

SYSTEM TERMINALS



Wall, ceiling and recessed hydronic fan coils, cassettes and hydronic unit heaters, ductable air handling terminal units, controlled mechanical ventilation, air mixers, low temperature radiant systems.

FR - FC - FCO - FCR

Wall, ceiling and recessed hydronic fan coils



Basic version FR (wall and ceiling)



FR G version with cabinet complete with front intake grille and air filter



MADE IN ITALY



SILENT VENTILATION



WALL CEILING INSTALLATION



BATTERY REVERSIBLE



HEATING HIGH PERFORMANCE



COOLING DEHUMIDITY

Technical and construction features

The pleasantly soft and elegant line of the FR models, which can be installed both on the wall and on the ceiling, integrates perfectly into any environment intended for commercial and residential activities, such as hotels, residences, offices, shops and homes.

The battery is reversible, the cover cabinet is made of galvanized sheet metal and pre-painted in RAL 9002 color, protected by transparent adhesive film to avoid damage during transport and installation.

On request, the version can be supplied with a cover cabinet equipped with a front air intake grille, complete with filter, for floor and ceiling installation.

The air delivery grille is made up of modular elements in heat-resistant plastic material in RAL 7032 color.

The right and left terminal elements include the seat for the control panel and the relative access doors, equipped with an exclusive snap closure system. In environments where access to the control panel is to be denied (public places, schools, etc.), the doors can be locked by means of a screw with a suitable hole cover. The FR fan coils are supplied as standard designed for housing the control panel on the right side.

On request, versions with customized coat with various chromatic patterns are also available with a small surcharge.

The extremely quiet operation, the rational construction and a wide choice of controls complete the versatility of these devices, designed to ensure maximum comfort even in all those environments where a low noise level is required.

Model	Battery water content
100	0,675 l
200	0,882 l
300	1,090 l
400	1,300 l
600	1,700 l
800	1,700 l

Model	Thermal Power kW	Refrigeration power kW	Code	€
Wall and ceiling fan coil FR 100	2,83	1,15	36200110	434,00
Wall and ceiling fan coil FR 200	4,98	2,10	36220110	526,00
Wall and ceiling fan coil FR 300	5,64	2,73	36240110	578,00
Wall and ceiling fan coil FR 400	7,05	3,11	36260110	598,00
Wall and ceiling fan coil FR 600	9,77	4,66	36280110	640,00
Wall and ceiling fan coil FR 800	12,33	5,14	36300110	752,00

Version with cabinet complete with front intake grille and air filter

Model	Thermal Power kW	Refrigeration power kW	Code	€
Wall and ceiling fan coil FR 100 G	2,83	1,15	36200111	474,00
Wall and ceiling fan coil FR 200 G	4,98	2,10	36220111	568,00
Wall and ceiling fan coil FR 300 G	5,64	2,73	36240111	618,00
Wall and ceiling fan coil FR 400 G	7,05	3,11	36260111	640,00
Wall and ceiling fan coil FR 600 G	9,77	4,66	36280111	712,00
Wall and ceiling fan coil FR 800 G	12,33	5,14	36300111	804,00

FR - FC - FCO - FCR

Wall, ceiling and recessed hydronic fan coils



mod. FC wall recessed vertical throw



mod. FCR recessed ceiling



mod. FCO wall recessed horizontal throw

Technical and construction features

The supporting structure is made of galvanized sheet metal of adequate thickness and is designed for fixing the unit to the wall or ceiling with bayonet slots, as well as for mounting the various components and accessories. The internal walls are suitably insulated with self-extinguishing closed cell material.

The heat exchange coil is of the type for 2-pipe systems, consisting of 3 rows of copper pipes and continuous aluminum finning.

The aluminum finned pack is integral with the tube bundle by mechanical expansion of the tubes themselves.

The frame is in galvanized steel and the manifolds are in cast brass, equipped with G 1/2" female threaded connections and G 1/8" manual air vent valves.

The fan coils are supplied as standard with hydraulic connections on the left side.

The fan unit consists of one (sizes 100 and 200) or two double suction centrifugal fans, with high air flow and low noise level, with impellers and screws made of plastic material. The groups are electronically balanced even after mounting on the units.

The 230 V single-phase electric motors, with permanently inserted capacitor and with built-in thermal protection, have 6 speeds, obtained by means of an autotransformer, of which three are connected as standard and can be selected from the control panel. The motor, directly coupled to the fans, is mounted on elastic supports and the unit is assembled with the suitably insulated condensate collection tray.

The electrical connection with the control panel is ensured by un connettore del tipo ad innesto rapido polarizzato.

Il filtro aria è in fibra sintetica, montato su telaio metallico con rete di contenimento su entrambi i lati ed è estraibile tramite apposite linguette da sbloccare per mezzo di un utensile.


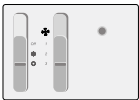

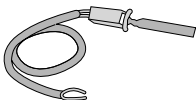

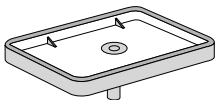
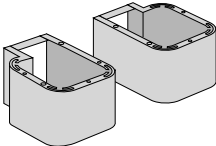
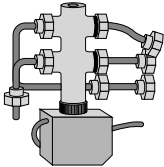
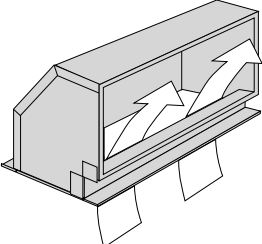
In the built-in versions FC - FCO - FCR the air filter is supplied on request. The FC - FCO - FCR vertical and horizontal recessed models, extremely practical and functional, are equipped with a complete range of accessories that allow you to solve any system problem and are particularly suitable in all those cases where it is necessary to occupy the least possible space. on the ground and on the ceiling. The units are designed for use in 2-pipe systems. For 4-pipe systems with two independent circuits, an additional heat exchange coil is available on request.

Model	Thermal Power kW	Refrigeration power kW	Code	€
Wall recessed fan coil FC 100	2,83	1,15	36200200	402,00
Wall recessed fan coil FC 200	4,98	2,10	36220200	454,00
Wall recessed fan coil FC 300	5,64	2,73	36240200	506,00
Wall recessed fan coil FC 400	7,05	3,11	36260200	526,00
Wall recessed fan coil FC 600	9,77	4,66	36280200	588,00
Wall recessed fan coil FC 800	12,33	5,14	36300200	670,00
Wall recessed fan coil FCO 100	2,83	1,15	36200201	392,00
Wall recessed fan coil FCO 200	4,98	2,10	36220201	454,00
Wall recessed fan coil FCO 300	5,64	2,73	36240201	494,00
Wall recessed fan coil FCO 400	7,05	3,11	36260201	516,00
Wall recessed fan coil FCO 600	9,77	4,66	36280201	588,00
Wall recessed fan coil FCO 800	12,33	5,14	36300201	640,00
Wall recessed fan coil FCR 100	2,83	1,15	36200300	402,00
Wall recessed fan coil FCR 200	4,98	2,10	36220300	454,00
Wall recessed fan coil FCR 300	5,64	2,73	36240300	506,00
Wall recessed fan coil FCR 400	7,05	3,11	36260300	526,00
Wall recessed fan coil FCR 600	9,77	4,66	36280300	588,00
Wall recessed fan coil FCR 800	12,33	5,14	36300300	670,00

FR - FC - FCO - FCR

Wall, ceiling and recessed hydronic fan coils

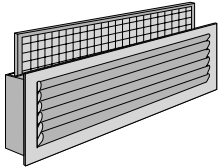
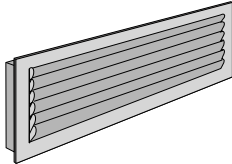
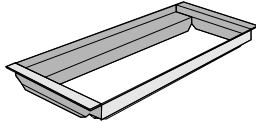
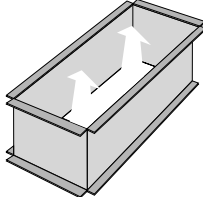
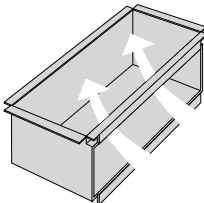
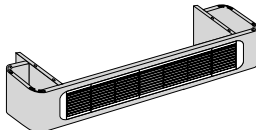
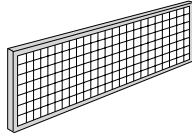
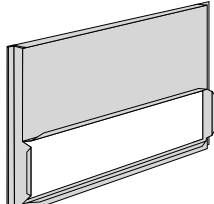
Accessories FR - FC - FCO - FCR

		Code	€
	Digital room thermostat on board the machine with battery probe included	36205226	100,00
	Basic control on the machine for the management of the 3 speeds and for the winter / summer selection	36205212	52,00
	Wall-mounted electronic room thermostat with summer-off-winter selector and 3-speed switch (with valve control complete with 4m cable)	36205221	82,00
	Mechanical consent thermostat for wall electronic room thermostat or basic control	36205214	36,00
	Wall-mounted digital room thermostat with LCD display for daily / weekly hourly programming and built-in consent probe	36205224	106,00
	Auxiliary condensate collection tray for the vertical versions FR - FC - FCO	36200501	20,00
	Pair of sockets for FR version	36200512	44,00
	Valve kit for standard 3-row coil only, complete with pipes and fittings	36205303	180,00
	90° air delivery connection mod. FC - FCR for built-in versions	mod. 100 36202201 mod. 200 36222201 mod. 300 36242201 mod. 400 36262201 mod. 600 36282201 mod. 800 36282201	30,00 34,00 38,00 78,00 88,00 88,00

FR - FC - FCO - FCR

Wall, ceiling and recessed hydronic fan coils

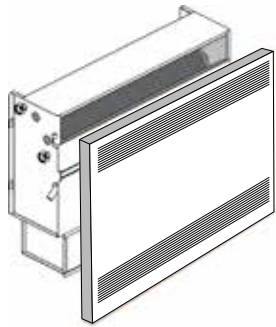
Accessories FR - FC - FCO - FCR

		Code	€	
	Air intake grille mod. FC - FCR in aluminum with fixed fins complete with filter for built-in versions	mod. 100	36201502	70,00
		mod. 200	36221502	90,00
		mod. 300	36241502	110,00
		mod. 400	36261502	112,00
		mod. 600	36281502	124,00
		mod. 800	36281502	124,00
			Air delivery grille mod. FC - FCR in aluminum with adjustable fins for built-in versions	mod. 100
mod. 200	36221501			58,00
mod. 300	36241501			64,00
mod. 400	36261501			68,00
mod. 600	36281501			76,00
mod. 800	36281501			76,00
	Lower air intake panel mod. FCR			mod. 100
		mod. 200	36220007	36,00
		mod. 300	36240007	42,00
		mod. 400	36260007	48,00
		mod. 600	36280007	50,00
		mod. 800	36280007	50,00
			Straight air delivery connection mod. FC - FCR for built-in versions FC - FCR	mod. 100
mod. 200	36222202			36,00
mod. 300	36242202			38,00
mod. 400	36262202			44,00
mod. 600	36282202			62,00
mod. 800	36282202			62,00
	90 ° air intake fitting mod. FC - FCO - FCR for built-in versions			mod. 100
		mod. 200	36222203	82,00
		mod. 300	36242203	84,00
		mod. 400	36262203	92,00
		mod. 600	36282203	98,00
		mod. 800	36282203	98,00
			Plinth complete with grid mod. FR	mod. 100
mod. 200	36220019			114,00
mod. 300	36240019			124,00
mod. 400	36260019			134,00
mod. 600	36280019			156,00
mod. 800	36280019			156,00
	Air filter for built-in versions mod. FC - FCO - FCR			mod. 100
		mod. 200	36225601	14,00
		mod. 300	36245601	16,00
		mod. 400	36265601	16,00
		mod. 600	36285601	18,00
		mod. 800	36285601	18,00
			Front air intake panel mod. FC	mod. 100
mod. 200	36220006			50,00
mod. 300	36240006			60,00
mod. 400	36260006			70,00
mod. 600	36280006			80,00
mod. 800	36280006			80,00

FR - FC - FCO - FCR

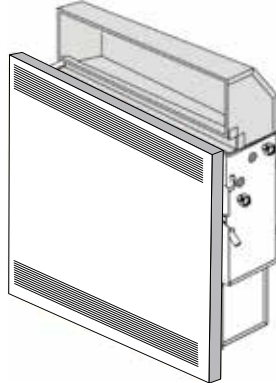
Wall, ceiling and recessed hydronic fan coils

Accessories FR - FC - FCO - FCR



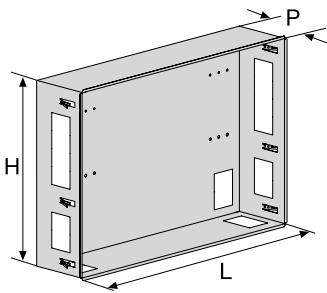
Front panel
mod. FCO
for recessed wall template
in pre-painted sheet metal

	Code	€
mod. 100	36200404	82,00
mod. 200	36220404	92,00
mod. 300	36240404	104,00
mod. 400	36260404	116,00
mod. 600	36280404	138,00
mod. 800	36280404	138,00



Front panel
mod. FC
for recessed wall template
in pre-painted sheet metal

mod. 100	36200504	88,00
mod. 200	36220504	98,00
mod. 300	36240504	110,00
mod. 400	36260504	122,00
mod. 600	36280504	144,00
mod. 800	36280504	144,00

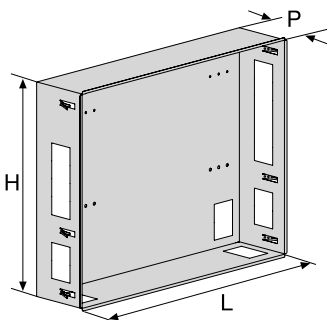


Built-in templ. FCO wall mounted in galvanized sheet

Mod.	100	200	300	400	600	800
P	235	235	235	235	235	235
L	632	742	852	962	1182	1182
H	730	730	730	730	730	730

Values in mm

mod. 100	36200403	128,00
mod. 200	36220403	132,00
mod. 300	36240403	138,00
mod. 400	36260403	156,00
mod. 600	36280403	166,00
mod. 800	36280403	166,00



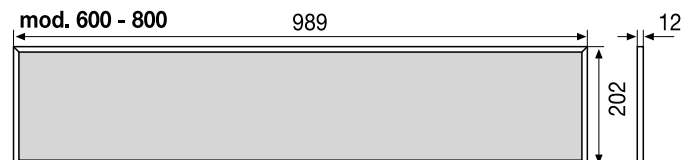
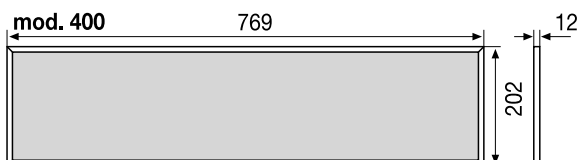
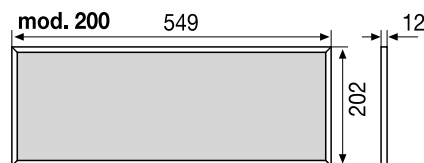
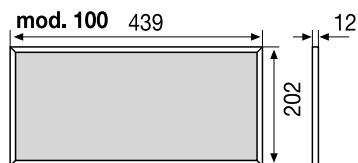
Built-in templ. FC wall mounted in galvanized sheet

Mod.	100	200	300	400	600	800
P	235	235	235	235	235	235
L	632	742	852	962	1182	1182
H	900	900	900	900	900	900

Values in mm

mod. 100	36200503	150,00
mod. 200	36220503	154,00
mod. 300	36240503	160,00
mod. 400	36260503	178,00
mod. 600	36280503	186,00
mod. 800	36280503	186,00

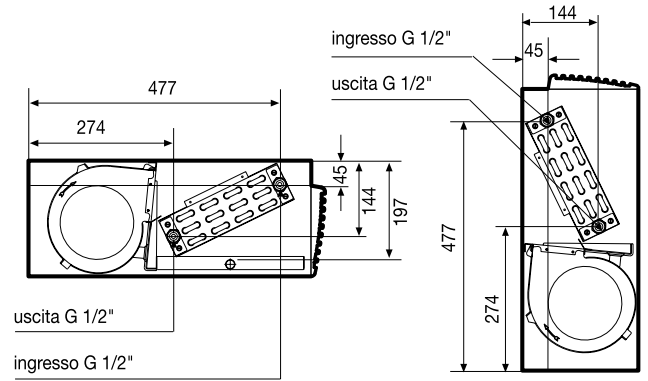
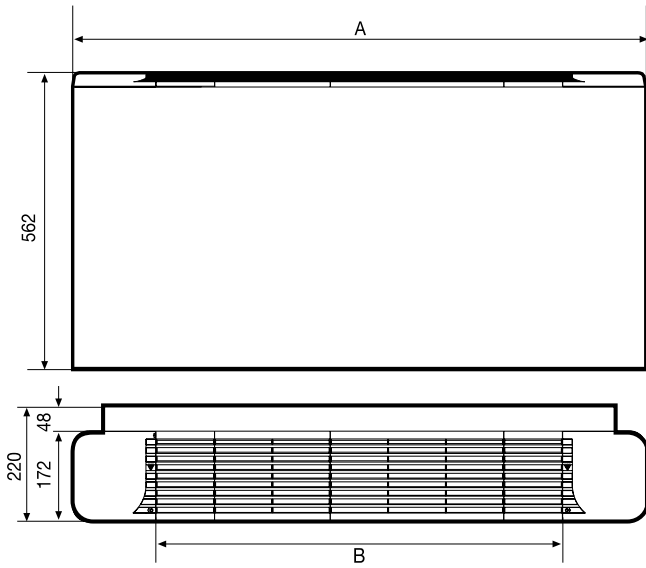
Dimensions air filters FR - FC - FCO - FCR



FR - FC - FCO - FCR

Wall, ceiling and recessed hydronic fan coils

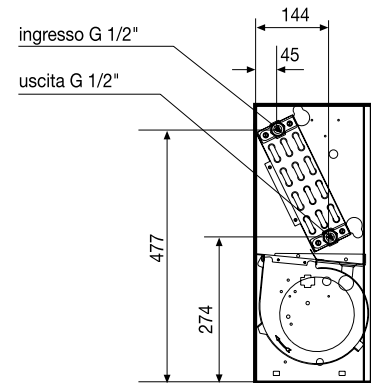
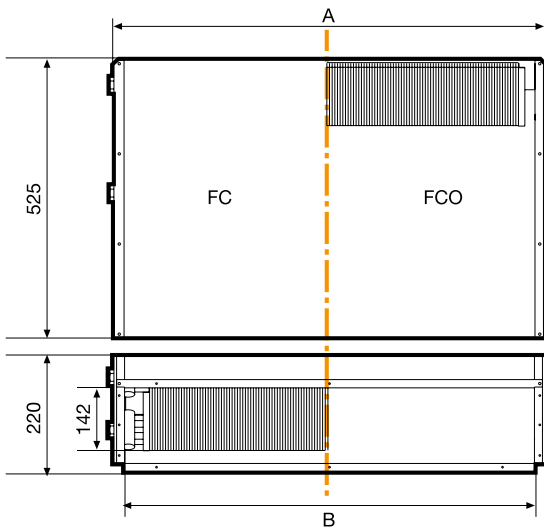
Dimensions FR wall models



Mod.	100	200	300	400	600	800
A	760	870	980	1090	1310	1310
B	440	550	660	770	990	990

Values in mm

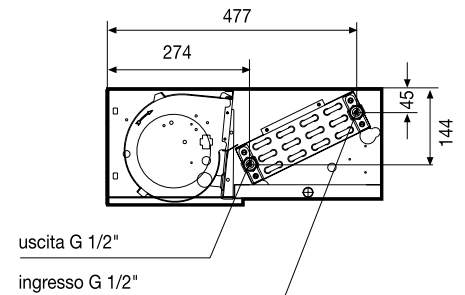
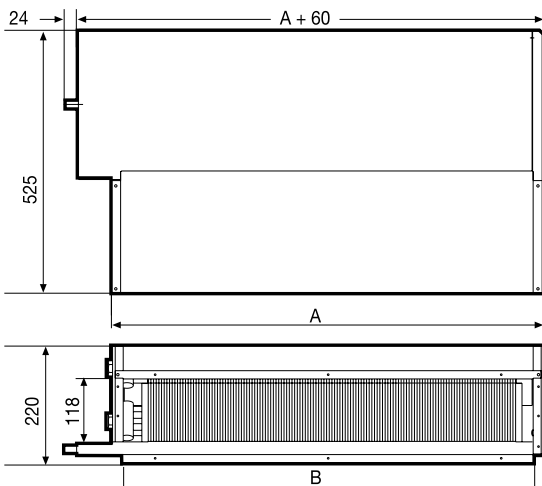
Dimensions FC - FCO vertical recessed models



Mod.	100	200	300	400	600	800
A	480	590	700	810	1030	1030
B	440	550	660	770	990	990

Values in mm

Dimensions recessed horizontal FCR models



Mod.	100	200	300	400	600	800
A	480	590	700	810	1030	1030
B	440	550	660	770	990	990

Values in mm

FR - FC - FCO - FCR

Wall, ceiling and recessed hydronic fan coils

Technical data table FR - FC - FCO - FCR

DESCRIPTION	U.M.	100	200	300	400	600	800	
Thermal power (water inlet 70 ° C)	W	max	2830	4980	5640	7050	9770	12330
		med	2530	4250	5140	6290	8860	11230
		min	2220	3840	4670	5230	7480	10580
Water flow max	l/h	243	423	485	606	825	1060	
Max water pressure drop70 °C	kPa	1,50	3,90	7,30	11,45	23,50	33,00	
Thermal power (water inlet 50 ° C)	W	max	1620	2700	3370	4050	5190	6050
		med	1450	2250	3070	3640	4640	5610
		min	1270	2060	2790	3240	4070	5090
Max water pressure drops 50 ° C	kPa	1,03	2,27	6,45	8,90	22,25	27,20	
1-row additional coil thermal power	W	max	1860	2420	3380	4100	5930	6530
		med	1710	2240	3160	3800	5510	6270
		min	1540	2060	2970	3490	4630	6070
Battery water flow 1 row	l/h	160	208	291	352	516	559	
Max water pressure drop 1 row	kPa	4,50	7,60	16,00	26,50	46,00	51,00	
Total cooling capacity	W	max	1150	2100	2730	3110	4210	5140
		med	1030	1780	2410	2880	3820	4740
		min	880	1640	2190	2630	3420	4360
Sensible cooling capacity	W	max	930	1600	2220	2550	3370	4150
		med	830	1350	1940	2180	2980	3670
		min	700	1200	1720	1970	2640	3340
Max cooling water flow	l/h	192	359	460	552	790	868	
Max pressure drops of cooling water	kPa	1,22	2,70	7,65	10,55	26,45	31,00	
Air flow	m ³ /h	max	210	356	450	560	760	1.000
		med	180	324	400	485	630	890
		min	150	289	340	434	540	780
Number of fans		1			2			
Sound pressure	dB(A)	max	30,6	42,4	40,7	42,3	44,7	50,0
		med	27,7	39,5	37,4	39,4	41,8	48,1
		min	22,9	37,1	34,2	36,7	38,1	45,5
Sound power	dB(A)	max	39,1	50,9	49,2	50,8	53,2	58,5
		med	36,2	48,0	45,9	47,9	50,3	56,6
		min	31,4	45,6	42,7	45,2	46,6	54,0
Power supply		230V/1/50Hz						
Motor power max	W	34	57	58	77	100	123	
Current consumption max.	A	0,15	0,27	0,25	0,34	0,47	0,59	
Weight (referred to version F)	Kg	17,0	19,0	22,0	24,6	28,8	30,2	

Summer cooling: ambient air temperature: 27 ° C b.d., 19 ° C b.w.
 water temperature: inlet 7 ° C, outlet 12 ° C at max speed. Winter
 heating: room air temperature: 20 ° C
 water temperature: inlet 70 ° C, ΔT 10 ° C at max speed.
 (with inlet water temperature at 50 ° C same water flow as in cooling at max. speed)