



## Fan heater SWS

Basic fan heater for water connection

### Application

Fan heater SWS is intended for water-heating and is suitable for places where fan heaters are traditionally used, such as industrial premises, workshops and storage rooms. The fan heater is mounted on the wall. By turning the unit the water connections will be positioned on the left or right side.

### Comfort

Fan heater SWS can be used for total heating in larger premises. SWS quickly gives a pleasant heat where it is needed.

### Operation and economy

The fan heater gives high output and provides fast and efficient heat at low cost. Easy installation and maintenance minimizes cost. Dust can be easily cleaned from the coil.

### Design

Fan heater SWS has a compact and functional design well suitable for the applications it is intended for.

### Product specifications

- Mounted on the wall.
- 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.
- Max. surrounding temperature +40 °C.
- Heating coil with aluminum fins and copper pipes. Smooth pipe connection, for soldering or clamping ring pipe connection.
- Casing of grey alu-zinc coated steel panels, very resistant against corrosion. Louvres in anodised aluminium.



## Technical specifications

### Fan heater SWS (IP44)

Type	Heat output*1 [kW]	Airflow [m <sup>3</sup> /h]	Air flow [m <sup>3</sup> /s]	Sound power*2 [dB(A)]	Sound pressure*3 [dB(A)]	$\Delta t$ *1,4 [°C]	Air throw*5 [m]	Water volume*6 [l]	Voltage [V]	Amperage [A]	Weight [kg]
<b>SWS02</b> *7	12	1260	0,35	65	50	16	7	1,3	230V~	0,36	14
<b>SWS12</b> *7	19	2340	0,65	73	57	13	10	1,5	230V~	0,63	18
<b>SWS22</b>	30	3560	0,99	74	58	14	14	2,7	230V~	0,94	26
<b>SWS32</b>	50	6300	1,75	80	64	13	19	3,8	230V~	2,16	45
<b>SWS33</b>	65	6090	1,69	80	64	18	17	5,2	230V~	2,16	45
<b>SWS323</b>	48	5890	1,64	77	62	13	16	3,8	400V3~	0,82	45
<b>SWS333</b>	62	5660	1,57	77	62	19	14	5,2	400V3~	0,83	45

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

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

\*3) Sound pressure ( $L_{pA}$ ). Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m<sup>2</sup>.

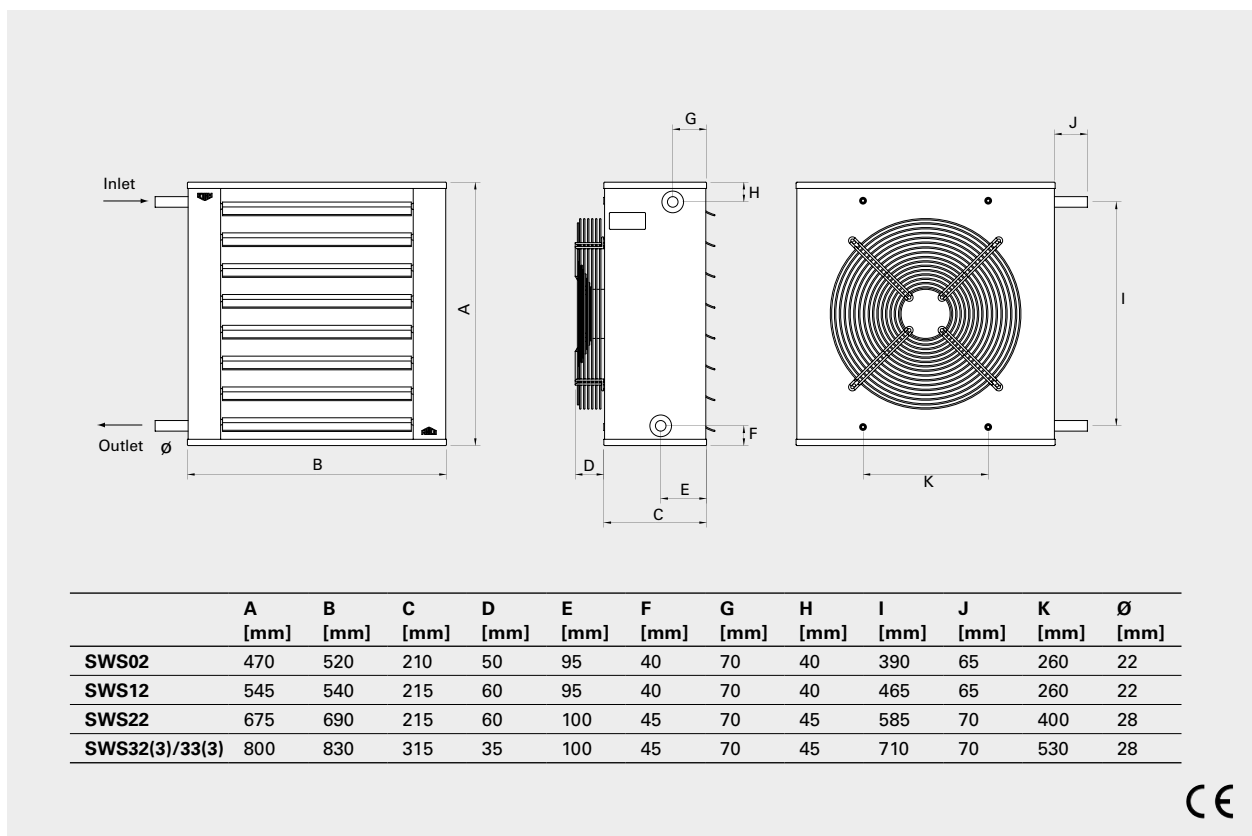
\*4)  $\Delta t$  = temperature rise of passing air.

\*5) The air throw data is valid at room temperature +18 °C. 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.

\*6) Water volume inside water coil.

\*7) Approved for 220V/1ph/60Hz. Product performance for 220V/1ph/60Hz will differ from stated data.

## Dimensions



# Fan heater SWS

## Mounting and connection

### Mounting

The fan heater is mounted on the wall. Mounting brackets are extra.

### Connection

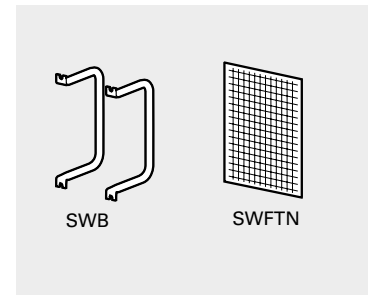
The fan motor on 230V~ units, is connected to a detached terminal box, which is mounted on wall next to the unit (1 m cable). The fan motor on 400V3~-units is connected to a terminal box which is positioned on the motor.

### Connection of heating coil

By turning the fan heater, pipe connections are possible on both sides. Heating coil with copper pipes. Smooth pipe connections for soldering or compression fittings. A vent valve should be connected at a high point in the pipe system. Vent- and draining valves are not included in the heating coil. For correct inlet and outlet connection of the heating coil, see dimension sketch.

## Accessories

Type	Description	SWS02	SWS12	SWS22	SWS32/33
<b>SWB0</b>	Mounting brackets	•			
<b>SWB1</b>	Mounting brackets		•		
<b>SWB2</b>	Mounting brackets			•	
<b>SWB3</b>	Mounting brackets				•
<b>SWSFT02</b>	Basic filter	•			
<b>SWSFT1</b>	Basic filter		•		
<b>SWSFT2</b>	Basic filter			•	
<b>SWSFT3</b>	Basic filter				•



## Control options

### SWS 230V~

Control by thermostat  
Complete regulation kit:

- KRT1900, KRTV19 or TKS16, room thermostat
- TVVS20/25, 2-way valve or TRVS20/25 3-way valve + SD20, actuator

### SWS 400V3~

2-step control of airflow only

The air flow is manually regulated in 2 steps. No heat regulation, maximum water flow through the heating coil.

Complete regulation kit:

- SWYD1, 2-step change-over switch for air flow (Y/D)
- STDT16, thermal contact motor protection

### Thermostat and 2-step control

The thermostat controls the heat supply on/off. The air flow is manually regulated in 2 steps.

Complete regulation kit:

- KRT1900 or TKS16, room thermostat
- SWYD1, 2-step change-over switch for air flow(Y/D)
- STDT16, thermal contact motor protection
- TVVS20/25, 2-way valve or TRVS20/25 3-way valve + SD20, actuator

Control



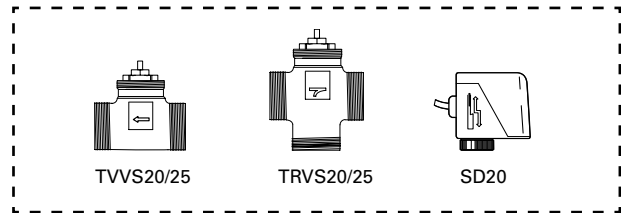
**TKS16, thermostat**  
 Processor controlled thermostat with visible dials and 1-pole main switch. Setting range +5 – +30 °C. Alternating contact for heating or cooling. Connection voltage: 230 V. Max. breaking current: 16 A. IP30.

**KRT1900, capillary tube thermostat**  
 Capillary tube thermostat with concealed dial. Setting range 0 – +40 °C. Max. breaking current: 16/10 A (230/400 V). IP55.

**SWYD1, 2-step change-over switch for air flow (Y/D)**  
 Controls the air flow in two steps. One change-over switch for each unit. IP66.

**STDT16, thermal contact motor protection**  
 Motor protection for models 400V3~. Switches off the supply voltage to the motor when the thermal contact in the motor windings is tripped. The motor protector is reset by pressing the black button as soon as the motor windings have cooled sufficiently. IP55.

Water control



**TVVS20/25, valves + SD20, actuator\***  
 TVVS20/25, 2-way regulation valve and SD20, actuator on/off provides a basic form of water regulation, without the possibility of adjusting or shutting the water flow off, e.g. when making maintenance. A suitable thermostat is chosen to regulate TVVS20/25 and SD20. DN20/25.

**TRVS20/25, 3-way control valve**  
 If a 3-way valve is preferred, TRVS20/25 can be used instead of TVVS20/25.

\*) For further information and options regarding our water controls, see the "Controls" section.

Type	Description	HxWxD [mm]
<b>TKS16</b>	Electronic thermostat, knob, 1-pole switch	80x80x39
<b>KRT1900</b>	Capillary tube thermostat	165x57x60
<b>SWYD1</b>	2-step change-over switch for air flow (Y/D)	120x85x135
<b>STDT16</b>	Thermal contact motor protection (400V3~)	150x80x98
<b>TVVS20</b>	2-way control valve DN20	
<b>TVVS25</b>	2-way control valve DN25	
<b>TRVS20</b>	3-way control valve DN20	
<b>TRVS25</b>	3-way control valve DN25	
<b>SD20</b>	Actuator on/off	