

CASSETTE



AC & EC fan motor

Flexi Hydronic Cassette



The water Cassette are fan coil systems suitable for installation in a false ceiling.

Units are available with engine at low energy consumption (EC version) or with standard motor (AC version).

units are also available for 2 and 4 pipe system. The dimensions are very compact if compared with analogous units giving same performances and this allows the installation in places

where the space is limited.

The maintenance is facilitated by the fact that all components are accessible removing only frontal panel.

- Cooling capacity ranging from 1.4 kW to 11.5
- Air flow ranging from 200 to 2250m³/h
- Heating capacity ranging from 1.6 to 14 kW.



Application

- The water Cassette are fan coil systems suitable for installation in a false ceiling. Their attractive is suitable for the most sophisticated environments where requirements for silence and high performances are the most important features

Fan

- Three-speed + Autofan motor, optimised for silent operation.

Structure and housing

- The frontal panel is made from a plastic reinforced with fibreglass. The internal unit frame is in galvanized sheet.

Filter

- Nylon filter: quickly removable, washable and renewable Antibacterial and anti smell filter (optional)

Plastic frontal panel

- The colour is RAL 9010

Heat exchanger

- Standard heating/cooling coil made in copper pipes and aluminum fins.
- Air vent valve included.



Auxiliary Coil High Performance System

This innovative system gives the possibility to use the unit with one single coil in a 4 pipe system. By this way the main coil with 4 rows can receive water from the system at lower temperature than usual for getting an equivalent or even higher capacity. For instance the feeding water temperature can be 45°C instead of the usual 70-60°C with a relevant energy saving.

The system **ACHPS**, with its combination of special valves and thermostat, provides also the by-pass of the water in the fancoil maintaining a constant pressure in the system.

Drip trays

- Made in plastic
- Auxiliary drip tray is standard and always in plastic for valve and external pipe condense containing.

Insulation

The insulation is fire-retardant.

Configuration

- Side holes allow auxiliary distribution and the intake of external air.

Valves

- units could be equipped with ON/OFF 3way/4doors valve (with by-pass) and 2way/2doors valve.

Condensate drain pump

- All units are equipped with discharging pump activated by a float. Maximum head 500 mm.
- Alarm signal in case of pump alarm as standard.

Other features

- 4 pcs stepping motors (air distribution in all way)
- LED display and IR receiver.
- Wall pad remote control as optional
- Unit suitable for non-standard control
- Predisposed for Auxiliary coil or high performance system ACHPS (With valves and thermostat I-Basic3 or I-Digit)
- Electric heater (optional and not available for cassette 4 pipe system)
- Master/slave configuration unit 31 units available
- Modbus BMS compatible using Datalogger
- Version with EC low power fan absorption available



Energy saving



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2 Pipe EC Cassette Model

TECHNICAL DATA	speed	PCG-04VECM	PCG-08VECM	PCH-12VECM	PCH-20VECM
Air flow (a)	1 max m ³ /h	575	810	1300	2100
	2 med m ³ /h	400	520	820	1380
	3 min m ³ /h	200	200	360	820
total cooling (a)	1 max kW	3.2	4.56	6.9	10.6
	2 med kW	2.5	3.28	5.1	8.6
	3 min kW	1.41	1.41	3.13	5.87
sensible cooling (a)	1 max kW	2.5	3.17	5.06	8.11
	2 med kW	1.9	2.3	3.85	7.1
	3 min kW	1.11	1.11	2.52	4.84
Pressure drop (a)	1 max kPa	10	36.8	31	36
heating capacity (b)	1 max kW	3.65	6.15	8.3	12.6
	2 med kW	3	3.9	6	10.3
	3 min kW	1.6	2	3.91	7
Pressure drop (b)	1 max kPa	7	33	26	34
sound power	1 max dB(A)	52	60	67	66
	2 med dB(A)	45	45	53	58
	3 min dB(A)	38	35	39	42
sound pressure (c)	1 max dB(A)	43,5	51,5	58,5	57,5
	2 med dB(A)	36,5	36,5	44,5	49,5
	3 min dB(A)	29,5	26,5	30,5	33,5
fan absorption power	1 max W	30	40	88	200
	A	0,17	0,35	0,63	1,57

(a) Room:27° C – 47% R.H. Water temp. (in/out):7/12°C

(b) Room:20° C. Water temp. in:50. same water flow conditioning

(c) sound pressure: reflecting surface at 1,5m, in a 100m³ room with reverberation time of 0,3s

2 Pipe AC Cassette Model

TECHNICAL DATA	speed	PCG-03V	PCG-04V	PCG-06V	PCG-08V	PCH-09V	PCH-12V	PCH-16V	PCH-20V
Air flow (a)	1 max m ³ /h	380	575	722	810	960	1300	1970	2250
	2 med m ³ /h	240	290	522	617	820	960	1640	1970
	3 min m ³ /h	200	200	450	450	700	700	1380	1380
total cooling (a)	1 max kW	2.37	3.2	4.08	4.56	5.6	6.9	9.55	11.5
	2 med kW	1.7	2.06	3.1	3.76	5.1	5.6	8.9	10.2
	3 min kW	1.41	1.41	2.7	2.7	3.57	3.57	6.8	7.69
sensible cooling (a)	1 max kW	1.89	2.5	3	3.17	4.37	5.06	8.37	8.21
	2 med kW	1.62	1.62	2.45	2.85	3.85	4.37	7.13	7.37
	3 min kW	1.11	1.11	2.15	2.15	2.96	2.96	5.72	5.52
Pressure drop (a)	1 max kPa	7.3	10	28	36.8	22	31	38	49
heating capacity (b)	1 max kW	2.8	3.65	5.29	6.15	6.7	8.54	11.8	14.1
	2 med kW	2	2.4	4.1	4.9	5.83	6.7	11	12.6
	3 min kW	1.6	1.6	3.51	3.5	4.68	4.68	8.8	9.43
Pressure drop (b)	1 max kPa	5.9	7	25	33	18	26	35	47
sound power	1 max dB(A)	42	48	57	60	57	65	65	70
	2 med dB(A)	37	40	46	52	53	57	61	65
	3 min dB(A)	35	35	42	42	46	46	58	58
sound pressure (c)	1 max dB(A)	33,5	39,5	48,5	51,5	48,5	56,5	56,5	61,5
	2 med dB(A)	28,5	31,5	37,5	43,5	44,5	48,5	52,5	56,5
	3 min dB(A)	26,5	26,5	33,5	33,5	37,5	37,5	49,5	49,5
fan absorption power	1 max W	38	60	56	85	83	147	267	310
	A	0.217	0.26	0.37	0.41	0.62	0.69	1.28	1.39

(a) Room:27° C – 47% R.H. Water temp. (in/out):7/12°C

(b) Room:20° C. Water temp. in:50. same water flow conditioning

(c) sound pressure: reflecting surface at 1,5m, in a 100m³ room with reverberation time of 0,3s

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4 Pipe EC and AC cassette model

TECHNICAL DATA speed			EC model			AC model		
			PCG-08PECM	PCH-12PECM	PCH-20PECM	PCG-08P	PCH-12P	PCH-20P
Air flow (a)	1 max	m³/h	810	1300	2100	810	1300	2250
	2 med	m³/h	520	820	1380	617	960	1970
	3 min	m³/h	200	360	820	450	700	1090
total cooling (a)	1 max	kW	3.6	5.7	7.06	3.45	5.7	7.92
	2 med	kW	2.86	4.46	5.99	2.87	5.21	6.82
	3 min	kW	1.31	2.42	3.83	2.42	3.18	5.34
sensible cooling (a)	1 max	kW	2.94	4.46	6.37	2.88	4.46	6.57
	2 med	kW	2.48	3.77	5.65	2.55	4.2	5.97
	3 min	kW	1.02	2.22	3.19	2.18	2.76	4.94
Pressure drop (a)	1 max	kPa	14.7	40.3	21.8	22.6	40.3	40.2
heating capacity (b)	1 max	kW	4.43	5.3	9.65	4.25	5.03	9.65
	2 med	kW	3.63	3.59	7.56	3.68	4.63	8.63
	3 min	kW	1.86	1.96	5.44	3.27	3.42	7.56
Pressure drop (b)	1 max	kPa	2.3	7.5	11.5	12	15	26.6
sound power	1 max	dB(A)	60	65	65	60	65	70
	2 med	dB(A)	49	53	58	52	57	65
	3 min	dB(A)	35	39	42	42	47	47
sound pressure (c)	1 max	dB(A)	51,5	56,5	56,5	51,5	56,5	61,5
	2 med	dB(A)	40,5	44,5	49,5	43,5	48,5	56,5
	3 min	dB(A)	26,5	30,5	33,5	33,5	38,5	38,5
fan absorption power	1 max	W	40	88	200	85	200	310
		A	0,35	0,63	1,57	0,42	0,64	1,35

(a) Room: 27° C – 47% R.H. Water temp. (in/out):7/12°C

(b) Room: 20° C Water temp(in/out): 70/60°C

(c) sound pressure: reflecting surface at 1,5m, in a 100m³ room with reverberation time of 0,3s

2 Pipe EC Cassette

SIZE		PCG-04VECM	PCG-08VECM	PCH-12VECM	PCH-20VECM
Dimensions	A mm	575	575	730	830
	B mm	255	290	260	290
	C mm	680	680	830	980
Weigth	Kg	28	30	36	50

2 Pipe AC Cassette

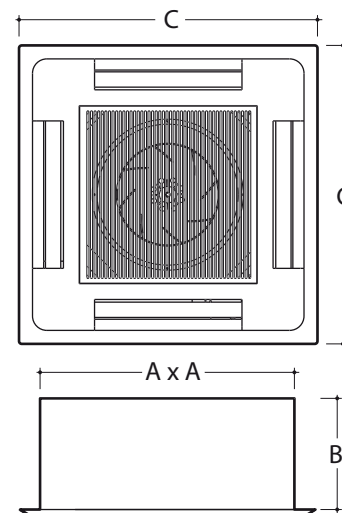
SIZE		PCG-03V	PCG-04V	PCG-06V	PCG-08V	PCH-09V	PCH-12V	PCH-16V	PCH-20V
Dimensions	A mm	575	575	575	575	730	730	830	830
	B mm	255	255	290	290	260	260	290	290
	C mm	680	680	680	680	830	830	980	980
Weigth	Kg	28	28	30	30	36	36	50	50

4 Pipe EC Cassette

SIZE		PCG-08PECM	PCH-12PECM	PCH-20PECM
Dimensions	A mm	575	730	830
	B mm	290	260	290
	C mm	680	830	980
Weigth	Kg	30	36	50

4 Pipe AC Cassette

SIZE		PCG-08P	PCH-12P	PCH-20P
Dimensions	A mm	575	730	830
	B mm	290	260	290
	C mm	680	830	980
Weigth	Kg	30	36	50



For more details ask technical documentation to info@aerfor.com

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