

SAPHIR Fan Coil Unit

2 & 4 pipe system

A complete range from 0.8 kW up to 3.6 kW



FX03 Terminal unit controller
BacNET and N2 Metasys network compatible

Thermostats



CSR00 (Wall mounted)
Fan speed selector



CMR00 (Wall mounted)
Thermostat with manual fan speed and S/W change over



CER00 (Wall mounted)
Thermostat with manual fan speed and automatic change over

CER20 (Wall mounted)
Thermostat with auto. fan speed and automatic change over

CER30 (Wall mounted)
Thermostat with auto. fan speed and automatic change over for modulating valve

Features

- Inner frame, made of galvanized steel and lined with self-extinguishing thermal insulation material.
- Coil for 2 pipe systems, independent of the inner frame and provided with antitorison structure. Standard water connections are on the right side of the unit, facing the air outlet; however they can be supplied left hand side on request; all water connections are 1/2" G female.
- Centrifugal fan deck independent of the inner frame with two aluminium impellers and galvanized steel scrolls, dynamically balanced; it includes the insulated condensate tray.
- 3 speed single phase motor, with permanently connected capacitor and thermal protection for the windings.
- Terminal board for the electric connections, fitted into a plastic box (ABS), mounted on the left side of the inner structure and easily removable.
- Outer casing, made of white (RAL 9001) ABS plastic (YSF and YSW models).
- Panel frontage made of sheet steel and painted with epoxy powders, of the same colour of the casing (YSF and YSW models).
- Air intake group (YSF and YSW models) and air delivery grilles (model YSW), both made of heat-resistant ABS plastic.
- Protection grill on the air delivery, made of heat-resistant ABS plastic (YSF and YSW models).
- Feet set (only YSF model), made of the same material and colour of the casing.
- Foldaway filter, easily removable, consisting of either an ABS plastic structure (YSW model) or a metallic structure (all other models), with a filter element made of polypropylene.

SAPHIR Fan Coil Unit

0.8 to 3.6 kW



Technical features

Model		10	20	30	40	
Total cooling capacity [kW]	(1)	max	1.56	2.09	2.92	3.62
		med	1.23	1.68	2.36	3.14
		min	0.84	1.22	1.83	2.35
Sensible cooling capacity [kW]	(1)	max	1.16	1.58	2.16	2.70
		med	0.86	1.19	1.78	2.27
		min	0.62	0.85	1.37	1.70
Water flow in cooling [l/h]	(1)	max	268	360	502	622
		med	211	289	407	540
		min	144	210	315	405
Pressure drop in cooling [kPa]	(1)	max	1.9	3.1	7.3	10.6
		med	1.2	2.1	5.0	8.3
		min	0.6	1.2	3.2	5.0
Heating capacity 2 pipes [kW]	(2)	max	2.05	2.81	3.61	4.57
		med	1.57	2.20	2.86	3.90
		min	1.04	1.55	2.17	2.84
Water flow in heating 2 pipes [l/h] *	(2)	max	268	360	502	622
		med	211	289	407	540
		min	144	210	315	405
Pressure drop in heating 2 pipes [kPa]	(2)	max	1.5	2.5	5.9	8.6
		med	1.0	1.7	4.1	6.7
		min	0.5	1.0	2.6	4.0
Heating capacity 2 pipes [kW]	(3)	max	3.51	4.85	6.08	7.74
		med	2.68	3.76	4.80	6.58
		min	1.75	2.63	3.63	4.76
Water flow in heating 2 pipes [l/h]	(3)	max	307	424	531	676
		med	234	329	420	575
		min	153	230	318	416
Pressure drop in heating 2 pipes [kPa]	(3)	max	1.8	3.1	6.1	9.3
		med	1.1	2.0	4.0	7.0
		min	0.5	1.1	2.5	3.9
Heating capacity 4 pipes [kW]	(3)	max	1.91	2.37	3.08	3.60
		med	1.58	1.98	2.65	3.23
		min	1.13	1.53	2.17	2.63
Water flow in heating 4 pipes [l/h]	(3)	max	167	207	269	315
		med	138	173	232	283
		min	99	134	189	230
Pressure drop in heating 4 pipes [kPa]	(3)	max	3.3	4.8	10.2	13.5
		med	2.3	3.5	7.9	11.2
		min	1.3	2.2	5.5	7.8
Air flow [m ³ /h]		max	275	390	425	550
		med	201	288	330	460
		min	125	190	246	325
Sound power level [dB(A)]		max	43	52	47	54
		med	35	44	42	49
		min	27	34	34	40
Sound pressure level [dB(A)]	(4)	max	34	43	37	44
		med	25	35	32	39
		min	18	24	24	31
Power supply [V-ph-Hz]		230 - 1- 50				
Power input [W]	max	31	42	63	65	
Absorbed current [W]	max	0.13	0.20	0.30	0.29	
Water content (2 pipes) [l]		1.00	1.00	1.40	1.40	

(1) Room temperature 27°C d.b., 19°C w.b. - Water temperature 7/12 °C

(2) Room temperature 20°C - Water temperature: 50°C

(3) Room temperature 20°C - Water temperature: 70/60°C

(4) Sound pressure level in a 100 m³ room, at 1,5 m distance and reverberating time of 0,3 s.

* Water flow values as Cooling, accordingly to the EUROVENT standards and UNI ENV 1397



Features & Accessories



Protection grill:

Delivered in standard (YSF, YSW).



Feet set:

Delivered in standard (only YSF).

LUX:

Metallic aluminium grey cabinet (YSF, YSW).



Folaway filter:

Delivered in standard. (ABS plastic structure for YSW model, metallic structure for all other models).



CDI:

Built-in digital regulator (YSF, YSW).



PPV:

Back panel painted in RAL 9001 (YSF).

PPV LUX:

Back panel painted in metallic aluminium gray colour (YSF).



DTH2902:

Insulated ON/OFF valves, for 2 and 4 pipes.



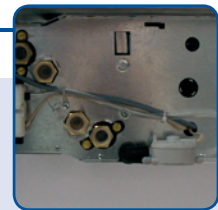
KREL:

Electric heater kit.



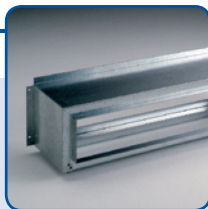
PC:

Condensing pump.



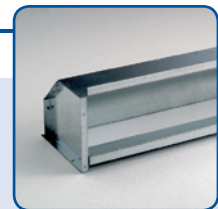
KPA:

Air suction plenum (YSIV, YSIH).



KPM:

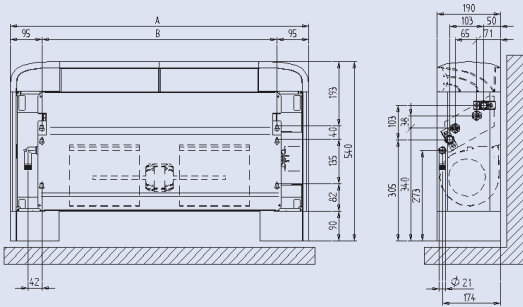
Air delivery plenum (YSIV, YSIH).



Dimensions & Weights

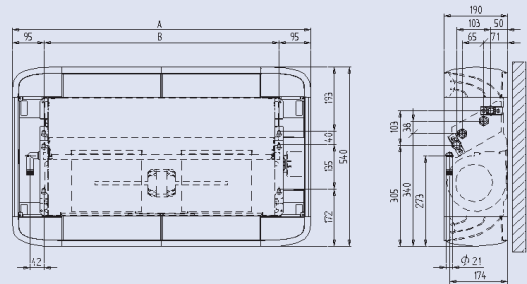


Model YSF 10 to 40



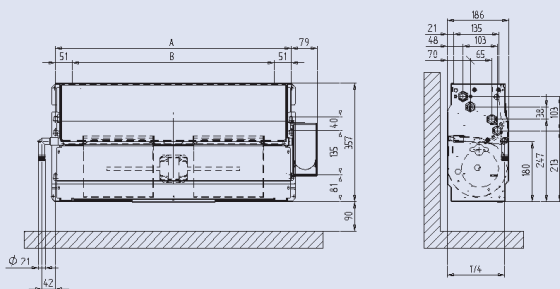
Mod.	10	20	30	40
A	900	900	1200	1200
B	710	710	1010	1010
kg	19	19	27	27

Model YSW 10 to 40



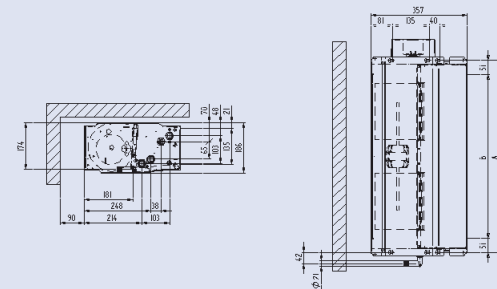
Mod.	10	20	30	40
A	900	900	1200	1200
B	710	710	1010	1010
kg	20	20	29	29

Model YSIV 10 to 40



Mod.	10	20	30	40
A	710	710	1010	1010
B	609	609	909	909
kg	14	14	20	20

Model YSIH 10 to 40



Mod.	10	20	30	40
A	710	710	1010	1010
B	609	609	909	909
kg	14	14	20	20

Notes:
Standard water connections are 1/2" female, right hand side.
Left side water connections are available on request.

Drawings not a scale.