



FCS Water Cassette units



THE REAL WATER CASSETTE



Mech-Elec

Panel beautiful, smart, modern styled, well proportioned smoothed outline to perfectly match with any interior decoration. Made of ABS, it is very resistant to corrosion, rust and environmental agents. White RAL 9010 colour. A **patented** device allow an easy and fast installation of the covering panel, eliminating all the typical inconveniences occurring in these systems.

Central air intake grill + N° 4 sides air supply fins manually adjustable enabling an optimal diffusion of the air in the 4 directions.

Bearing structure made of extremely thick galvanized steel-sheet + Internal thermo-acoustic insulation (class M1). External brackets on the 4 corners for an easy fixing to the roof. N° 01 hole Ø 67 mm for optional external air intake by a circular duct and N° 02 holes Ø 180 mm for optional ducts application for treated air delivery in near environment.

Drain pan made of Polystyrene, made in one piece (without dangerous junctions). Provided with drainpipe Ø 31,5 mm.

Condensate pump including floater and not-return valve avoiding frequent on/off. Static pressure = 1 m ; 230V – 1 Ph – 50Hz.

Coil made of copper pipes and aluminium fins fixed by mechanical expansion. Coil connections provided with manual air vent valve.

Working with water temperature limit 80°C.

Fan section including 1 centrifugal fan with single air inlet. **Fan made of ABS, specially designed for this application**, directly coupled to the electric motor. Mounted on elastic and anti vibration supports. Fan section statically and dynamically balanced, extra silent fan, designed to realize high air flow with low revolutions number.

Electric motor provided with heat protection (Klixon), running capacitor permanently switched on, IP 42, Class B, electric cables protected by double insulation.

Manufactured according to the international standards, 230V – 1 Ph – 50Hz.

Air filter easy to remove, made of high efficiency polypropylene NAN cellular fabric net. Can be regenerated by water wash, blowing, suction.

Electrical equipment: standard, Terminal board to connect the unit to wired remote control (the remote control is an accessory).

Is also available the accessory "Electronic card mounted on the unit + Receiver + Infrared Remote Control" .

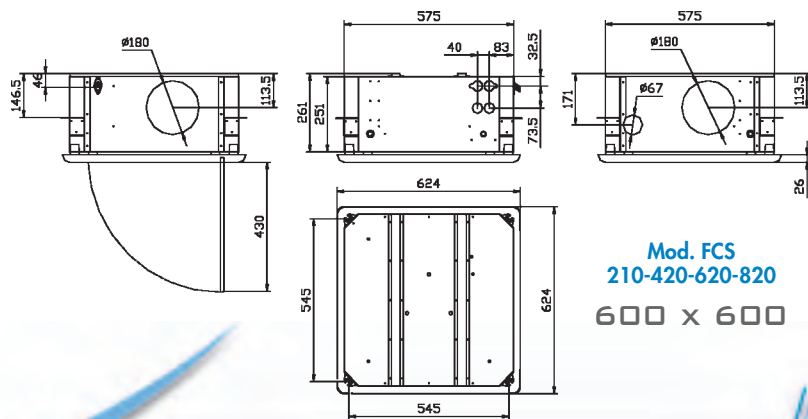
...AND A HUGE ACCESSORIES RANGE ALWAYS ABLE TO WARRANTY A SOLUTION FOR ANY NEED/REQUIREMENT...

EXCLUSIVE ACCESSORIES



- **Multi-functions microprocessor controls, programmable** with Display, Automatic Speeds, dirty filter Alert, Economy Function, Destratification, ...
- **HTN & HTR Regulation: Control by Infrared control & Network system**

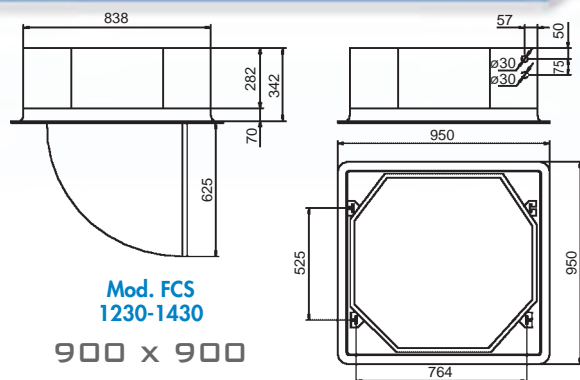
TECHNICAL DATA



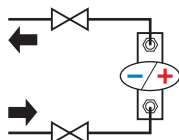
Mod. FCS
210-420-620-820
600 x 600



Mech-Elec



Mod. FCS
1230-1430
900 x 900



2 PIPE (1 coil)

Model		FCS 210	FCS 420	FCS 620	FCS 820	FCS 1230	FCS 1430
Cooling capacity	Total (1) W	2.500	4.200	5.300	6.000	7.870	11.000
	Sensible (1) W	2.200	3.400	4.300	4.800	5.820	8.460
Heating capacity	(2) W	6.470	10.530	13.400	15.310	16.440	24.420
Air flow (3)	m ³ /h	830	950	1.085	1.300	1.260	2.040
Water flow (4)	Cooling l/h	430	722	912	1.032	1.354	1.892
	Heating l/h	556	906	1.152	1.317	1.414	2.100
Water pressure drops (5)	Cooling kPa	18,2	27,6	30,3	34,1	39,4	41,0
	Heating kPa	23,8	33,8	37,8	43,3	33,5	39,4
Sound levels (6)	Min-Med-Max dB(A)	24 - 31 - 35	26 - 33 - 38	29 - 35 - 40	31 - 37 - 42	33 - 40 - 44	38 - 43 - 50
Fans/Motors number	No./No.	1/1	1/1	1/1	1/1	1/1	1/1
Speed number	No. (*)	7	7	7	7	3	3
Current input (7)	MAX W - A	118W - 0,57A	122W - 0,59A	126W - 0,61A	130W - 0,63A	135W - 0,65A	190W - 0,92A
Power supply		230 V - 1 Ph - 50 Hz				230 V - 1 Ph - 50 Hz	
Unit dimensions	A x A mmxmm	575 x 575	575 x 575	575 x 575	575 x 575	840 x 840	840 x 840
	H mm	261	261	261	261	340	340
Panel/grill dimensions	B x B mmxmm	624 x 624	624 x 624	624 x 624	624 x 624	950 x 950	950 x 950
	S mm	25	25	25	25	60	60
Male gas Water connections	ø	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
Drain pipe	ø (mm)	31,5	31,5	31,5	31,5	31,5	31,5
Panel weight	kg	2,0	2,0	2,0	2,0	5,8	5,8
Net weight (only unit)	kg	22,0	22,5	22,7	23,2	44,0	46,0
No. (*) Available speed (only 3 connected)		600 x 600				900 x 900	

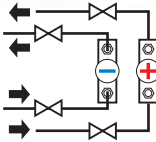
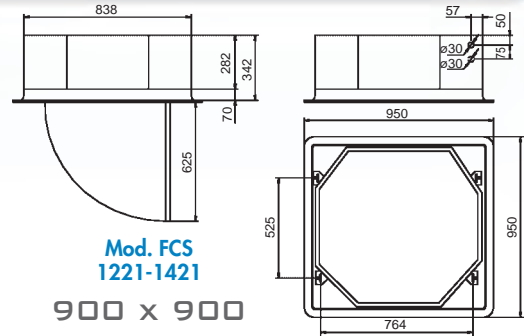
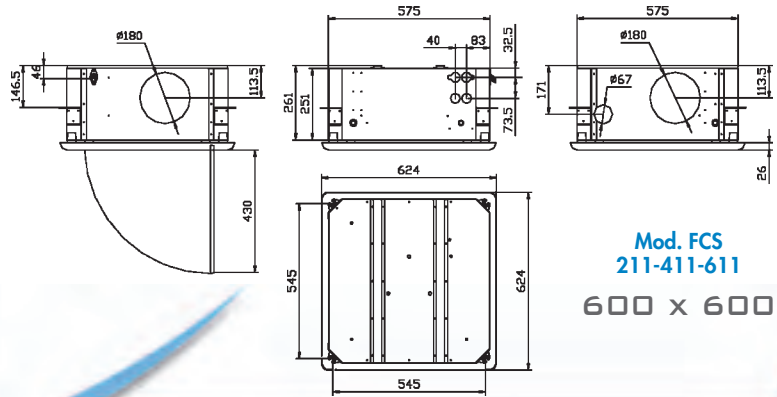


(8) AIR FLOW AND COOLING/HEATING CAPACITIES REDUCTIONS (Note: Ref. 0 Pa)

MODEL	Speed	FCS 210	FCS 420	FCS 620	FCS 820	FCS 1230	FCS 1430
Total cooling capacity	Med	0,84	0,85	0,88	0,80	0,91	0,94
	Min	0,65	0,75	0,74	0,66	0,86	0,87
Sensible cooling capacity	Med	0,79	0,81	0,85	0,75	0,89	0,92
	Min	0,57	0,69	0,68	0,59	0,82	0,84
Heating capacity	Med	0,81	0,83	0,86	0,77	0,90	0,93
	Min	0,60	0,71	0,70	0,61	0,83	0,85
Air flow	Med	0,70	0,73	0,77	0,65	0,83	0,88
	Min	0,42	0,57	0,55	0,44	0,74	0,76

Technical data refer to the following conditions: Standard unit - Atmospheric pressure 1013 mbar - Power supply 230V/1Ph/50Hz. (1) - (2) - (3) - (4) - (5): Nominal technical data refer to the maximum speed and unit with free air flow (External static pressure = 0 Pa). (1) Cooling: Environment air temperature: 27°C d.b., 19°C w.b. - Entering water temp. 7°C, leaving water temp. 12°C - Max speed (nominal). For Med and Min fan speed see (8) (ref. entering water temp. 7°C and water flow as for the Max speed (4)). (2) Heating: Environment air temperature: 20°C - Entering water temperature 70°C, leaving water temperature 60°C - Max speed (nominal). For Med and Min fan speed see (8) (ref. entering water temp. 70°C and water flow as for the Max speed (4)). (1) (2) (8) Cooling and Heating capacities: Data calculated based on measurements made in calorimetric room ref. UNI 6552 - UNI 6552/A242 standards. (3) (8) Air flow: Measurements made with casing ref. AMCA 210-74 fig. 11 standards and plenum + diaphragm ref. CNR-UNI 10023 standards. (6) Sound Levels: Free-field sound-pressure, 2-m distance. Data calculated based on sound power measured in riverberation room ref. ISO 3741 - ISO 3742 standards. (7) Electrical data: Measurements with Wattmeter Jokogawa WT 110.

TECHNICAL DATA



4 PIPE (2 coils)

Model		FCS 211	FCS 411	FCS 611	FCS 1221	FCS 1421
Cooling capacity	Total (1) W	2.200	4.500	5.500	6.070	7.410
	Sensible (1) W	1.800	3.600	4.400	4.730	6.000
Heating capacity	(2) W	3.540	7.000	7.200	8.130	10.620
Air flow (3)	m ³ /h	700	1.800	1.850	1.260	2.040
Water flow (4)	Cooling l/h	378	774	946	1.044	1.275
	Heating l/h	304	602	619	699	913
Water pressure drops (5)	Cooling kPa	18,0	37,5	40,8	37,7	29,4
	Heating kPa	15,6	20,2	24,0	25,3	40,1
Sound levels (6)	Min-Med-Max dB(A)	26 - 31 - 35	30 - 37 - 45	32 - 39 - 46	33 - 40 - 44	38 - 43 - 50
Fans/Motors number	No./No.	1/1	1/1	1/1	1/1	1/1
Speed number	No. (*)	7	7	7	3	3
Current input (7)	MAX W - A	124W - 0,60A	135W - 0,65A	143W - 0,69A	135W - 0,65A	190W - 0,92A
Power supply		230 V - 1 Ph - 50 Hz			230 V - 1 Ph - 50 Hz	
Dimensioni unità	A x A mmxmm	575 x 575	575 x 575	575 x 575	840 x 840	840 x 840
Unit dimensions	H mm	261	261	261	340	340
Dimensioni pannello/griglia	B x B mmxmm	624 x 624	624 x 624	624 x 624	950 x 950	950 x 950
Panel/grill dimensions	S mm	25	25	25	60	60
Male gas Water connections	Cooling coil ø	1/2"	1/2"	1/2"	3/4"	3/4"
	Heating coil ø	1/2"	1/2"	1/2"	3/4"	3/4"
Drain pipe	ø (mm)	31,5	31,5	31,5	31,5	31,5
Panel weight	kg	2,0	2,0	2,0	5,8	5,8
Net weight (only unit)	kg	22,8	23,4	24,0	47,0	47,0
Available speed (only 3 connected)		600 x 600			900 x 900	



(8) AIR FLOW AND COOLING/HEATING CAPACITIES REDUCTIONS (Note: Ref. 0 Pa)

MODEL	Velocità - Speed	FCS 211	FCS 411	FCS 611	FCS 1221	FCS 1421
Total cooling capacity	Med	0,84	0,78	0,79	0,91	0,94
	Min	0,71	0,68	0,68	0,86	0,87
Sensible cooling capacity	Med	0,79	0,73	0,73	0,89	0,92
	Min	0,64	0,60	0,61	0,82	0,84
Heating capacity	Med	0,81	0,74	0,75	0,90	0,93
	Min	0,66	0,63	0,63	0,83	0,85
Air flow	Med	0,70	0,61	0,62	0,83	0,88
	Min	0,50	0,46	0,46	0,74	0,76

Technical data refer to the following conditions: Standard unit - Atmospheric pressure 1013 mbar - Power supply 230V/1Ph/50Hz. (1) - (2) - (3) - (4) - (5): Nominal technical data refer to the maximum speed and unit with free air flow (External static pressure = 0 Pa).

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(2) Heating: Environment air temperature: 20°C - Entering water temperature 70°C, leaving water temperature 60°C - Max speed (nominal). For Med and Min fan speed see (8) (ref. entering water temp. 70°C and water flow as for the Max speed (4)).

(1) (2) (8) Cooling and Heating capacities: Data calculated based on measurements made in calorimetric room ref. UNI 6552, UNI 6552/A242 standards. (3) (8) Air flow: Measurements made with casing ref. AMCA 210-74 fig.11 standards and plenum + diaphragm ref. CNR-UNI 10023 standards.

(6) Sound levels: Free field sound pressure, 2 m distance. Data calculated based on sound power measured in reverberation room ref. ISO 3741 - ISO 3742 standards. (7) Electrical data: Measurements with Wattmeter Jokogawa WT 110.