



7 models

💧 Water heat

Fan heater SWS

Basic fan heater for water connection

Application

Fan heater SWS is intended for water-heating or cooling. SWS 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. The airspeed of SWS is controlled by external accessories. The louvres are individually adjustable and the additional accessory programs open up for various solutions.

Operation and economy

Fan heater SWS gives high output and provides fast and efficient heat at low cost. Easy installation and maintenance minimizes cost and the risk of errors. 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.
- Wide range of controls and accessories, e.g. a separate filter section.
- 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 [m³/h]	Air flow [m³/s]	Sound level* ² [dB(A)]	Δt * ^{1,3} [°C]	Air throw* ⁴ [m]	Water volume* ⁵ [l]	Voltage [V]	Amperage [A]	Weight [kg]
SWS02 * ⁶	7/12	520/1260	0,14/0,35	27/50	37/28	5,5	1,3	230V~	0,32	14
SWS12 * ⁶	8/19	620/2340	0,17/0,65	25/57	35/23	8	1,5	230V~	0,67	18
SWS22	11/30	860/3560	0,24/0,99	33/58	38/25	10	2,7	230V~	0,90	26
SWS32	19/50	1540/6300	0,43/1,75	39/64	36/23	15	3,8	230V~	2,42	45
SWS33	24/65	1550/6090	0,43/1,69	39/64	44/31	13	5,2	230V~	2,48	45
SWS323	40/48	4400/5890	1,22/1,64	56/62	26/24	12,5	3,8	400V3~	0,82	45
SWS333	52/62	4300/5660	1,19/1,57	56/62	35/32	11	5,2	400V3~	0,83	45

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

*2) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m². At lowest/highest airflow.

*3) Δt = temperature rise of passing air at maximum heat output and lowest/highest airflow.

*4) 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.

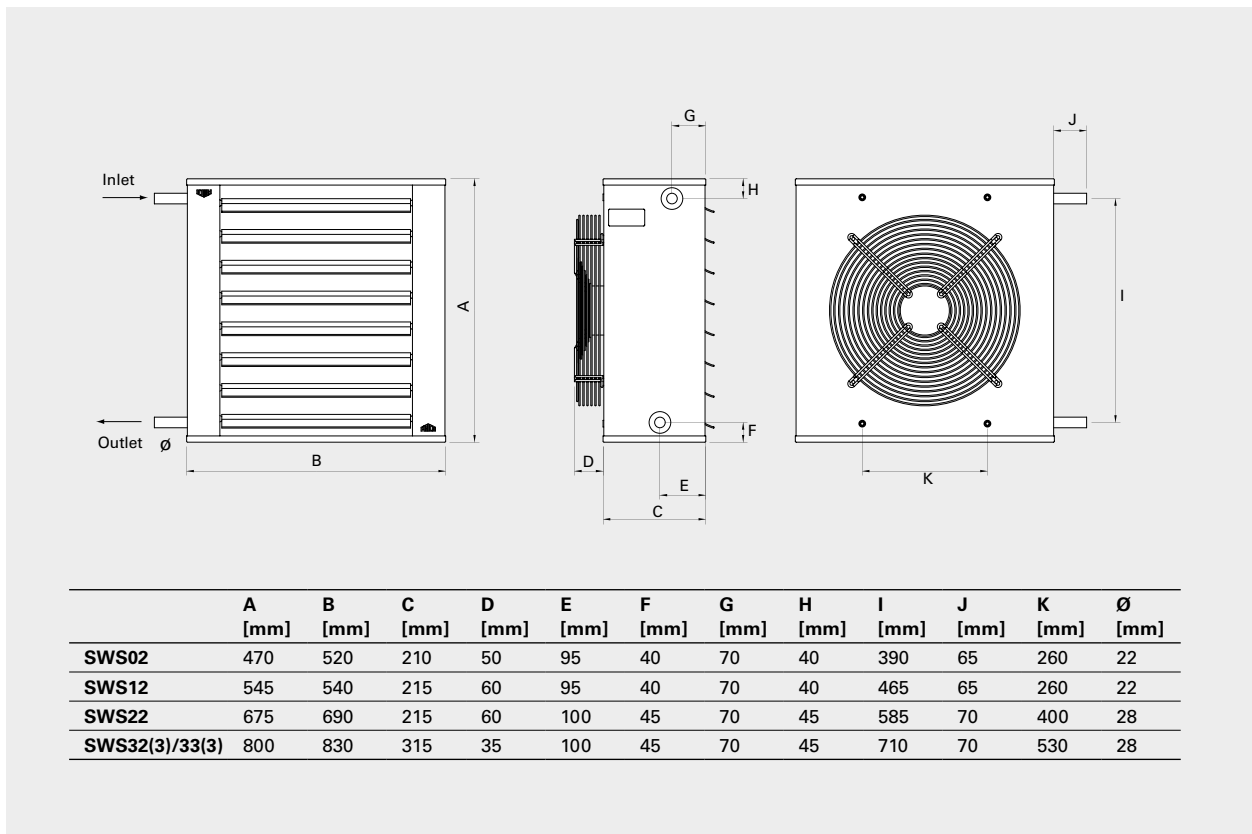
*5) Water volume inside water coil.

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

Protection class: IP44.

CE compliant.

Dimensions



Fan heater SWS

Mounting and connection

Mounting

The fan heater is mounted on the wall. The accessories are assembled with screws or guides and then fitted to the wall with suitable fasteners. 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. When a mixing cabinet or a filter section is used, holes must be made in the casing for connection cables.

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.

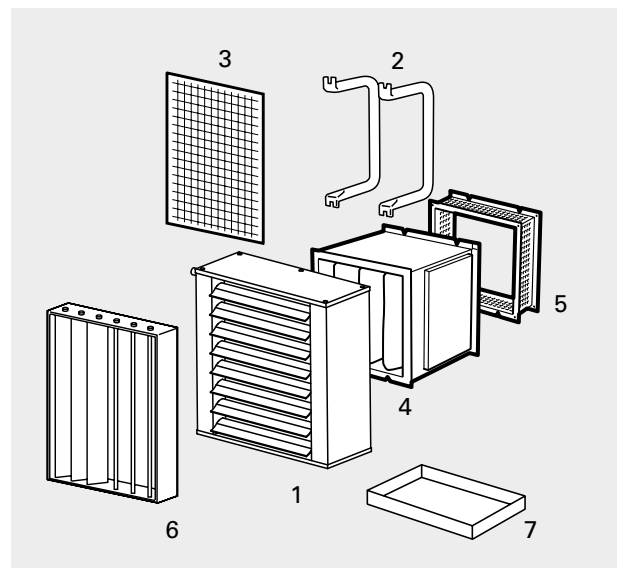
Accessories

SWST, drip tray

Used to collect condensation when the unit is used for cooling.

For information about other accessories, see fan heater SWH.

Type	Description
SWB0	Mounting brackets SWS02
SWB1	Mounting brackets SWS12
SWB2	Mounting brackets SWS22
SWB3	Mounting brackets SWS32/SWS33
SWF1	Filter section SWS12
SWF2	Filter section SWS22
SWF3	Filter section SWS32/SWS33
SWD1	Return air intake SWS12
SWD2	Return air intake SWS22
SWD3	Return air intake SWS32/SWS33
SEWF1	Extra filter cassette EU3 SWS12
SEWF2	Extra filter cassette EU3 SWS22
SEWF3	Extra filter cassette EU3 SWS32/SWS33
SWSFT02	Basic filter SWS02
SWSFT1	Basic filter SWS12
SWSFT2	Basic filter SWS22
SWSFT3	Basic filter SWS32/SWS33
SWLR1	Extra air director SWS12
SWLR2	Extra air director SWS22
SWLR3	Extra air director SWS32/SWS33
SWST02	Drip tray SWS02
SWST1	Drip tray SWS12
SWST2	Drip tray SWS22
SWST3	Drip tray SWS32/SWS33



- | | |
|--------------------------|----------------------------|
| 1) Fan heater SWS | 5) Return air intake SWD |
| 2) Mounting brackets SWB | 6) Extra air director SWLR |
| 3) Basic filter SWSFT | 7) Drip tray SWST |
| 4) Filter section SWF | |

Control options

SWS 230V~

Control by thermostat only

The thermostat starts/stops the fan and also controls the heat supply on/off. The fan is set to run on high speed.

Complete regulation kit:

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

5-step control of airflow only

The air flow is manually regulated in 5 steps. No heat regulation, maximum water flow through the heating coil.

Complete regulation kit:

- RE1,5, 5-step regulator max 1,5A, or
RE3, 5-step regulator max 3A, or
RE7, 5-step regulator max 7A

Thermostat and 5-step control

The thermostat starts/stops the fan and also controls the heat supply on/off. The air flow is manually regulated in 5 steps.

Complete regulation kit:

- RE1,5, 5-step regulator max 1,5A, or
RE3, 5-step regulator max 3A, or
RE7, 5-step regulator max 7A
- KRT1900 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

For further information and options, see the "Controls" section.

Fan heater SWS

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.

RE1,5/RE3/RE7, 5-step change-over switch for air flow

Controls the air flow in 5 steps. **RE1,5** controls maximum 1,5 A. **RE3** controls maximum 3 A. **RE7** controls maximum 7 A. To control the heat, a suitable thermostat and a valve + actuator are needed. IP54.

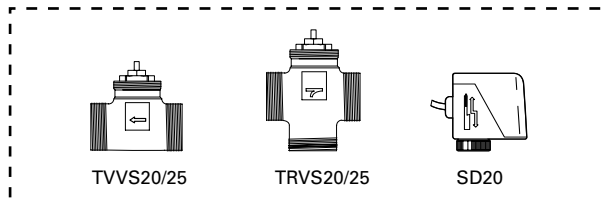
SWYD1, 2-step change-over switch for air flow (Y/D)

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]
TKS16	Electronic thermostat, knob, 1-pole switch	80x80x39
KRT1900	Capillary tube thermostat	165x57x60
RE1,5	5-step change-over switch for air flow, max. 1,5A	200x105x105
RE3	5-step change-over switch for air flow, max. 3A	200x105x105
RE7	5-step change-over switch for air flow, max. 7A	247x147x145
SWYD1	2-step change-over switch for air flow (Y/D)	120x85x135
STDT16	Thermal contact motor protection (400V3~)	150x80x98
TVVS20	2-way control valve DN20	
TVVS25	2-way control valve DN25	
TRVS20	3-way control valve DN20	
TRVS25	3-way control valve DN25	
SD20	Actuator on/off	

Output charts water - Heating

Incoming / outgoing water temperature 90/70 °C														
Type	Fan position	Airflow [m³/h]	Air temp. in = -15 °C				Air temp. in = 0 °C				Air temp. in = +15 °C			
			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]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWS02	max	1260	23,4	34	0,29	23,0	19,0	42	0,23	15,7	14,8	49	0,18	10,0
	min (80V)	520	12,7	49	0,05	7,6	10,3	55	0,13	5,1	7,9	60	0,10	3,2
SWS12	max	2340	35,8	25	0,44	16,1	29,0	34	0,36	11,0	22,5	43	0,28	6,9
	min (80V)	620	15,0	48	0,18	3,3	12,0	54	0,15	2,2	9,3	59	0,11	1,4
SWS22	max	3560	57,4	27	0,70	21,0	46,6	36	0,57	14,3	36,3	45	0,44	9,1
	min (80V)	860	22,0	52	0,27	3,6	17,7	57	0,22	2,4	13,7	61	0,17	1,5
SWS32	max	6300	95,4	25	1,17	33,3	77,5	34	0,95	22,7	60,5	43	0,74	14,4
	min (80V)	1540	37,8	49	0,46	6,1	30,4	55	0,37	4,1	23,5	60	0,29	2,5
SWS33	max	6090	125,0	39	1,53	59,7	101,0	46	1,24	40,5	78,9	53	0,97	25,6
	min (80V)	1550	45,9	63	0,56	9,5	36,80	66	0,45	6,3	28,4	68	0,35	3,9
SWS323	max Δ	5890	92,2	26	1,14	30,8	75,00	35	0,93	21,1	58,6	44	0,73	13,3
	min Y	4400	77,5	31	0,96	22,3	62,80	39	0,78	15,2	49,0	47	0,61	9,6
SWS333	max Δ	5660	120,0	40	1,48	54,2	97,00	47	1,20	36,8	75,5	54	0,94	23,2
	min Y	4300	99,6	45	1,23	38,7	80,50	52	1,00	26,1	62,6	57	0,78	16,4

Incoming / outgoing water temperature 80/60 °C														
Type	Fan position	Airflow [m³/h]	Air temp. in = -15 °C				Air temp. in = 0 °C				Air temp. in = +15 °C			
			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]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWS02	max	1260	20,7	28	0,25	18,7	16,3	36	0,20	12,2	12,2	43	0,15	6,5
	min (80V)	520	11,3	42	0,14	6,2	8,8	47	0,11	4,0	6,6	52	0,08	2,4
SWS12	max	2340	31,4	20	0,38	13,0	24,8	29	0,30	8,4	18,5	38	0,22	4,9
	min (80V)	620	13,2	41	0,16	2,6	10,3	46	0,13	1,7	7,6	51	0,09	1,0
SWS22	max	3560	50,6	22	0,62	16,9	40,0	31	0,49	11,0	29,9	39	0,36	6,5
	min (80V)	860	19,4	44	2,37	2,9	15,2	49	0,19	1,9	11,3	53	0,14	1,1
SWS32	max	6300	84,0	20	1,02	26,8	66,5	29	0,81	17,4	49,8	38	0,61	10,2
	min (80V)	1540	33,4	42	0,41	4,9	26,2	47	0,32	3,1	19,5	52	2,37	1,8
SWS33	max	6090	110,0	32	1,34	48,4	87,2	40	1,06	31,3	65,3	46	0,79	18,4
	min (80V)	1550	40,7	54	0,50	7,7	31,8	57	0,39	4,9	23,7	60	0,29	2,9
SWS323	max Δ	5890	80,8	21	0,98	25,0	64,0	30	0,78	16,2	47,9	39	0,58	9,5
	min Y	4400	67,9	25	0,83	18,1	53,6	34	0,65	11,7	40,1	42	0,49	6,9
SWS333	max Δ	5660	105,0	34	1,28	44,4	83,1	41	1,01	28,7	62,2	47	0,76	16,8
	min Y	4300	87,7	38	1,07	31,7	69,1	44	0,84	20,4	51,6	50	0,63	11,9

Fan heater SWS

Output charts water - Heating

Incoming / outgoing water temperature 60/50 °C														
Type	Fan position	Airflow [m³/h]	Air temp. in = -15 °C				Air temp. in = 0 °C				Air temp. in = +15 °C			
			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]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWS02	max	1260	17,3	21,0	0,42	49,4	13,1	29	0,32	29,6	9,1	36	0,22	15,2
	min (80V)	520	9,4	32,4	0,23	16,3	7,1	38	0,17	9,7	4,9	42	0,12	4,9
SWS12	max	2340	26,6	14,7	0,64	35,0	20,0	24	0,48	20,8	13,8	32	0,33	10,5
	min (80V)	620	11,1	31,8	0,27	7,0	8,3	37	0,20	4,1	5,7	42	0,14	2,1
SWS22	max	3560	42,6	16,3	1,03	45,3	32,2	25	0,78	27,1	22,3	33	0,54	13,8
	min (80V)	860	16,3	34,5	0,39	7,8	12,2	39	0,29	4,6	8,4	43	0,20	2,3
SWS32	max	6300	70,7	14,4	1,71	72,0	53,5	23	1,29	43,1	37,1	32	0,90	21,9
	min (80V)	1540	32,5	32,5	0,68	13,0	20,9	38	0,51	7,7	14,4	42	0,35	3,9
SWS33	max	6090	92,4	24,7	2,23	128,0	69,7	32	1,68	76,4	48,4	38	1,17	39,0
	min (80V)	1550	33,9	42,3	0,82	20,3	25,3	45	0,61	11,9	17,5	48	0,42	6,0
SWS323	max Δ	5890	68,0	15,2	1,64	67,0	51,4	24	1,24	40,0	35,7	33	0,86	20,4
	min Y	4400	57,1	18,9	1,38	48,5	43,1	27	1,04	28,9	29,8	35	0,72	14,7
SWS333	max Δ	5660	88,1	25,7	2,13	118,0	66,5	32	1,61	70,0	46,1	39	1,11	35,7
	min Y	4300	73,3	29,6	1,77	83,8	55,2	35	1,33	49,7	38,2	41	0,92	25,3

Incoming / outgoing water temperature 60/40 °C														
Type	Fan position	Airflow [m³/h]	Air temp. in = -15 °C				Air temp. in = 0 °C				Air temp. in = +15 °C			
			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]	Output [kW]	Air temp. out [°C]	Water flow [l/s]	Pressure drop [kPa]
SWS02	max	1260	15,2	17	0,18	11,2	11,0	24	0,13	6,2	7,1	31	0,09	2,8
	min (80V)	520	8,3	27	0,10	3,8	6,0	32	0,07	2,1	3,9	37	0,05	0,9
SWS12	max	2340	22,7	10	0,27	7,4	16,4	19	0,20	4,1	10,3	28	0,12	1,7
	min (80V)	620	9,6	26	0,12	1,6	6,9	31	0,08	0,8	4,4	36	0,05	0,4
SWS22	max	3560	36,9	12	0,44	9,9	26,7	21	0,32	5,5	16,9	29	0,20	2,4
	min (80V)	860	14,3	29	0,17	1,8	10,3	33	0,12	1,0	6,6	37	0,08	0,4
SWS32	max	6300	61,3	10	0,74	15,6	44,5	20	0,54	8,6	28,3	28	0,34	3,8
	min (80V)	1540	24,6	27	0,30	2,9	17,8	32	0,21	1,6	11,4	36	0,14	0,7
SWS33	max	6090	81,4	20	0,98	28,7	59,2	27	0,71	16,0	38,1	33	0,46	7,1
	min (80V)	1550	30,3	36	0,37	4,7	21,9	39	0,26	2,6	14,1	42	0,17	1,2
SWS323	max Δ	5890	59,0	11	0,71	14,5	42,8	20	0,52	8,1	27,2	28	0,33	3,5
	min Y	4400	49,7	14	0,60	10,6	36,0	23	0,43	5,9	22,9	30	0,28	2,6
SWS333	max Δ	5660	77,7	21	0,94	26,3	56,5	28	0,68	14,7	36,3	34	0,44	6,5
	min Y	4300	64,8	24	0,78	18,9	47,0	30	0,57	10,5	30,3	36	0,37	4,7

Output charts water - cooling

Incoming / outgoing water temperature 7/12 °C												
Type	Fan position	Airflow	Air temp. in = +24 °C, 50% RH					Air temp. in = +27 °C, 50% RH				
			Output total	Output sensible	Air temp. out	Water flow	Pressure drop	Output total	Output sensible	Air temp. out	Water flow	Pressure drop
		[m³/h]	[kW]	[kW]	[°C]	[l/s]	[kPa]	[kW]	[kW]	[°C]	[l/s]	[kPa]
SWS02	max	1260	2,9	2,9	17	0,14	7,2	4,2	3,5	19	0,20	15,7
	min (80V)	520	1,6	1,6	15	0,08	2,8	2,5	1,9	16	0,12	6,1
SWS12	max	2340	4,2	4,2	19	0,20	3,5	5,6	5,3	20	0,27	8,3
	min (80V)	620	1,8	1,8	15	0,09	1,0	2,7	2,2	16	0,13	2,2
SWS22	max	3560	7,0	7,0	18	0,33	5,3	9,5	8,5	20	0,45	12,1
	min (80V)	860	2,7	2,6	15	0,13	1,3	4,2	3,2	16	0,20	2,8
SWS32	max	6300	11,7	11,7	18	0,56	8,2	15,7	14,3	20	0,75	18,7
	min (80V)	1540	4,7	4,6	15	0,22	2,1	7,2	5,6	16	0,35	4,5
SWS33	max	6090	15,7	15,7	16	0,75	17,9	22,3	18,7	18	1,06	38,9
	min (80V)	1550	6,3	5,6	13	0,30	3,9	9,4	6,8	14	0,45	8,0
SWS323	max Δ	5890	11,2	11,2	18	0,54	7,8	15,2	13,7	20	0,73	17,6
	min Y	4400	9,4	9,4	18	0,45	6,0	13,2	11,4	19	0,63	13,6
SWS333	max Δ	5660	14,9	14,9	16	0,71	16,7	21,4	17,8	18	1,02	36,2
	min Y	4300	12,4	12,4	15	0,59	12,7	18,4	14,7	17	0,88	27,4

Incoming / outgoing water temperature 8/15 °C												
Type	Fan position	Airflow	Air temp. in = +24 °C, 50% RH					Air temp. in = +27 °C, 50% RH				
			Output total	Output sensible	Air temp. out	Water flow	Pressure drop	Output total	Output sensible	Air temp. out	Water flow	Pressure drop
		[m³/h]	[kW]	[kW]	[°C]	[l/s]	[kPa]	[kW]	[kW]	[°C]	[l/s]	[kPa]
SWS02	max	1260	2,2	2,2	19	0,08	0,9	2,9	2,9	20	0,10	3,7
	min (80V)	520	1,3	1,3	17	0,04	0,4	1,6	1,6	18	0,06	1,5
SWS12	max	2340	3,1	3,1	20	0,11	0,3	4,2	4,2	22	0,14	1,6
	min (80V)	620	1,4	1,4	17	0,05	0,1	1,8	1,8	18	0,06	0,5
SWS22	max	3560	5,3	5,3	20	0,18	0,5	7,0	7,0	21	0,24	2,6
	min (80V)	860	2,1	2,1	17	0,07	0,1	2,7	2,7	17	0,09	0,7
SWS32	max	6300	8,8	8,8	20	0,30	0,8	11,7	11,7	21	0,40	4,1
	min (80V)	1540	3,6	3,6	17	0,12	0,2	4,7	4,7	18	0,16	1,1
SWS33	max	6090	12,2	12,2	18	0,42	2,3	16	16	19	0,54	9,4
	min (80V)	1550	4,6	4,6	15	0,16	0,5	6,4	5,7	16	0,22	2,1
SWS323	max Δ	5890	8,5	8,5	20	0,29	0,8	11,3	11,3	21	0,38	3,8
	min Y	4400	7,2	7,2	19	0,25	0,6	9,5	9,5	20	0,32	3,0
SWS333	max Δ	5660	11,7	11,7	18	0,40	1,6	15,2	15,2	19	0,52	8,8
	min Y	4300	9,8	9,8	17	0,33	1,7	12,7	12,7	18	0,42	6,8

Fan heater SWS

Output charts water - cooling

Incoming / outgoing water temperature 14/17 °C												
Type	Fan position	Airflow	Air temp. in = +24 °C, 50% RH					Air temp. in = +27 °C, 50% RH				
			Output total	Output sensible	Air temp. out	Water flow	Pressure drop	Output total	Output sensible	Air temp. out	Water flow	Pressure drop
		[m³/h]	[kW]	[kW]	[°C]	[l/s]	[kPa]	[kW]	[kW]	[°C]	[l/s]	[kPa]
SWS02	max	1260	1,7	1,7	20	0,14	7,6	2,4	2,4	21	0,19	6,1
	min (80V)	520	0,9	0,9	19	0,07	2,5	1,3	1,3	19	0,10	2,5
SWS12	max	2340	2,5	2,5	21	0,20	4,8	3,6	3,6	22	0,29	9,3
	min (80V)	620	1,1	1,1	19	0,08	1,0	1,5	1,5	20	0,12	0,8
SWS22	max	3560	4,2	4,2	21	0,33	6,6	5,9	5,9	22	0,47	4,4
	min (80V)	860	1,6	1,6	18	0,13	1,2	2,2	2,2	19	0,18	1,1
SWS32	max	6300	6,9	6,9	21	0,55	10,4	9,9	9,9	22	0,78	6,9
	min (80V)	1540	2,8	2,8	19	0,22	1,9	3,9	3,9	19	0,31	1,8
SWS33	max	6090	9,3	9,3	19	0,74	19,4	13,0	13,0	21	1,03	15,4
	min (80V)	1550	3,4	3,4	17	0,27	3,1	4,7	4,7	18	0,37	4,7
SWS323	max Δ	5890	6,7	6,7	21	0,53	9,6	9,5	9,5	22	0,75	6,5
	min Y	4400	5,6	5,6	20	0,45	7,0	7,9	7,9	22	0,63	5,1
SWS333	max Δ	5660	8,8	8,8	19	0,70	17,7	12,4	12,4	20	0,98	14,4
	min Y	4300	7,4	7,4	19	0,59	12,6	10,3	10,3	20	0,82	11,0

Incoming / outgoing water temperature 15/18 °C												
Type	Fan position	Airflow	Air temp. in = +24 °C, 50% RH					Air temp. in = +27 °C, 50% RH				
			Output total	Output sensible	Air temp. out	Water flow	Pressure drop	Output total	Output sensible	Air temp. out	Water flow	Pressure drop
		[m³/h]	[kW]	[kW]	[°C]	[l/s]	[kPa]	[kW]	[kW]	[°C]	[l/s]	[kPa]
SWS02	max	1260	1,5	1,5	20	0,12	5,8	2,2	2,2	22	0,17	11,7
	min (80V)	520	0,8	0,8	19	0,06	1,9	1,2	1,2	20	0,09	3,8
SWS12	max	2340	2,2	2,2	21	0,17	3,6	3,3	3,3	23	0,26	7,6
	min (80V)	620	0,9	0,9	20	0,07	0,8	1,4	1,4	20	0,11	1,5
SWS22	max	3560	3,6	3,6	21	0,28	5,0	5,3	5,3	23	0,42	10,3
	min (80V)	860	1,4	1,4	19	0,11	0,9	2,0	2,0	20	0,16	1,8
SWS32	max	6300	6,0	6,0	21	0,48	7,9	8,9	8,9	23	0,71	16,2
	min (80V)	1540	2,4	2,4	19	0,19	1,5	3,5	3,5	20	0,28	2,9
SWS33	max	6090	8,0	8,0	20	0,64	14,8	11,8	11,8	21	0,94	29,8
	min (80V)	1550	3,0	3,0	18	0,24	2,4	4,3	4,3	19	0,34	4,7
SWS323	max Δ	5890	5,8	5,8	21	0,46	7,3	8,6	8,6	23	0,68	15,1
	min Y	4400	4,8	4,8	21	0,38	5,3	7,2	7,2	22	0,57	10,9
SWS333	max Δ	5660	7,7	7,7	20	0,61	13,6	11,2	11,2	21	0,89	27,2
	min Y	4300	6,4	6,4	20	0,51	9,7	9,3	9,3	20	0,74	19,3

Output charts water - cooling

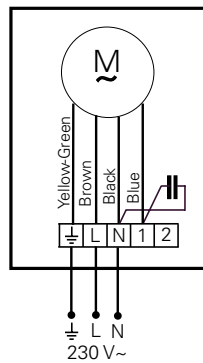
Incoming / outgoing water temperature 15/19 °C												
Type	Fan position	Airflow	Air temp. in = +24 °C, 50% RH					Air temp. in = +27 °C, 50% RH				
			Output total	Output sensible	Air temp. out	Water flow	Pressure drop	Output total	Output sensible	Air temp. out	Water flow	Pressure drop
		[m³/h]	[kW]	[kW]	[°C]	[l/s]	[kPa]	[kW]	[kW]	[°C]	[l/s]	[kPa]
SWS02	max	1260	1,3	1,3	21	0,08	2,6	2,0	2,0	22	0,12	5,8
	min (80V)	520	0,7	0,7	20	0,04	0,9	1,1	1,1	21	0,06	1,9
SWS12	max	2340	1,8	1,8	22	0,11	1,5	2,9	2,9	23	0,17	3,6
	min (80V)	620	0,8	0,8	20	0,05	0,3	1,2	1,2	21	0,07	0,7
SWS22	max	3560	3,0	3,0	22	0,18	2,2	4,8	4,8	23	0,28	5,0
	min (80V)	860	1,2	1,2	20	0,07	0,4	1,8	1,8	21	0,11	0,9
SWS32	max	6300	5,1	5,1	22	0,30	3,4	8,0	8,0	23	0,48	7,8
	min (80V)	1540	2,1	2,1	20	0,12	0,7	3,2	3,2	21	0,19	1,4
SWS33	max	6090	7,0	7,0	21	0,42	6,7	10,7	10,7	22	0,64	14,7
	min (80V)	1550	2,6	2,6	19	0,16	1,1	3,9	3,9	19	0,23	2,4
SWS323	max Δ	5890	4,9	4,9	22	0,29	3,2	7,7	7,7	23	0,46	7,3
	min Y	4400	4,1	4,1	21	0,24	2,3	6,4	6,4	23	0,38	5,3
SWS333	max Δ	5660	6,6	6,6	21	0,40	6,2	10,2	10,2	22	0,61	13,5
	min Y	4300	5,6	5,6	20	0,33	4,4	8,5	8,5	21	0,51	9,6

Fan heater SWS

Wiring diagrams

SWS 230V~

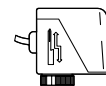
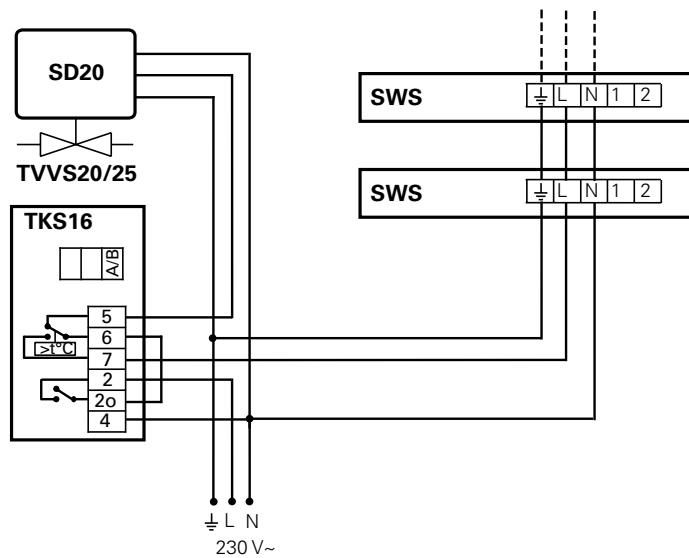
Internal wiring diagram



Control by thermostat only



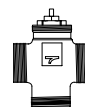
TKS16,
electronic
thermostat



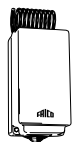
SD20,
actuator



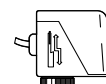
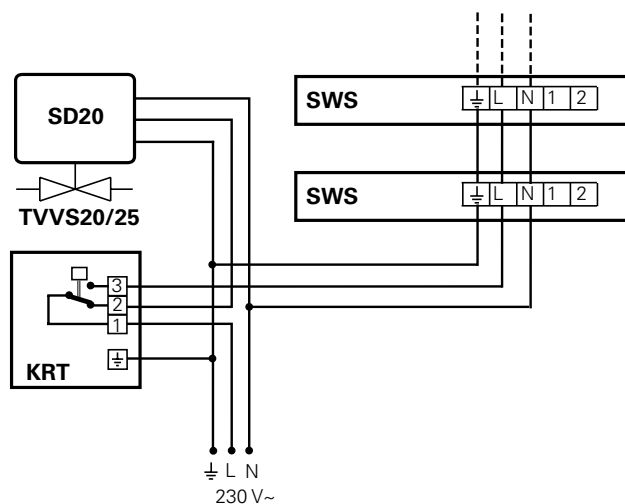
TVVS20/25,
two way valve



TRVS20/25,
three way valve



KRT1900,
capillary tube thermostat



SD20,
actuator



TVVS20/25,
two way valve



TRVS20/25,
three way valve

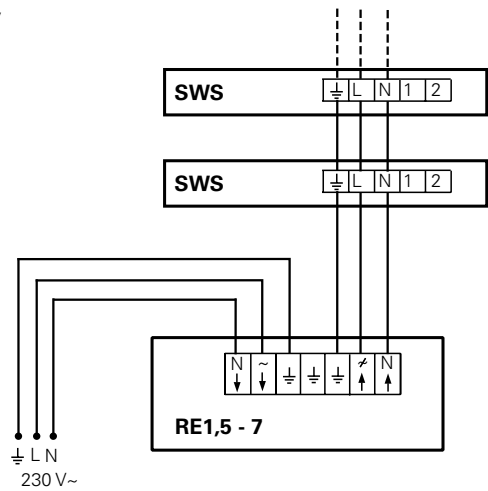
Wiring diagrams

SWS 230V~

5-step control of airflow only



RE1,5-7,
5-step control



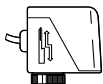
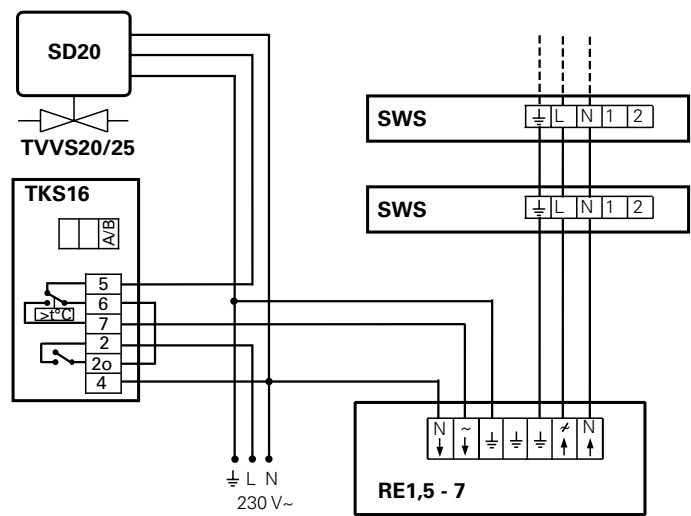
Thermostat and 5-step control



TKS16,
electronic thermostat



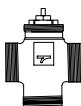
RE1,5-7,
5-step control



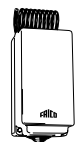
SD20,
actuator



TVVS20/25,
two way valve



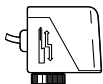
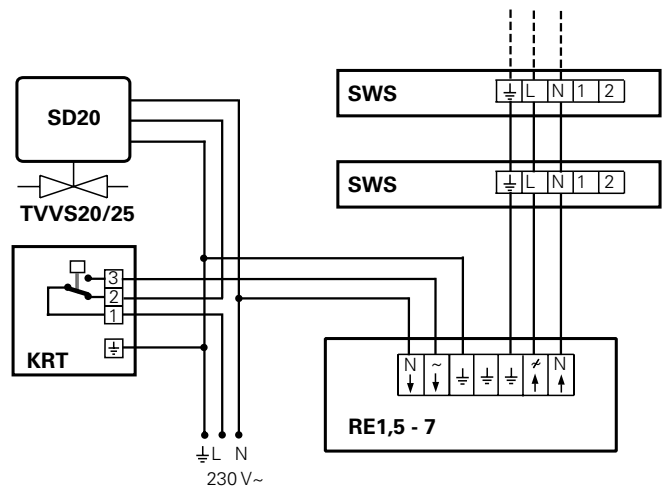
TRVS20/25,
three way valve



KRT1900,
capillary tube thermostat



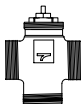
RE1,5-7,
5-step control



SD20,
actuator



TVVS20/25,
two way valve



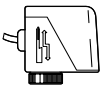
TRVS20/25,
three way valve

Wiring diagrams
SWS 400V3~

Thermostat and 2-step control



TKS16,
electronic
thermostat



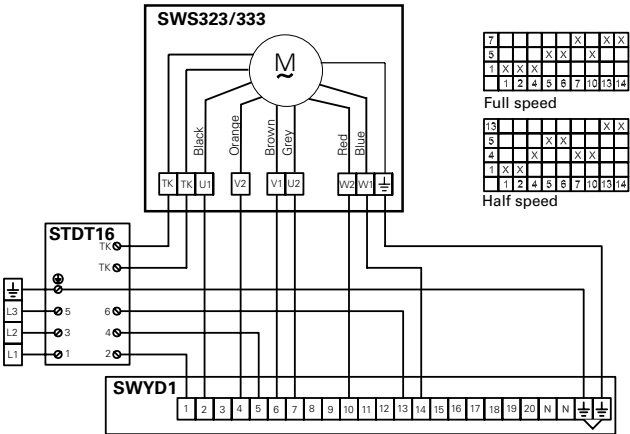
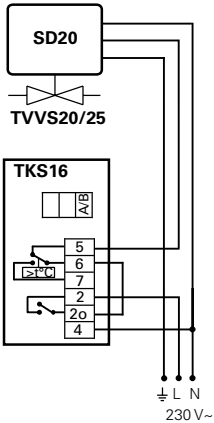
SD20,
actuator



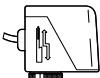
TVVS20/25,
two way valve



TRVS20/25,
three way valve



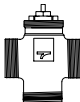
KRT1900,
capillary tube thermostat



SD20,
actuator



TVVS20/25,
two way valve



TRVS20/25,
three way valve

