FRICO

Fan heater SWH

Intelligent fan heater with extremely low sound level, for water connection

SWH is a silent running fan heater with many smart and energy saving functions. The fan heater is supplemented with the SIRe control system and can provide fully automatic room heating adaptable according to each unique area of use.

SWH is suitable for use in premises where fan heaters are traditionally used, such as industrial buildings, as well as environments with low sound requirements.

- Very low sound level.
- Five fan speeds.
- Mounted on the wall or ceiling. Mounting brackets are extra.
- Intended for water temperatures up to +150 °C and 10 bar in standard design.
- Corrosion proof housing made of hot zinc-plate and powder enameled steel panels. Colour: RAL 9016, NCS S 0500-N (white). Housing without lacquer or in other colours available on request. Aluminium louvres.

Fan heater SWH (IP44)

Type	Heat output[1] [kW]	Air flow[2] [m³/h]	Air flow[2] [m³/s]	Sound level[3] [dB(A)]	Δt[1,4] [°C]	Air throw[5] [m]	Water volume[6] [l]	Voltage [V]	Amperage [A]	Weight [kg]
SWH02	7/12	530/1120	0,15/0,31	20/39	38/30	5,5	1,3	230V~	0,34	20
SWH12	9/19	760/2020	0,21/0,56	26/48	34/24	8	1,5	230V~	0,7	24
SWH22	19/32	1770/3370	0,49/0,94	40/55	31/25	10	2,7	230V~	1,2	34
SWH32	28/50	2670/5200	0,74/1,44	39/51	31/25	15	3,8	230V~	1,7	55
SWH33	36/64	2250/4500	0,63/1,25	38/50	41/35	12	5,2	230V~	1,7	59

[1]) Applicable at water temperature 80/60 °C, air temperature, in +15 °C. At lowest/highest airflow.
[2]) Applies to fan position 1 – 4.
[3]) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m². At lowest/highest airflow.
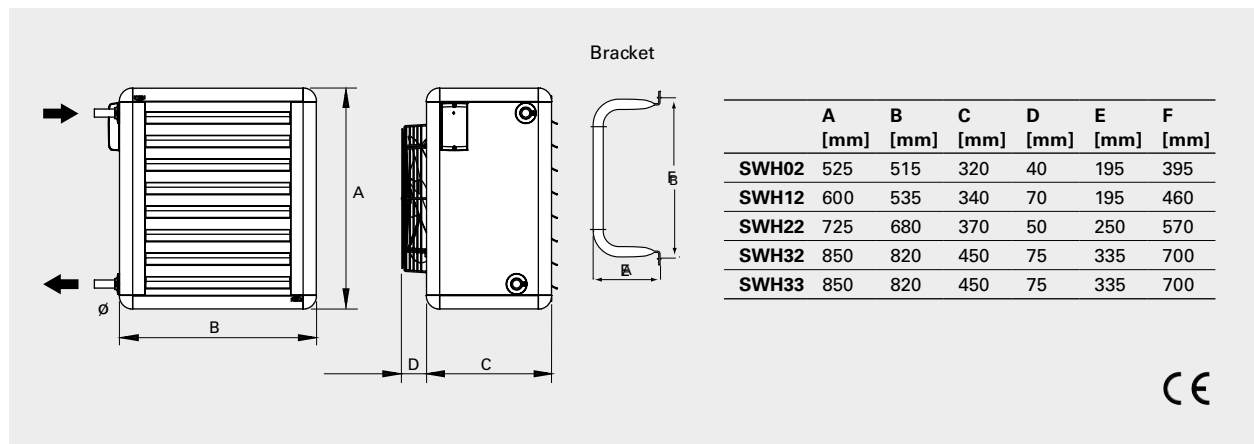[4]) Δt = temperature rise of passing air at maximum heat output and lowest/highest airflow.
[5]) The air throw data above is valid when the horizontally adjustable air director is used and the outlet temperature is +40 °C and the room temperature is +18 °C.
The air throw is defined as the distance in a straight angle from the fan heater to the point where the air speed has dropped to 0,2 m/s.
[6]) Water volume inside water coil.

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

Dimensions

Bracket

	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
SWH02	525	515	320	40	195	395
SWH12	600	535	340	70	195	460
SWH22	725	680	370	50	250	570
SWH32	850	820	450	75	335	700
SWH33	850	820	450	75	335	700

CE

Accessories

Type	Description
SWB0	Mounting brackets SWH02
SWB1	Mounting brackets SWH12
SWB2	Mounting brackets SWH22
SWB3	Mounting brackets SWH32/SWH33
SWFTN02	Basic filter SWH02
SWFTN1	Basic filter SWH12
SWFTN2	Basic filter SWH22
SWFTN3	Basic filter SWH32/SWH33
SWF1	Filter section SWH12
SWF2	Filter section SWH22
SWF3	Filter section SWH32/SWH33
SWEF1	Extra filter cassette EU3 SWH12
SWEF2	Extra filter cassette EU3 SWH22
SWEF3	Extra filter cassette EU3 SWH32/SWH33
SWD1	Return air intake SWH12
SWD2	Return air intake SWH22
SWD3	Return air intake SWH32/SWH33
SWLR1	Extra air director SWH12
SWLR2	Extra air director SWH22
SWLR3	Extra air director SWH32/SWH33
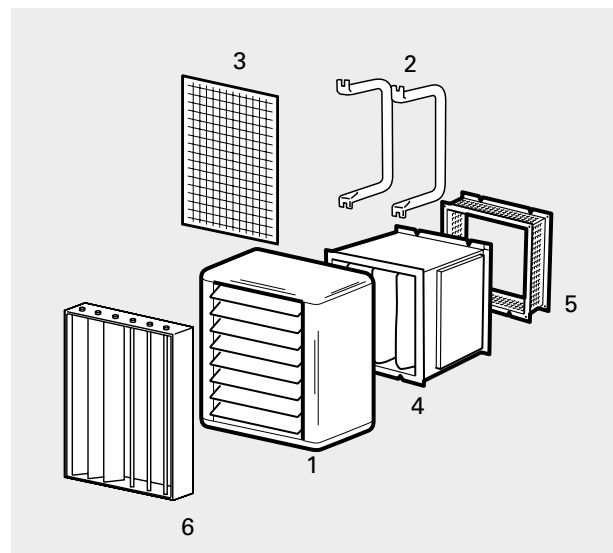
1) Fan heater SWH
2) Mounting brackets SWB
3) Basic filter SWFTN
4) Filter section SWF
5) Return air intake SWD
6) Extra air director SWLR

Control

SWH is prepared for the SIRe control system whose pre-programmed default settings and many features make it easy to install and use the fan heater. Read more about SIRe on the next page.

Valve system VLSP, VOT, VLP or VMT is used to control the water flow.

SIReBN Basic

SIReFCY Competent

SIReFAY Advanced

Control SWH - SIRe control system

SWH is prepared for the SIRe control system whose pre-programmed default settings and many features make it easy to install and use the fan heater. The control system is pre-installed in SWH with an integrated PC board. If more than one SWH should be controlled by a single SIRe, an additional modular cable SIReCC per unit is needed. Cables between units can easily be joined together by using joint piece SIReCJ. SIRe is supplied pre-programmed with quick fit plug connections and is very easy to use and install.

SIRe learns the requirements and can provide fully automated room heating with calendar function and selectable switch off at set temperatures for up to nine units. Using SIRe no more energy is consumed than necessary. Because the fan speed is adapted , the sound level is optimized and is never higher than is necessary for comfort. With SIRe Advanced it is possible to choose between Eco and Comfort mode dependent on whether energy savings or optimal comfort has been prioritised.

There are three different levels with different functionality to choose from, Basic, Competent or Advanced. The SIRe control system is supplemented with a valve system for a complete solution.

Functions SIReBN Basic
- Manual regulation of the fan and temperature
- Automatic control of fan speed and temperature with integrated thermostat.

Functions SIReFCY Competent
- All functions for Basic
- Calendar function
- Filter alarm
- Simple BMS control - on/off, fan speed and alarm functions

Functions SIReFAY Advanced
- All functions for Competent
- Eco mode - extra energy-efficient mode
- Comfort mode - when comfort is important
- Advanced BMS control
- Max limit of return water temperature.
- Stepless heat control.
- Possibility to use an external filter guard.

Integrated in fan heater

Integrated PC Board

SIReIT, internal temperature sensor
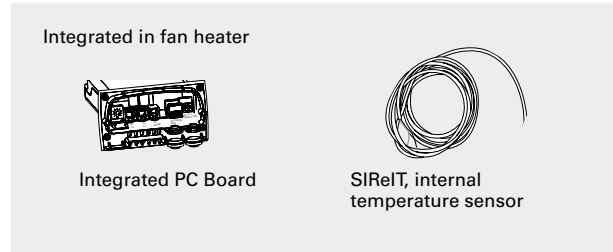
Type	Description
SIReBN	Control system SIRe Basic
SIReFCY	Control system SIRe Competent for fan heaters
SIReFAY	Control system SIRe Advanced for fan heaters
SIReRTX	External room temperature sensor
SIReUR	Kit for recessed installation
SIReWTA	Clamp-on sensor
SIReCC603	Modular cable RJ12 (6/6) 3 m
SIReCC605	Modular cable RJ12 (6/6) 5 m
SIReCC610	Modular cable RJ12 (6/6) 10 m
SIReCC615	Modular cable RJ12 (6/6) 15 m
SIReCC640	Modular cable RJ12 (6/6) 40 m

Basic - SIReBN - Simple and low cost
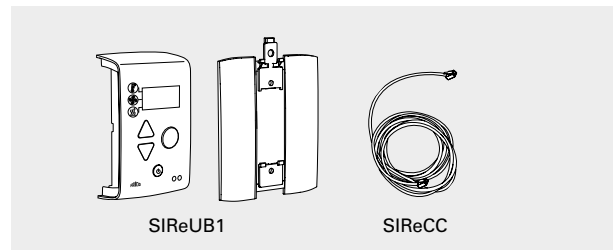
SIReUB1

SIReCC

Manual or automatic control of fan speed and temperature with an integrated thermostat. Possibility of selecting whether the fan should be switched off or not at set room temperature, depending whether sound comfort or circulation of room air is prioritised. Alarm via control unit.
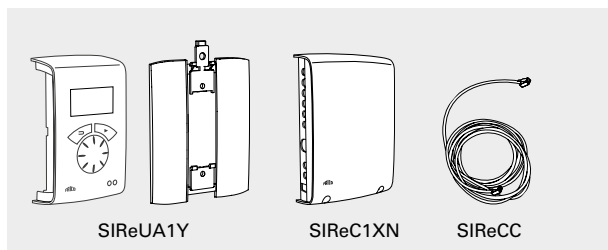
Included in SIReBN Basic:
- SIReUB1, control unit with built in room temperature sensor. Wall unit cover included.
- SIReCC, modular cable, RJ12 (6p/6c), 5 m

Accessories
- SIReRTX, external room temperature sensor, RJ11 (4p/4c), 10 m
- SIReCC, modular cable, RJ12 (6p/6c), 5, 10, 15, 40 m
- VLSP, pressure independent valve system on/off

Competent - SIReFCY - Extended functionality

SIReUA1Y   SIReC1XN   SIReCC

Manual or automatic control of fan speed and temperature with an integrated thermostat. Possibility of selecting whether the fan should be switched off or not at set room temperature, depending whether sound comfort or circulation of room air is prioritised. Calendar function with weekly program and night mode. Filter alarm that indicates when it is time to change or clean the filter. With SIReUR the control unit can be recessed in a wall, protruding only 11 mm. Alarm via control unit or BMS.

Included in SIReFCY Competent:

- SIReUA1Y, control unit with built in room temperature sensor. Wall unit cover included.
- SIReC1XN, PC board HUB Competent
- SIReCC, modular cables, RJ12 (6p/6c), 3 m resp. 5 m

Accessories

- SIReRTX, external room temperature sensor, RJ11 (4p/4c), 10 m
- SIReUR, kit for recessed installation
- SIReCC, modular cable, RJ12 (6p/6c), 5, 10, 15, 40 m
- VLSP, pressure independent valve system on/off

Advanced - SIReFAY - fully automatic with extended functionality
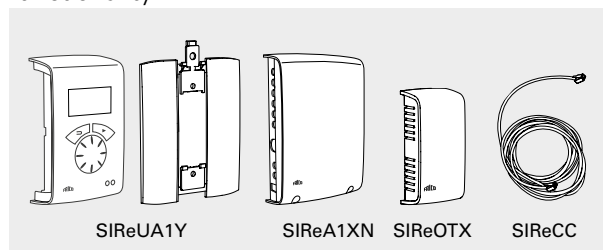
SIReUA1Y   SIReA1XN SIReOTX   SIReCC

Manual or automatic control of fan speed and temperature with an integrated thermostat. Possibility of selecting whether the fan should be switched off or not at set room temperature, depending whether sound comfort or circulation of room air is prioritised. Calendar function with weekly program and night mode. Filter alarm that indicates when it is time to change or clean the filter. With SIReUR the control unit can be recessed in a wall, protruding only 11 mm. Alarm via control unit or BMS.
Possible to control and monitor using BMS system. Choose between Eco and Comfort mode dependent on whether energy savings or optimal comfort has been prioritised. Valve system VLP is required to use SIRe Advanced.

Included in SIReFAY Advanced:

- SIReUA1Y, control unit with built in room temperature sensor. Wall unit cover included.
- SIReA1XN, PC board HUB Advanced
- SIReOTX, outdoor temperature sensor
- SIReCC, modular cables, RJ12 (6p/6c), 3 m resp. 5 m

Accessories

- SIReRTX, external room temperature sensor, RJ11 (4p/4c), 10 m
- SIReUR, kit for recessed installation
- SIReWTA, return water sensor, RJ11 (4p/4c), 3 m
- SIReCC, modular cable, RJ12 (6p/6c), 5, 10, 15, 40 m
- VLP, pressure independent and modulating valve system

Information about accessories for SIRe and valve kits can be found in the "Controls" section.