
 6. The water inlet is connected to the heater's lowest placed pipe and the outlet at the highest position according to the arrows in Figure G. The connection is R3/4" on SWXCE12 and R1" on the SWXCE22.
 7. When tightening the couplings on the connection nipples, these must be held so that no torque is transferred to the fan heater's inlet and outlet pipes, see figure H.
- Important! Make sure the entire system is close to the water connection. Any potential leakage can cause expensive water damage.**
8. The connection of brass to the coil should be protected against corrosion in aggressive environments, for example with vulcanic tape that can withstand the surrounding environment, see figure I.

G



H



I



Electrical installation

The electrical installation should be carried out by a qualified electrician in conformity with prevailing regulations. The appliance should be supplied via a triple-pole switch with at least 3 mm breaking gap.

The fan motor is connected to a detached terminal box, which is mounted on a wall next to the unit (0,85 m cable).

The cable glands used must meet the protection class requirements. See wiring diagrams.

Cleaning/maintenance

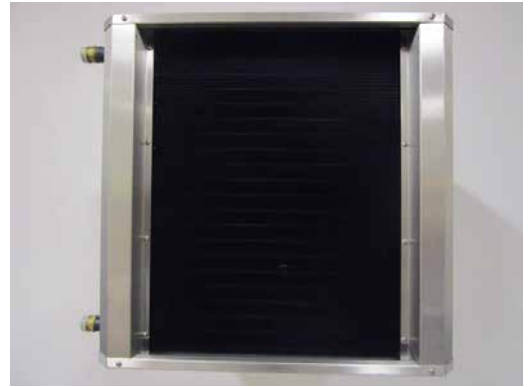
Routine cleaning is important for the product to run effectively. The cleaning intervals must be adjusted, depending on the local conditions of the fan heater. Dust and dirt on the guard and blades of the fan heater restrict the airflow. Dust deposits on the aluminium fins of the coil also reduce airflow and heat transfer. The cooling flanges of the fan motor must also be kept clean to ensure that the operating temperature of the motor is as low as possible. The life of the coil is significantly affected by how dust and dirt are removed. When cleaning the coil with compressed air or water, always work in the opposite direction to the airflow. Make sure in particular that the fins of the coil are not bent or otherwise damaged. Do not use strong chemicals, bleaching agents or acid-based cleaning agents to clean the coil. These types of cleaning agents are difficult to rinse off and increase the rate of corrosion of the coils. The cleaning agents for ElectroFin coils must not contain the following chemicals: Nitric acid, chromic acid, formic acid, hydrofluoric acid, sulphuric acid, tetrachloroethene. Mixtures with acetonitrile, methanol, tetrahydrofuran, hexane and/or dichloromethane. Sodium hypochlorite, as a solution of more than 5%. Sodium hydroxide, as a solution of more than 10%.

Recommended cleaning spray: Clinex A/C

Read the manufacturer's safety data sheet before use and follow the instructions.

1. Disconnect the power supply from the fan motor. Remove the air director on the front of the heater, Fig. J.
2. The fan heater has a quick-release cleaning flap, Fig. K.
3. To remove the cleaning flap, turn the quick-release lock a quarter turn anti-clockwise, Fig. L.

J



K



L



4. When the cleaning flap has been removed (Fig. M), build-up such as dust etc., which restricts the air flow, can be vacuumed off the fan side of the fins or removed with a soft brush (non-metallic). If compressed air is available, use it to clean the coils in the opposite direction to the airflow at a pressure of max. 6-7 bar. Aim the air jet at a right angle to the coil so that the fins are not bent or otherwise damaged. Vacuum or brush the fan motor, fan blades and guard to clean as well.

(M)



5. Then spray an approved cleaning agent (Fig. N) onto both sides of the coil fins and rinse with water in the direction of the fan. Finally, thoroughly rinse the bottom of the coil to remove the dirt and dust.

6. Dry the stainless casing of the heater on the inside and outside. Reattach the cleaning flap and air director.

(N)



Cleaning in environments containing chloride.

Cleaning must be carried out every three months in environments containing chloride, even if the coil is not dirty enough to restrict the airflow. This is necessary to optimize the life of ElectroFin-coated coils and to ensure the unit runs effectively.

Recommended cleaning agent for chloride coating: CHLOR*RID

Read the manufacturer's safety data sheet before use and follow the instructions.

7. Read the instructions under cleaning/maintenance and follow points 1-4.

8. It is extremely important that the temperatures do not exceed 54 °C (130 °F) when cleaning and rinsing the coil.

9. Spray the coil on both sides with an approved salt chloride-removal agent (Fig. N) to dissolve the salt deposits.

10. Rinse the coil with clean water in the direction of the fan.

11. Dry the stainless casing of the heater on the inside and outside. Reattach the cleaning flap and air director.

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

- *Ensure that the area around the intake is kept free from material which could prevent the air flow through the appliance.*
- *Lifting aids should be used to lift the appliance.*
- *The unit is unpainted and may have sharp metal edges.*
- *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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about your local contact: www.frico.net.**