AIR

DESIGN AND PERFORMANCE

0.58 kW
9.87 kW

1.00 kW
21.18 kW

61 m³/h
1670 m³/h

Ventilclima®

DESIGN & COMFORT AT THE MAXIMUM SILENCE

Great attention was paid to the design; Air has a refined and elegant shape, making it an element that contributes to enrich the room where it is installed, combining both with traditional and modern styles. The research done was focused to contain the dimensions as much as possible, in order to offer high performance in an extremely compact unit.

Air represents the combination of technology and design, where the technological choices adopted have allowed us to have maximum comfort at the maximum working silence.

A wide range of accessories is available allowing you to customize the unit in order to satisfy all the needs of both installation and air handling.

RANGE

The range consists of 10 sizes with 3 and 4 row coils, 2 or 4 pipe system, for a capacity going from 0.58 a 9.87 kW, with 9 versions which can be installed both vertically and horizontally:

- with cabinet in case of exposed versions;
- without cabinet in case of recessed types, installed on steel boxes or on the ceiling.

AIR, THE RIGHT CHOICE

The wider range of capacities, studied to satisfy installation requirements, and the scrupulous design of construction details together with working silence, make it a product of extreme quality, reliability and versatility.

It has been paid particular care to the design to have an eco-friendly product: all the materials used for AIR are recyclable, allowing a life cycle of the product that does not damage nature and does not pollute.

MAXIMUM SILENCE

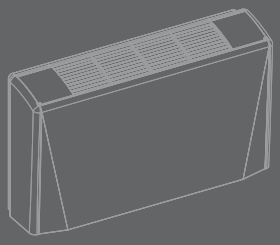
REVERSIBLE AIR SUPPLY GRILLES

REVERSIBLE HEAT EXCHANGER COIL

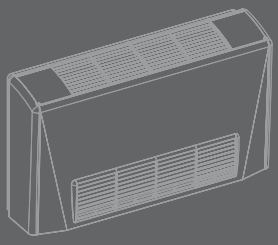
BUILT ENTIRELY WITH RECYCLABLE MATERIALS

VERTICAL/HORIZONTAL CONDENSATE DRAIN PAN DOUBLE DISCHARGE

VERTICAL UNITS WITH CABINET

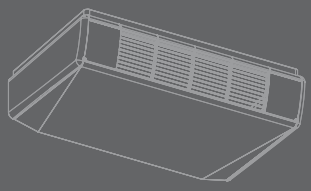


AIR xM
- Vertical bottom air intake
- Vertical air supply
- Whitout socle
- With socle
- With socle and lower panel

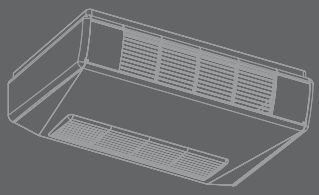


AIR xMF
- Frontal air intake
- Vertical air supply

HORIZONTAL UNITS WITH CABINET

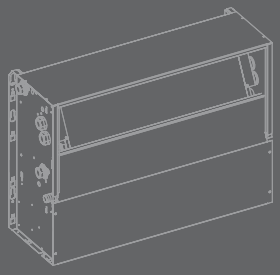


AIR xM
- Horizontal air intake
- Horizontal air supply

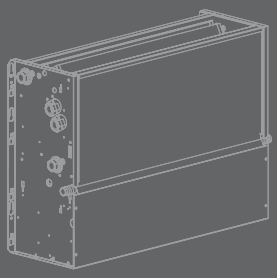


AIR xMF
- Vertical air intake
- Horizontal air supply

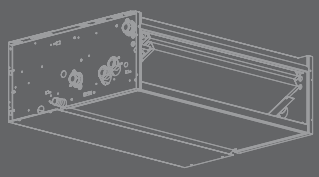
RECESSED UNITS



AIR xIF
- Frontal air supply



AIR xI
- Vertical air supply



AIR xI
- Horizontal air supply

EXTERNAL CABINET

The cabinet is made of plasticized steel, RAL 9010. The frontal folds not only give to the unit an original and innovative design, but contribute also to strengthen the structure offering time lasting solidity to the unit. The sides are realised in ABS, and perfectly combine with the external cabinet in an aesthetically harmonic whole.
The reversible supply grilles are in ABS too and allow to modify the air flow.

CONDENSATE DRAIN PAN

Condensate drain pan is prepainted and insulated and allows the unit to be connected to either the left or right side thanks to the double drain condensate fitting. The shape of the condensate drain pan has been designed to ensure continuous water drainage to avoid stagnation.
Moreover high flexibility and an easy installation are granted thanks to the possibility of fixing it both in horizontal and vertical.

i-Com
Easy and versatile, I-Com is the base version of new control panel, without temperature control.

i-Basic 1
I-Basic 1 allows also the precise room temperature control thanks to analogic electronic thermostat integrated in the control panel.

i-Basic 2
I-Basic 2 allows also the precise room temperature control thanks to microprocessor electronic thermostat integrated in the control panel and allows to manage an electric heater.

i-Basic 3
I-Basic 3 has a range of programmable functions and allows to manage manually or automatically the operation speed.

i-Digit
I-Digit is the fully digital control panel that integrates a large and comfortable display, perfect for all the installations that require high automation of functions and an high level of comfort like hotel, offices and homes.

NEW CONTROL PANEL *

The new control panel i-Basic has a modern design perfectly matching with AIR design, in the version installed on board, and extremely pleasing on the wall configuration.

CENTRIFUGAL FAN MOTOR

The centrifugal fan motor (with one or more fans according to the size) has double intake section. The blades are designed to be longer and allow to reach high performances with low motor revolutions.
This, together with a fan installed to reduce the vibrations at a minimum level, guarantees a high silence level.

COILS

The finned heat exchangers are the result of an accurate study which is focused on the optimization of performances and dimensions. The connections have gas-thread and anti torsion system, to allow an easy hydraulic connection. It is possible to have also the 4R+1R configuration for 4 pipe system.

* Control panel isn't supplied as standard and can only be delivered loose.
The installation on the unit is by the customer.

AIR Speed set in the factory				10 4°3°2°	20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	70 4°3°2°	80 4°3°2°	90 4°3°2°	100 4°3°2°
2 pipe system (3R coil)													
Total cooling capacity	(E)	W	6	1250	1930	2730	3710	4690	5010	5670	6150	7690	9180
		W	5	1000	1720	2330	2850	3370	4030	4570	5400	6840	8740
	(E)	W	4	870	1320	1940	2360	2730	3200	3840	4250	5910	7930
	(E)	W	3	770	1170	1720	1960	2270	2670	3220	3470	5060	7340
	(E)	W	2	680	980	1480	1640	1740	2120	2570	2810	4340	6580
		W	1	580	850	1060	1270	1390	1910	2310	2480	4180	6380
Sensible cooling capacity		W	6	960	1430	2030	2750	3660	3690	4200	4870	6490	7450
		W	5	750	1270	1710	2070	2570	2920	3340	4240	5680	7090
	(E)	W	4	650	950	1410	1700	2060	2290	2780	3220	4870	6670
	(E)	W	3	570	840	1260	1390	1680	1900	2320	2590	4140	6140
	(E)	W	2	490	710	1070	1170	1280	1500	1830	2080	3520	5460
		W	1	390	610	780	890	1020	1350	1650	1830	3170	5060
Water flow		l/h	6	215	331	468	636	805	859	973	1056	1319	1576
		l/h	5	172	295	399	489	579	691	785	927	1174	1501
		l/h	4	149	227	334	404	469	549	659	729	1014	1361
		l/h	3	133	200	295	336	390	458	553	595	868	1260
		l/h	2	116	168	255	282	299	364	441	483	744	1129
		l/h	1	99	146	182	218	238	327	397	426	718	1095
Water pressure drop		kPa	6	6	16,3	36,6	24	42	23,9	17,9	20,6	33,8	30,5
		kPa	5	4	13,3	27,7	15,1	23,5	16,3	12,2	16,4	27,5	28
	(E)	kPa	4	3,1	8,4	20,2	10,8	16,2	10,8	9	10,7	21,3	23,5
	(E)	kPa	3	2,5	6,7	16,2	7,8	11,7	7,9	6,6	7,5	16,2	20,5
	(E)	kPa	2	2	5	12,6	5,7	7,3	5,3	4,4	5,2	12,3	16,9
		kPa	1	1,5	3,8	7	3,6	4,9	4,4	3,7	4,2	11,6	16
Heating capacity		W	6	1770	2530	3500	5180	6570	7000	7340	8580	9630	11650
		W	5	1360	2210	2980	3940	4650	5560	5850	7480	8510	11070
	(E)	W	4	1120	1660	2460	3050	3740	4150	4870	5710	7450	1020
	(E)	W	3	960	1470	2160	2530	3140	3470	4110	4610	6480	9430
	(E)	W	2	750	1170	1880	2160	2370	2850	3490	3880	5550	8400
		W	1	580	1030	1410	1750	1820	2730	3170	3420	5200	7930
Water flow		l/h	6	215	331	468	636	805	859	973	1056	1319	1576
		l/h	5	172	295	399	489	579	691	785	927	1174	1501
		l/h	4	149	227	334	405	469	549	659	729	1014	1361
		l/h	3	134	200	295	336	390	458	553	595	868	1260
		l/h	2	116	168	255	282	299	364	441	483	744	1129
		l/h	1	99	146	182	218	238	327	397	426	718	1095
Water pressure drop		kPa	6	4,9	13,3	29,8	19,6	37,6	19,5	14,6	18,5	27,6	24,8
		kPa	5	3,3	10,9	22,6	12,3	21,1	13,3	10	14,7	22,4	22,8
	(E)	kPa	4	2,9	6,9	16,4	8,8	14,6	8,8	7,3	9,3	17,3	19,2
	(E)	kPa	3	2,1	5,5	13,2	6,4	10,4	6,4	5,4	6,5	13,2	16,7
	(E)	kPa	2	1,6	4	10,2	4,7	6,4	4,3	3,6	4,5	10,1	13,8
		kPa	1	1,2	3,1	5,7	3	4,3	3,6	3	3,6	9,4	13,1

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m³ with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 50°C

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

(E)

AIR Speed set in the factory				10 4°3°2°	20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	70 4°3°2°	80 4°3°2°	90 4°3°2°	100 4°3°2°
2 pipe system (3R coil)													
	Heating capacity	W	6	3070	4300	5920	8860	11150	11970	12430	14690	16250	19700
		W	5	2350	3740	5030	6730	7860	9480	9900	12800	14340	18710
		W	4	1920	2810	4140	5160	6320	7010	8220	9710	12570	17270
		W	3	1640	2480	3630	4280	5310	5870	6940	7830	10950	15970
		W	2	1280	1960	3170	3670	4000	4840	5930	6600	9370	14210
		W	1	1000	1740	2380	2970	3100	4660	5400	5830	8740	13460
	Water flow	l/h	6	269	378	520	779	979	1052	1092	1291	1427	1731
		l/h	5	206	329	442	590	690	833	869	1124	1259	1643
		l/h	4	169	247	364	453	555	615	721	852	1104	1517
		l/h	3	146	218	319	376	466	515	609	687	962	1402
		l/h	2	114	172	279	322	351	425	521	579	823	1248
		l/h	1	88	152	209	261	282	409	474	512	768	1182
	Water pressure drop	kPa	6	6,6	15,4	33,1	25,7	44,4	25,6	16,4	22	29,1	26,9
		kPa	5	4,1	12,1	24,8	15,8	24	17	11	17..3	23,3	24,6
		kPa	4	3,3	7,3	17,6	9,9	16,3	10	7,9	10,6	18,5	21,4
		kPa	3	2,3	5,9	14	7,1	12	7,3	5,9	7,3	14,5	18,6
		kPa	2	1,5	3,9	11	5,4	7,3	5,2	4,5	5,4	11	15,2
		kPa	1	0,9	3,1	6,6	3,8	5	4,9	3,8	4,3	9,8	13,8
	Air flow	m³/h	6	205	342	427	603	771	835	968	1153	1376	1670
		m³/h	5	150	295	364	439	510	650	753	1001	1198	1604
		m³/h	4	120	211	292	359	398	503	619	728	1002	1511
		m³/h	3	100	184	256	294	336	419	519	586	865	1395
		m³/h	2	78	153	221	248	249	344	421	476	736	1224
		m³/h	1	61	130	160	220	189	299	379	407	649	1112
	Sound power level	dB(A)	6	48	51	51	53	54	54	57	62	62	65
		dB(A)	5	41	47	47	45	46	49	52	59	59	64
		(E) dB(A)	4	36	40	43	40	40	43	46	51	55	62
		(E) dB(A)	3	32	36	39	35	36	38	41	45	51	60
		(E) dB(A)	2	26	30	36	31	30	33	37	40	47	57
		dB(A)	1	21	28	29	25	25	30	34	38	43	55
	Sound pressure level	dB(A)	6	39	42	42	44	45	45	48	53	53	56
		dB(A)	5	32	38	38	36	37	40	43	50	50	55
		dB(A)	4	27	31	34	31	31	34	37	42	46	53
		dB(A)	3	23	27	30	26	27	29	32	36	42	51
		dB(A)	2	17	21	28	22	21	24	28	31	38	48
		dB(A)	1	13	19	21	16	16	21	25	29	34	46
	Power supply			~230V / 1ph / 50Hz									
	Power input	W	6	35	45	58	77	91	104	114	153	220	249
		W	5	24	35	45	49	62	80	88	136	169	229
		(E) W	4	19	22	34	38	48	61	67	104	129	213
		(E) W	3	16	18	29	30	39	50	54	84	105	195
		(E) W	2	12	13	24	25	30	41	45	68	86	179
		W	1	10	12	18	19	23	35	38	59	73	162
	Absorbed current	A	6	0,16	0,20	0,26	0,34	0,41	0,47	0,50	0,67	0,97	1,14
		A	5	0,11	0,15	0,20	0,22	0,28	0,36	0,39	0,60	0,74	1,05
		A	4	0,09	0,10	0,15	0,17	0,21	0,28	0,29	0,46	0,57	0,97
		A	3	0,07	0,08	0,13	0,13	0,17	0,22	0,24	0,38	0,46	0,90
		A	2	0,06	0,06	0,11	0,11	0,13	0,18	0,20	0,32	0,38	0,83
		A	1	0,04	0,05	0,08	0,09	0,10	0,16	0,17	0,28	0,32	0,76

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m³ with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 50°C

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

(E)

AIR Speed set in the factory			10 4°3°2°	20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	70 4°3°2°	80 4°3°2°	90 4°3°2°	100 4°3°2°
2 pipe system (4R coil)												
	Total cooling capacity	W	6	1650	2310	3070	4230	5400	5610	6610	7250	9080	10710
		W	5	1300	2060	2600	3230	3870	4460	5330	6340	8020	10180
		W	4	1020	1560	2140	2650	3100	3480	4410	4950	6940	9220
		W	3	910	1380	1880	2180	2560	2880	3710	4010	5890	8480
		W	2	810	1180	1630	1840	1920	2290	2960	3260	5010	7560
		W	1	680	1020	1130	1410	1430	1800	2680	2890	4810	7310
	Sensible cooling capacity	W	6	1190	1640	2220	3030	4010	4010	4710	5440	7170	8240
		W	5	920	1460	1860	2290	2840	3160	3780	4730	6250	7830
		W	4	730	1090	1530	1870	2260	2450	3110	3600	5390	7310
		W	3	650	960	1350	1520	1830	2030	2600	2900	4550	6700
		W	2	500	820	1150	1280	1360	1600	2050	2340	3860	5930
		W	1	390	710	810	970	1030	1270	1860	2050	3510	5530
	Water flow	l/h	6	283	397	526	727	927	962	1134	1244	1558	1837
		l/h	5	222	353	446	555	663	766	915	1088	1376	1747
		l/h	4	176	268	368	454	531	597	757	850	1190	1582
		l/h	3	157	236	323	375	440	495	636	687	1010	1457
		l/h	2	139	202	279	315	329	392	508	559	859	1298
		l/h	1	117	176	194	242	245	308	459	495	824	1254
	Water pressure drop	kPa	6	13	30,1	526	18,3	32,4	12,7	18,9	22,3	36,6	24,1
		kPa	5	8,5	24,5	446	11,4	18	8,5	13	17,6	29,4	22
		kPa	4	5,6	15,1	368	8	12,2	5,5	9,3	11,4	22,8	18,5
		kPa	3	4,6	12,1	323	5,7	8,7	3,9	6,8	7,8	17,1	16
		kPa	2	3,7	9,1	279	4,2	5,2	2,6	4,6	5,4	12,8	13,1
		kPa	1	2,7	7,2	194	2,6	3,1	1,7	3,8	4,4	11,9	12,3
	Heating capacity	W	6	1950	2860	3900	5710	7330	7830	8280	9800	11030	13320
		W	5	1430	2470	3290	4170	4890	6150	6570	8520	9690	12640
		W	4	1130	1830	2680	3410	3810	4500	5380	6410	8430	11630
		W	3	950	1600	2340	2770	3190	3740	4520	5130	7270	10700
		W	2	740	1270	2030	2350	2370	3060	3790	4260	6180	9490
		W	1	580	1110	1490	1870	1790	2830	3450	3750	5720	8950
	Water flow	l/h	6	283	397	526	727	927	962	1134	1244	1558	1837
		l/h	5	222	353	446	555	663	766	915	1088	1376	1747
		l/h	4	176	268	368	454	531	597	757	850	1190	1582
		l/h	3	157	236	323	375	440	495	636	687	1010	1457
		l/h	2	139	202	279	315	329	392	508	559	859	1298
		l/h	1	117	176	194	242	245	308	459	495	824	1254
	Water pressure drop	kPa	6	10,6	24,5	15,9	14,9	29	10,3	15,4	20	29,8	19,6
		kPa	5	6,9	20	11,9	9,3	16,1	6,9	10,6	15,8	24	17,9
		kPa	4	5	12,3	8,5	6,5	10,9	4,4	7,6	9,9	18,6	15,1
		kPa	3	3,7	9,9	6,7	4,6	7,7	3,2	5,6	6,8	13,9	13
		kPa	2	3	7,5	5,2	3,4	4,5	2,1	3,8	4,7	10,5	10,6
		kPa	1	2,2	5,9	2,7	2,1	2,8	1,4	3,1	3,8	9,7	10

- **Standard unit with free outlet:** external static pressure = 0 Pa

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 50°C

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

AIR Speed set in the factory			10 4°3°2°	20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	70 4°3°2°	80 4°3°2°	90 4°3°2°	100 4°3°2°
2 pipe system (4R coil)												
	Heating capacity	W	6	3310	4810	6580	9710	12490	13360	13950	16540	18510	22430
		W	5	2430	4150	5540	7090	8330	10470	11040	14380	16250	21280
		W	4	1930	3060	4520	5800	6480	7610	9020	10840	14140	19620
		W	3	1620	2670	3930	4730	5440	6330	7580	8660	12210	18050
		W	2	1270	2110	3410	4000	4050	5170	6390	7200	10370	15990
		W	1	980	1860	2520	3150	3050	4800	5810	6300	9580	15040
	Water flow	l/h	6	305	422	578	869	1100	1173	1224	1453	1625	1970
		l/h	5	230	364	487	651	766	919	969	1262	1426	1868
		l/h	4	186	269	396	531	607	668	792	948	1241	1722
		l/h	3	160	235	345	435	504	555	666	760	1072	1574
		l/h	2	124	185	299	370	376	454	561	632	910	1404
		l/h	1	94	162	221	277	297	432	510	553	841	1321
	Water pressure drop	kPa	6	39,4	25,2	17,3	18,8	32,8	13,4	16,2	21,9	29,6	20,4
		kPa	5	32,3	19,5	12,8	11,3	17,4	8,8	10,8	17,1	23,5	18,6
		kPa	4	27,4	11,4	8,9	7,9	11,5	5	7,5	10,3	18,4	16,1
		kPa	3	23,4	9	7	5,5	8,3	3,6	5,6	7	14,2	13,9
		kPa	2	17,4	5,9	5,4	4,2	5	2,5	4,1	5	10,7	11,2
		kPa	1	12,5	4,7	3,2	2,5	3,3	2,3	3,5	4	9,3	10,1
	Air flow	m³/h	6	202	333	420	591	760	822	952	1137	1361	1647
		m³/h	5	148	287	358	432	507	641	745	993	1187	1584
		m³/h	4	118	205	287	353	394	493	609	724	994	1494
		m³/h	3	99	177	251	288	331	412	512	583	856	1378
		m³/h	2	77	148	216	243	247	338	415	471	729	1212
		m³/h	1	60	127	157	215	186	292	374	405	640	1098

- **Standard unit with free outlet:** external static pressure = 0 Pa

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 50°C

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

AIR Speed set in the factory				10 4°3°2°	20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	70 4°3°2°	80 4°3°2°	90 4°3°2°	100 4°3°2°
4 pipe system (3R+1 coil)													
Total cooling capacity		W	6	1230	1890	2670	3640	4870	4920	5320	6380	8530	9190
		W	5	980	1680	2290	2800	3500	3960	4420	5610	7530	8740
	(E)	W	4	860	1300	1910	2310	2840	3140	3290	4320	6520	7930
	(E)	W	3	750	1140	1680	1920	2340	2630	2760	3530	5580	7340
	(E)	W	2	670	960	1450	1610	1780	2090	2220	2870	4790	6580
		W	1	560	840	1040	1250	1430	1870	2100	2540	4350	6380
Sensible cooling capacity		W	6	950	1400	1960	2700	3590	3880	3940	4770	6380	6930
		W	5	750	1240	1660	2030	2530	2870	3230	4160	5580	6570
	(E)	W	4	640	940	1370	1660	2030	2250	2370	3150	4780	5950
	(E)	W	3	550	820	1200	1270	1660	1870	1970	2540	4060	5470
	(E)	W	2	480	690	1030	1140	1250	1480	1580	2040	3450	4870
		W	1	390	600	730	890	990	1320	1490	1810	3110	4690
Water flow		l/h	6	211	325	459	625	836	844	914	1094	1463	1577
		l/h	5	168	289	392	480	602	679	758	962	1292	1501
		l/h	4	147	223	327	397	488	539	564	742	1119	1362
		l/h	3	129	196	288	329	401	451	473	606	958	1259
		l/h	2	115	165	249	277	305	359	381	492	822	1129
		l/h	1	96	143	179	214	245	321	360	435	746	1096
Water pressure drop		kPa	6	5,8	15,8	35,4	23,2	44,8	23,2	16	22	40,6	30,5
		kPa	5	3,9	12,8	26,9	14,6	25,1	15,8	11,5	17,5	32,6	28
	(E)	kPa	4	3	8,1	19,5	10,4	17,3	10,5	6,8	11,1	25,3	23,6
	(E)	kPa	3	2,4	6,5	15,6	7,5	12,3	7,7	5	7,7	19,2	20,5
	(E)	kPa	2	2	4,8	12,1	5,5	7,6	5,1	3,4	5,4	14,7	16,9
		kPa	1	1,4	3,7	6,7	3,5	5,2	4,2	3,1	4,3	12,4	16,1
Heating capacity		W	6	1270	2000	2910	3230	4770	4970	5480	6000	7990	8510
		W	5	1040	1830	2580	2630	3690	4110	4640	5480	7240	8060
	(E)	W	4	870	1440	2220	2240	3070	3390	3980	4390	6370	7590
	(E)	W	3	840	1360	2030	1940	2660	2950	3550	3910	5660	7090
	(E)	W	2	710	1170	1830	1710	2120	2570	3160	3450	5010	6500
		W	1	600	740	1440	1390	1750	2340	2920	3120	4560	6140
Water flow		l/h	6	112	176	255	284	419	436	481	527	702	747
		l/h	5	92	161	226	231	324	361	408	482	636	708
		l/h	4	77	127	195	196	269	298	350	386	559	667
		l/h	3	74	119	178	170	233	259	312	343	498	623
		l/h	2	62	103	161	151	186	226	278	303	439	571
		l/h	1	52	65	126	122	154	206	256	274	400	540
Water pressure drop		kPa	6	2,4	6,9	16,4	23,5	7,7	9,4	12,6	14,8	27,2	33,4
		kPa	5	1,7	5,9	13,3	16,3	4,9	6,8	9,4	12,6	22,8	30,4
	(E)	kPa	4	1,2	3,9	10,2	12,3	3,5	4,8	7,2	8,5	18,2	27,3
	(E)	kPa	3	1,1	3,5	8,7	9,5	2,7	3,8	5,9	7	14,8	24,2
	(E)	kPa	2	0,9	2,7	7,3	7,7	1,8	3	4,8	5,6	11,9	20,8
		kPa	1	0,6	1,2	4,8	5,3	1,3	2,5	4,2	4,7	10,1	18,8

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m³ with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz

For any condition, different than what indicated above, please refer to our selection software and to the unit air flow diagrams

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

(E)

AIR			10	20	30	40	50	60	70	80	90	100
Speed set in the factory			4°3°2°	4°3°2°	4°3°2°	4°3°2°	4°3°2°	4°3°2°	4°3°2°	4°3°2°	4°3°2°	4°3°2°

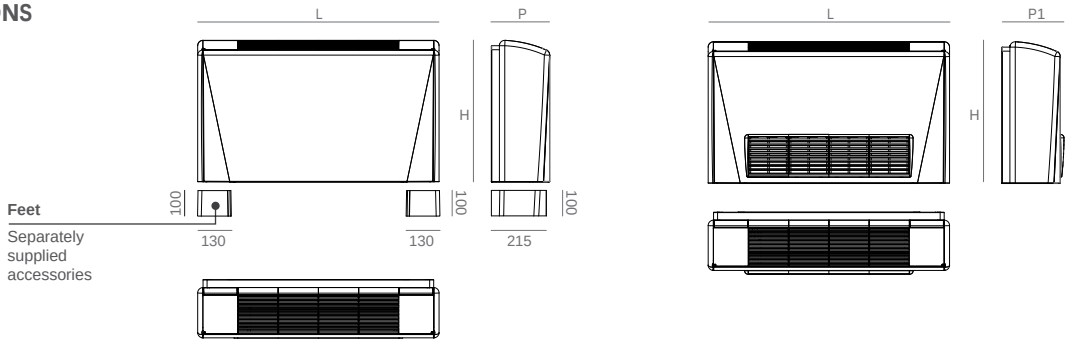
4 pipe system (3R+1 coil)

Air flow		m^3/h	6	200	317	424	604	753	829	960	1138	1352	1643
		m^3/h	5	146	282	354	427	505	635	751	1000	1180	1572
		m^3/h	4	117	201	291	349	401	496	603	733	990	1493
		m^3/h	3	98	174	248	284	329	407	508	581	851	1368
		m^3/h	2	76	146	214	241	245	335	411	469	725	1216
		m^3/h	1	60	132	155	212	184	288	370	403	635	1101
Sound power level		dB(A)	6	48	51	52	53	54	55	57	62	62	65
		dB(A)	5	41	47	48	45	46	49	52	59	59	64
	(E)	dB(A)	4	36	40	43	40	40	43	46	51	55	62
	(E)	dB(A)	3	32	36	39	35	36	38	41	45	51	60
	(E)	dB(A)	2	26	30	36	32	30	33	37	40	47	57
		dB(A)	1	20	28	29	25	25	30	34	38	43	55
Sound pressure level		dB(A)	6	39	42	43	44	45	46	48	53	53	56
		dB(A)	5	32	38	39	36	37	40	43	50	50	55
		dB(A)	4	27	31	34	31	31	34	37	42	46	53
		dB(A)	3	23	27	30	26	27	29	32	36	42	51
		dB(A)	2	17	21	28	23	21	24	28	31	38	48
		dB(A)	1	12	19	21	16	16	21	25	29	34	46
Power supply				~230V / 1ph / 50Hz									
Power input		W	6	35	45	58	77	91	104	114	153	220	249
		W	5	24	35	45	49	62	80	88	136	169	229
	(E)	W	4	19	22	34	38	48	61	67	104	129	213
	(E)	W	3	16	18	29	30	39	50	54	84	105	195
	(E)	W	2	12	13	24	25	30	41	45	68	86	179
		W	1	10	12	18	19	23	35	38	59	73	162
Absorbed current		A	6	0,16	0,20	0,26	0,34	0,41	0,47	0,50	0,67	0,97	1,14
		A	5	0,11	0,15	0,20	0,22	0,28	0,36	0,39	0,60	0,74	1,05
		A	4	0,09	0,10	0,15	0,17	0,21	0,28	0,29	0,46	0,57	0,97
		A	3	0,07	0,08	0,13	0,13	0,17	0,22	0,24	0,38	0,46	0,90
		A	2	0,06	0,06	0,11	0,11	0,13	0,18	0,20	0,32	0,38	0,83
		A	1	0,04	0,05	0,08	0,09	0,10	0,16	0,17	0,28	0,32	0,76

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m^3 with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz

For any condition, different than what indicated above, please refer to our selection software and to the unit air flow diagrams

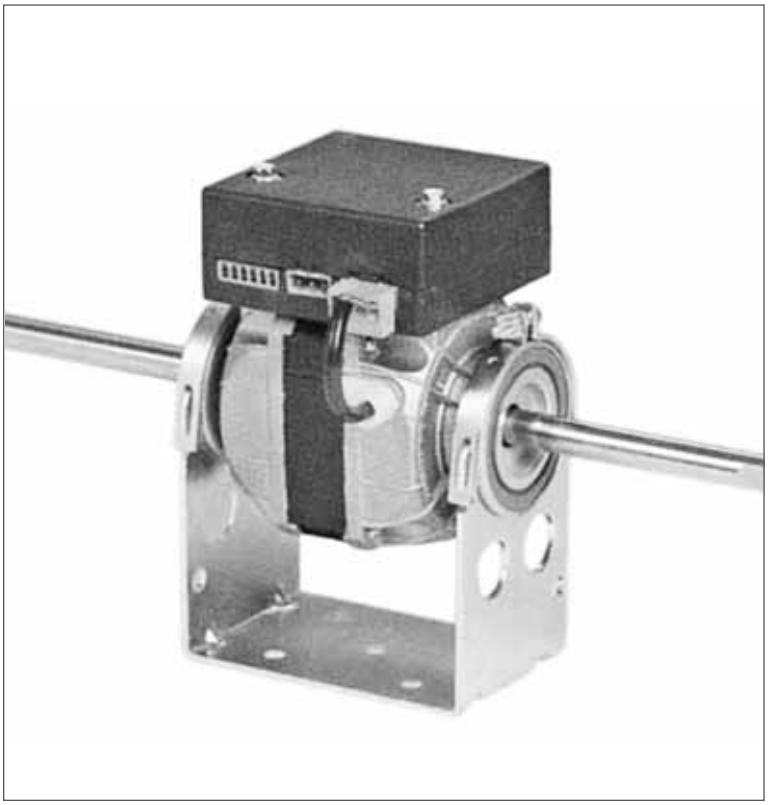
DIMENSIONS



AIR			10	20	30	40	50	60	70	80	90	100
With cabinet	L	mm	600	750	900	1050	1200	1350	1500	1500	1650	1800
	H	mm	530	530	530	530	530	530	530	530	530	530
	P	mm	218	218	218	218	218	218	218	218	218	218
	P1	mm	232	232	232	232	232	232	232	232	232	232
Without cabinet	L	mm	380	530	680	830	980	1130	1280	1280	1430	1580
	H	mm	480	480	480	480	480	480	480	480	480	480
	P	mm	215	215	215	215	215	215	215	215	215	215
Net weight (2 pipe 3R)		kg	13.24	16.85	19.12	22.88	26.14	29.90	36.05	36.05	40.68	46.53
Net weight (2 pipe 4R)		kg	13.89	17.70	20.14	24.09	27.56	31.50	37.84	37.84	42.64	48.66
Net weight (4 pipe 3R+1)		kg	13.89	17.70	20.14	24.09	27.56	31.50	37.84	37.84	42.64	48.66

ECM: NEW SOLUTION

New range of fan motors for fan coil application, with a very low power input.
These type of motors, designed according to the latest technology and combined with a proper electronic control of stop and go status, allow an energy saving of a 50% compared to a standard motor.
Consequently, we can forecast a CO2 emission which is 40/50% less than the one caused by a standard PSC motor whose speeds are given by a transformer and/or given by the winding.

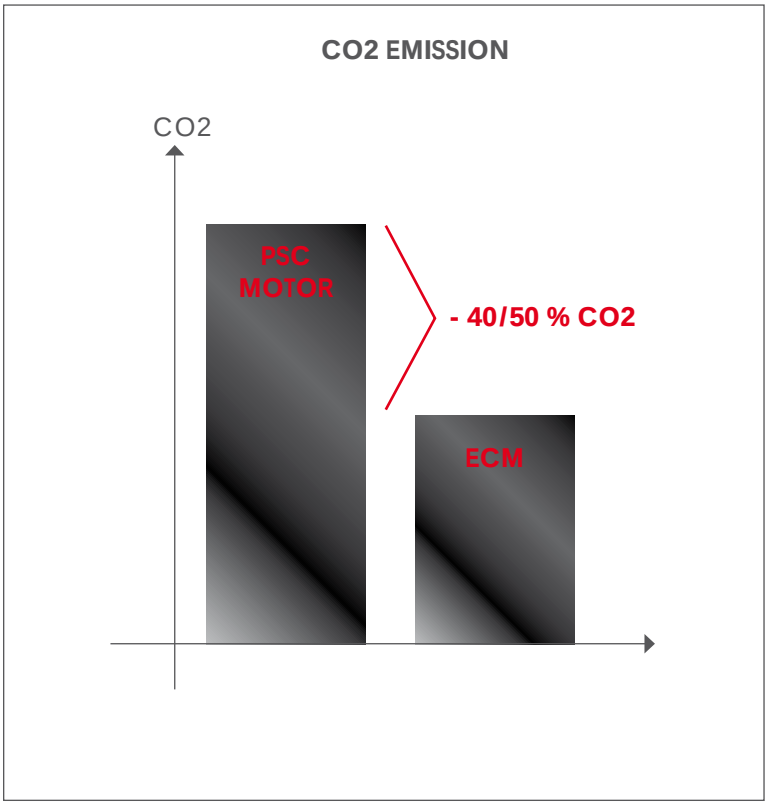


GENERAL FEATURES

ECM motors are completely interchangeable with those of the already well known motors. Mechanical structure and cradles are in fact the same and the only difference is having replaced the transfomer with the electronic control case.
Moreover, these motors have been designed to give a performance similar to the standard ones, but with the possibility of being used with a 0-10V control.

TRY THE FUTURE

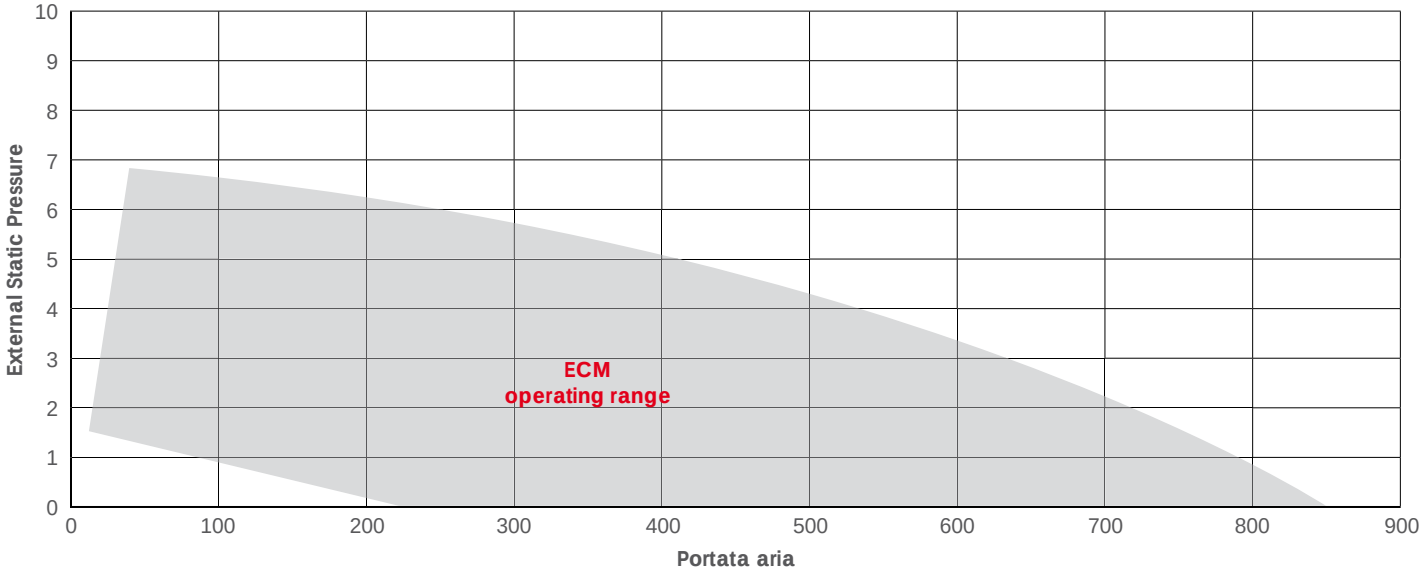
By this type of fan motors, the users can be personalise the speeds according to their request, by means of any control which can easily be designed.
This opens a new perspective to room air conditioning. In fact the fan coil manufacturer can program valves, motors and clutches by menas of the same logic, with the result that the final user can get an optimised system of room conditioning with a low CO2 impact.
By using these type of motors, it is possible to satisfy the requirements of the "ecodesign" prescriptions suggested by Eurovent and is also in line with the future requirements, given a lower input power demand.



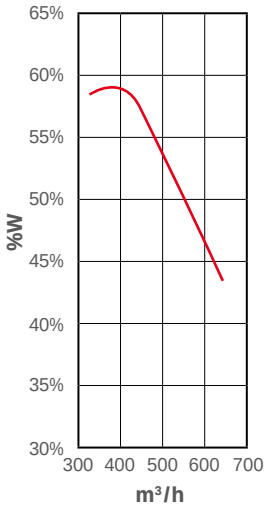
WORK ECM MOTORS

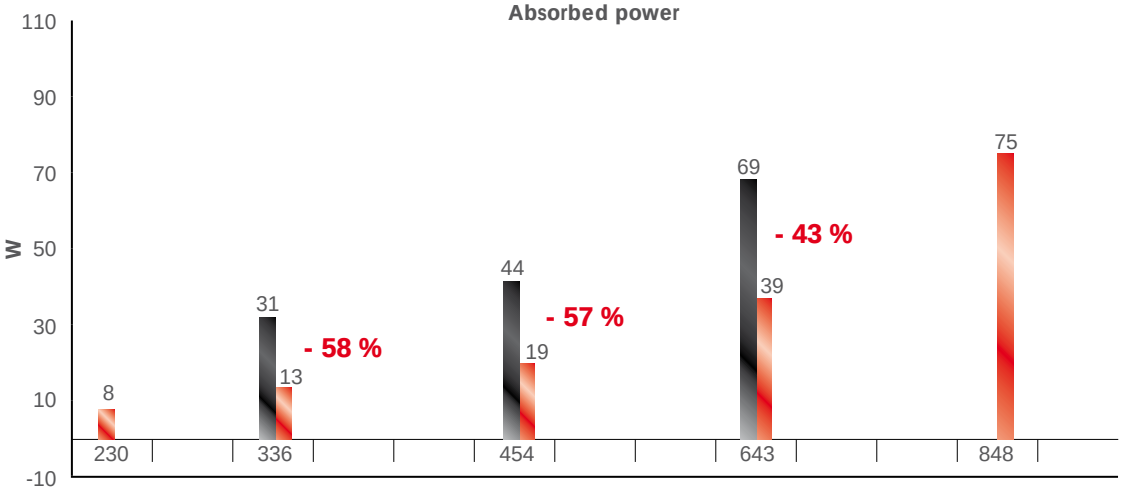
The basic explanation of a ECM motor's construction is that it is similar to a brushed motor, except everything is 'inside out' and there are no brushes at all. The permanent magnets that would wrap around the armature in a normal motor are instead placed around the motor shaft, and this assembly is called the rotor. The wire coils are around the inside of the motor can, making several different magnetic poles. In a sensored ECM motor, there are sensors on the rotor that send signals back to the electonic speed control.

Air flow (Fans 2x146x196)

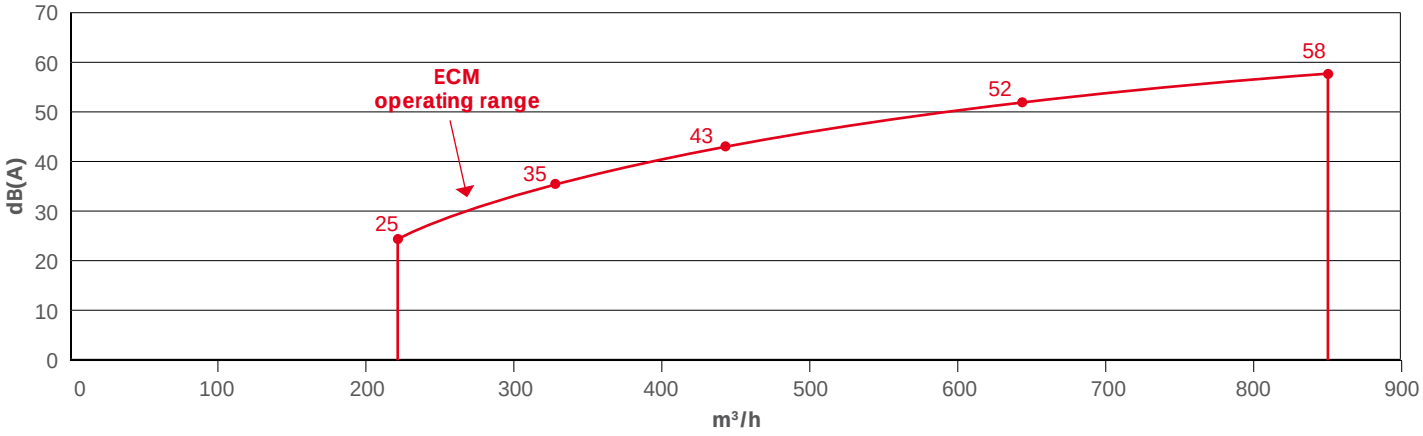


Energy Saved by ECM





Noisiness



ECM MOTORS

AIR Speed set in the factory			20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	80 4°3°2°
2 pipe system (3R coil)								
Total cooling capacity	W	max	1320	1940	2360	2890	3200	4410
	W	med	1160	1720	1950	2380	2670	3600
	W	min	980	1480	1640	1810	2130	2920
Sensible cooling capacity	W	max	950	1410	1700	2060	2290	3220
	W	med	840	1250	1380	1680	1900	2590
	W	min	700	1070	1160	1270	1510	2080
Water flow	l/h	max	227	333	404	496	548	757
Water pressure drop	kPa	max	8,4	20,2	10,8	17,9	10,8	11,5
Heating capacity	W	max	1660	2460	3050	3740	4150	5710
	W	med	1470	2150	2530	3140	3470	4610
	W	min	1170	1880	2160	2360	2860	3870
Water flow	l/h	max	227	333	404	496	548	757
Water pressure drop	kPa	max	6,8	16,4	8,8	14,6	8,8	9,3
Air flow	m^3/h	max	211	292	359	398	503	728
	m^3/h	med	184	256	295	336	419	586
	m^3/h	min	152	221	249	249	344	476
Sound power level	db(A)	max	40	45	40	40	43	51
	db(A)	med	36	41	35	36	38	45
	db(A)	min	30	36	31	30	33	40
Sound pressure level	db(A)	max	31	36	31	31	34	42
	db(A)	med	27	32	26	27	29	36
	db(A)	min	21	27	22	21	24	31
Power input	W	max	10,3	12,6	11,5	10,6	15,9	26
	W	med	8,4	10,1	8,7	8,1	11,7	18
	W	min	7	8,3	7,4	5,9	9,15	11
Input control voltage	V	-	2.7/3.7/4.8	3.2/4/4.8	2.5/3.2/4.2	1.6/2.9/3.8	2.6/3.5/4.6	2.4/3.1/4.1

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m^3 with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 50°C

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

ECM MOTORS

AIR Speed set in the factory			20 4°3°2°	30 4°3°2°	40 4°3°2°	50 4°3°2°	60 4°3°2°	80 4°3°2°
4 pipe system (3R+1R coil)								
Total cooling capacity	W	max	1300	1910	2310	2250	3140	4330
	W	med	1140	1690	1920	1850	2620	3530
	W	min	970	1450	1610	1410	2090	2870
Sensible cooling capacity	W	max	940	1390	1670	1770	2250	3160
	W	med	820	1230	1360	1440	1870	2550
	W	min	700	1050	1140	1090	1470	2040
Water flow	l/h	max	223	327	397	488	539	742
Water pressure drop	kPa	max	7,6	18,7	10,1	17	10	11
Heating capacity	W	max	1450	2220	2240	2810	3390	4400
	W	med	1360	2020	1940	2420	2950	3910
	W	min	1180	1830	1720	1940	2580	3450
Water flow	l/h	max	127	195	196	270	298	386
Water pressure drop	kPa	max	3,9	10,2	12,3	17,3	4,8	8,6
Air flow	m^3/h	max	201	291	349	400	496	733
	m^3/h	med	174	248	284	329	407	581
	m^3/h	min	146	214	240	245	335	469
Sound power level	db(A)	max	40	43	40	38	43	51
	db(A)	med	36	39	35	34	38	45
	db(A)	min	30	36	32	27	33	40
Sound pressure level	db(A)	max	31	34	31	29	34	42
	db(A)	med	27	30	26	25	29	36
	db(A)	min	21	27	23	18	24	31
Power input	W	max	10,3	12,6	11,5	10,6	15,9	26
	W	med	8,4	10,1	8,7	8,1	11,7	18
	W	min	7	8,3	7,4	5,9	9,15	11
Input control voltage	V	-	2.7/3.7/4.8	3.2/4/4.8	2.5/3.2/4.2	1.6/2.9/3.8	2.6/3.5/4.6	2.4/3.1/4.1

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m^3 with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz

COOLING
Inlet water temp.: 7°C
Outlet water temp.: 12°C
Inlet air temp.: 27°C d.b. - 19°C w.b.

HEATING
Air temp.: 20°C
Inlet water temp.: 50°C

HEATING
Air temp.: 20°C
Inlet water temp.: 70/60°C

A GROUP TAKES PART TO THE EUROVENT PROGRAM
OF FAN COIL PERFORMANCE CERTIFICATION
IN ORDER TO PROVIDE ITS CUSTOMERS THE RELIABILITY
AND ACCURACY OF PERFORMANCES.

DP AIR 2014-0 IT

A GROUP S.p.A. - Via Montegrappa, 67 - 31020 San Zenone degli Ezzelini (Treviso) - Italy
Tel. +39 0423 567774 - Fax +39 0423 567985 - www.aliseogroup.com - info@ventilclima.com