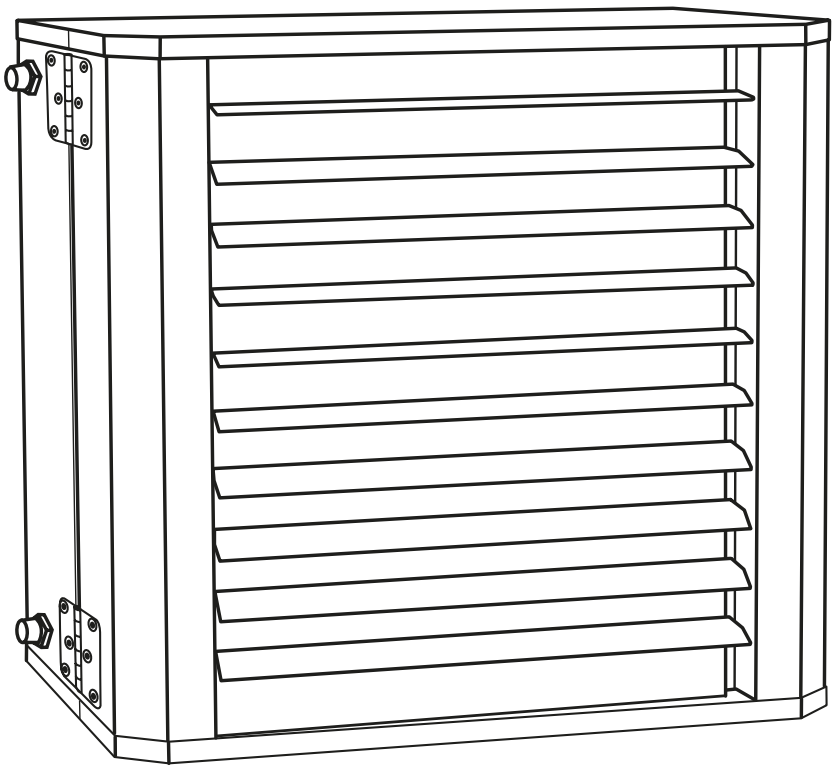
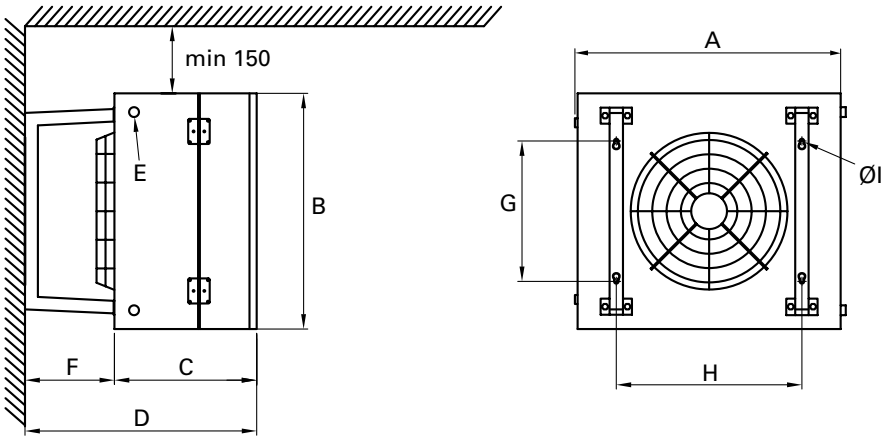
Original instructions

SWX CS

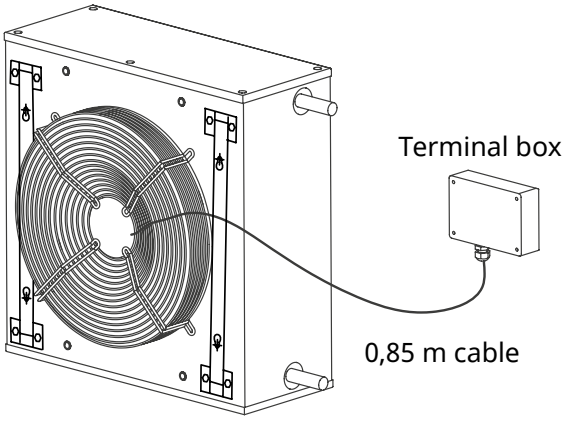


SWX CS



[mm]	A	B	C	D	E	F	G	H	ØI
SWX CS12	585	535	395	705	G3/4"	250	330	410	10
SWX CS22	740	660	395	725	G3/4"	270	420	505	10

Electrical installation 230V~



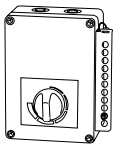
Accessories

Type		HxWxD [mm]
SWXCDFT1	SWXCS12	515x425x5
SWXCDFT2	SWXCS22	620x565x5

SWXCDFT

Controls SWX CS

Type	RSK-nr (SE)	NRF-nr (NO)	HxWxD [mm]
SWXRT35	670 45 41	8502309	175x150x100

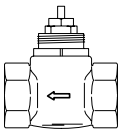


SWXRT35

Water regulation SWX CS

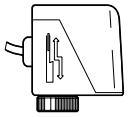
Type	RSK-nr (SE)	NRF-nr (NO)
SD20*	672 70 37	8502157
TVV20*	672 70 35	8502147
TVV25*	672 70 36	8502148

Water regulation



TVV20/25

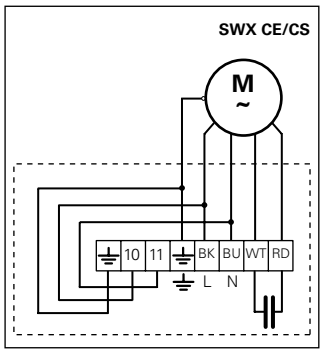
+



SD20

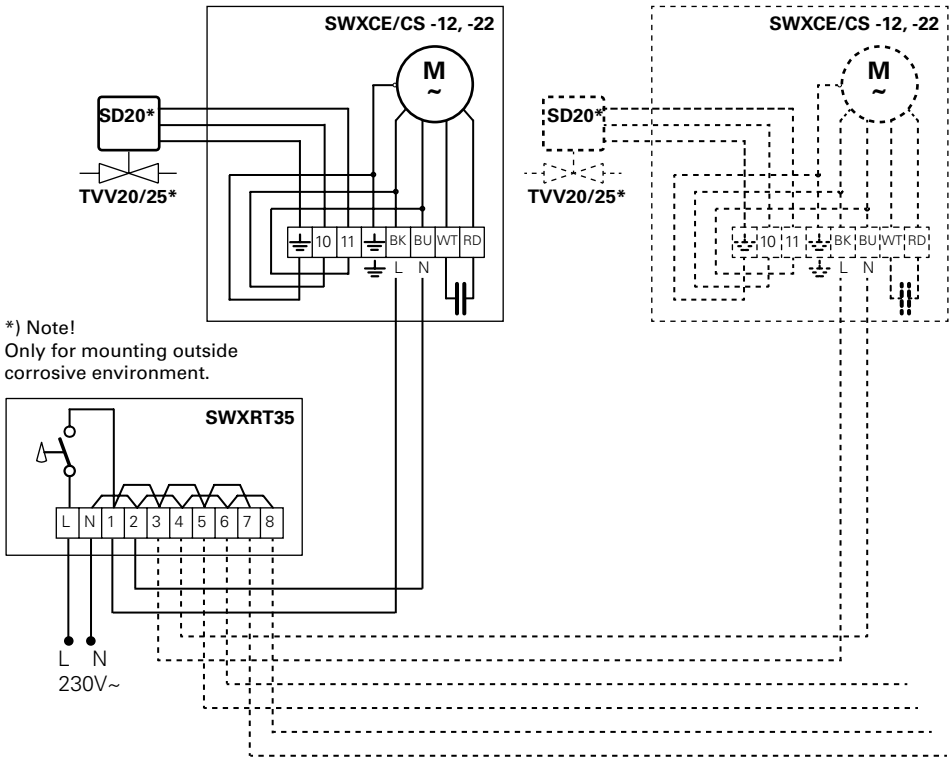
Wiring diagrams SWX CS

Internal



SWX CS

Control by thermostat only



SWX CS

Typ	Heat output*[1] [kW]	Airflow [m³/h]	Airflow [m³/s]	Sound level*[2] [dB(A)]	∆t*[1,3] [°C]	Air throw [m]	Water volume*[4] [l]	Voltage [V]	Amperage [A]	Weight [kg]
SWXCS12	20	2160	0,6	59	27	7	1,5	230V~	0,51	31
SWXCS22	37,2	4300	1,2	69	25	10	2,4	230V~	1,25	47

*[1]) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.
*[2]) Conditions: Distance to the unit 5 metres.
*[3]) ∆t = 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 (SWXCS22: 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: 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: 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: Air throw
SE: Kastlängd
NO: Kastelengder
FR: Portée
RU: Длина струи
DE: Wurfweite
PL: Zasięg strumienia powietrza
ES: Distribución
IT: Lancio
NL: Luchtworp

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: Voltage
SE: Spänning
NO: Spenning
FR: Tension
RU: Напряжение
DE: Spannung
PL: Napięcie
ES: Tensión
IT: Tensione motore
NL: Voltage

GB: Amperage
SE: Ström
NO: Strøm
FR: Intensité
RU: Сила тока
DE: Stromstärke
PL: Natężenie
ES: Intensidad
IT: Corrente motore
NL: Stroom-sterkte

GB: Weight
SE: Vikt
NO: Vekt
FR: Poids
RU: Вес
DE: Gewicht
PL: Waga
ES: Peso
IT: Peso
NL: Gewicht

Output charts water

SWX CS

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]**
SWXCS12	2160	28,9	44,5	0,36	16,5	24,6	48,4	0,30	12,2
SWXCS22	4300	54,1	42,2	0,66	19,2	46,0	46,3	0,56	14,0

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]**
SWXCS12	2160	24,3	38,2	0,30	12,2	20,0	42,1	0,24	8,2
SWXCS22	4300	45,2	36,1	0,55	13,7	37,2	40,3	0,45	9,4

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]**
SWXCS12	2160	14,9	25,4	0,18	4,9	10,7	29,5	0,13	2,7
SWXCS22	4300	27,4	23,8	0,33	5,5	19,4	28,2	0,24	2,7

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

SWX is a range of fan heaters suitable for environments with strict demands on materials and safety. 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.

The front of SWX CS can be opened for easy cleaning.
Protection class: IP65.

SWX CS

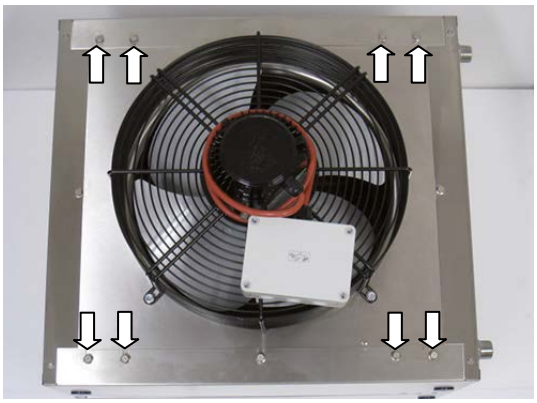
The fan heater is available in two sizes, SWXCS12 and SWXCS22. They have been adapted specifically for use in corrosive environments, such as offshore or chemical industry.

- 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.
- All pipes in the water coil, including hoses and connections, are made from stainless acid-proof steel, EN 1.4404.
- Aluminium fins with nano-coating.
- Protection class IP65 – protected against dust and water jets.
- Removable front panel for fast and easy cleaning.
- 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.

Fitting the wall brackets

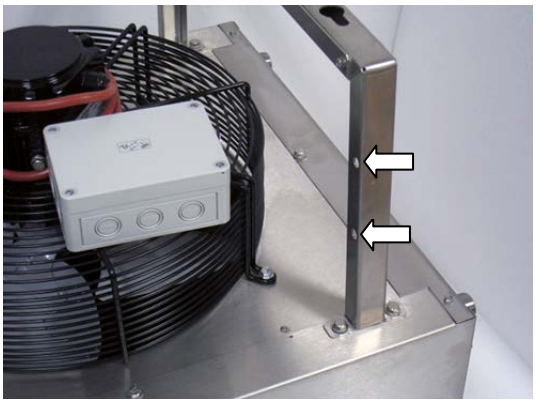
1. Remove the eight screws indicated by the arrows in picture A.

A



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

B



3. 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.

4. The fan heaters are delivered with the air deflector installed for water connection on the left hand side. If the fan heater is mounted with the pipes facing right, the air deflector must be turned for the air to be deflected downward. Remove the six screws (1/4” hex head) attaching the air deflector as shown in picture C, lift out the air deflector and turn it 180°. Then reattach it.

C

D

5. Mount the fan heater as shown in photo D 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 2000 mm. Make sure that the ceiling is able to support the weight of the fan heater.

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. Connect the water supply pipe to the lower pipe on the heater and connect the outlet pipe to the upper pipe, as shown by the arrows in picture E. All models use G3/4” connections.

Note! Be careful while connecting the pipes to prevent pipe damage and water leakage.

The heating coil must not be connected to a mains pressure water system or an open water system.

Prior to use, the pipe system should be ventilated. The air valve should be connected on a high point in the pipe system. Air and draining valves are not included in the heating coil.

Units that are likely to be exposed to air temperatures below zero, for example when a mixing cabinet is used, should be equipped with external frost protection to ensure that the heating coil is not damaged by frost.

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.

After the electrical installation of the motor, check the rotation of the fan. Seen from the inlet side, the impellers should be rotating anti-clockwise.

See wiring diagrams.

Maintenance

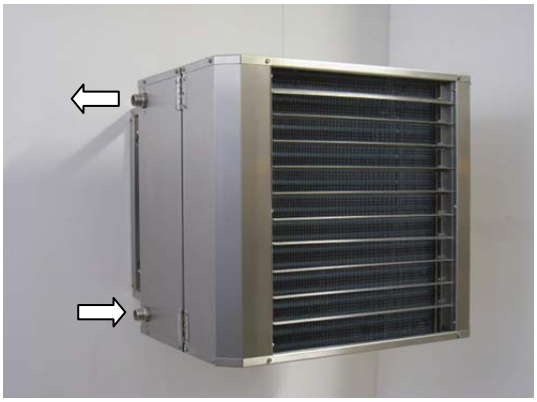
To ensure performance and reliabilty of the unit, inspection and cleaning should be carried out reguarly. Inspection should be carried out at least twice a year. Clean the unit when needed.

During inspection the power supply must always be disconnected.

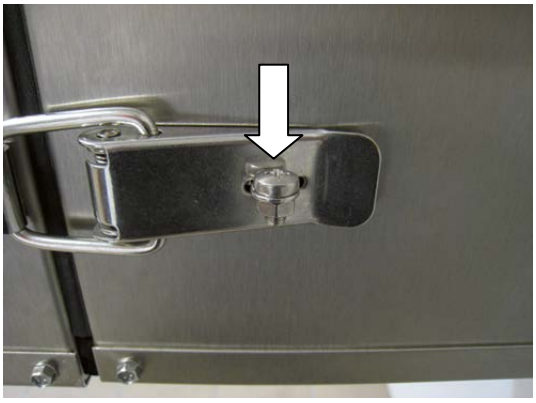
The fan heater is fitted with a removable front panel for fast and easy cleaning. The lower eccentric lock is fitted with a screw (picture F) to prevent opening of the front panel without a tool, and access to the rotating fan blade. May be replaced by a lock. The opening angle of the front panel is limited by a stop to prevent the flexible hoses from breaking. This function must not be removed or modified.

Note! In ceiling mount installations, the removable front panel must be lowered carefully and must not be subjected to any additional loads when open.

E



F



Cleaning

The interval between each cleaning depends on the environment the fan heater is used in. Dust on the fan protective grille and on the water coil's aluminum fins impedes the airflow and reduces its heat exchanging performance. The water coil must therefore be kept clean. The fan cooling flanges also need to be kept clean, to obtain the lowest possible motor operating temperature.

The removable front panel and rear are fitted with draining plugs for removing dirt and water during cleaning, see picture G and H. Catch the water under the heater in a bucket or similar container. Punch out the plugs using a tool and reinstall them following the completed cleaning procedure.

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. 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.

G

H

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