

CASSETTE FAN COIL UNITS



Air treatment
42GW

IDROFAN®

Options/accessories

- Two- or four-way valves
- Fresh air inlet
- Conditioned air to adjacent room kit
- Electric heater
- Auxiliary drain pan

Features

- Six sizes with integrated cooling and heating coils, two-pipe or two-pipe with electric heater, and four-pipe applications. Air flow range 100-400l/s, cooling capacity 1.6-8.7kW, heating capacity 2.2-15.5kW.
- The 42GW_AC is available with a new-generation three-speed AC motor. The 42GW_LEC is available with a variable-speed Low Energy Consumption EC motor.
- Designed for installation in false ceilings with an all-in-one air distribution grille.
- Reliable cooling and heating for offices, shops, restaurants, meeting rooms.
- Elegant air inlet grille, blends in with any room décor.
- Light and easy to install. The small chassis fits neatly with standard ceiling tiles.
- Four-way air distribution for individual comfort or localised control.
- New centrifugal fan and the fan/motor assembly ensure extra-quiet operation.
- Standard filter has a pleated surface that is 87% larger than in a conventional filter.
- Special diffuser design for rapid blending of supply and room air. Conditioned air is directed along the ceiling. Return air enters the unit through a large grille.
- High-performance condensate drain pump for fast and quiet condensate removal.
- Easy maintenance with direct access from below to all main components.

Standard controls

Electronic thermostat

- Four versions, A, B, C and D, with potentiometer
- EC version, three configurable discrete speeds via 0-10 V signal
- Automatic or manual three-speed selection
- Automatic or manual change-over
- Electric heat control
- Comfort/economy/frost protection modes



HDB controller

- Digital display or infra-red terminal
- Unit grouping capability
- Adjustable settings and parameters
- Timer and daily scheduling



NTC communicating controller

- Network communication
- Aquasmart Evolution system compatible
- IAQ and DCV management
- Motorised blinds & lighting control



Aquasmart New System Manager

Physical and electrical data, units with AC motors



42GW		200C			300C			400C			500C			600C			701C		
Coil type		2 pipes			2 pipes			2 pipes			2 pipes			2 pipes			2 pipes		
Fan speed*		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Air flow	l/s	183	125	100	204	140	89	249	173	134	272	199	147	321	229	139	402	299	166
Cooling mode																			
Total cooling capacity	kW	2.40	1.80	1.55	4.00	2.90	1.90	4.70	3.50	2.85	6.30	4.50	3.40	7.20	5.50	3.70	8.70	6.60	4.05
Sensible cooling capacity	kW	2.01	1.49	1.31	3.10	2.20	1.41	3.70	2.70	2.10	4.80	3.60	2.70	5.50	4.10	2.70	6.40	4.85	3.00
Water flow rate	l/s	0.11	0.09	0.07	0.19	0.14	0.09	0.22	0.17	0.14	0.30	0.22	0.16	0.34	0.26	0.18	0.42	0.32	0.19
	l/h	413	310	267	688	499	327	808	602	490	1084	774	585	1238	946	636	1496	1135	697
Water pressure drop	kPa	11.1	6.5	4.9	11.0	6.2	2.9	14.7	8.6	6.0	23.3	13.6	8.7	11.6	7.0	3.4	19	12	5
Heating mode																			
Heating capacity	kW	3.20	2.50	2.20	5.00	4.00	2.50	6.20	4.60	3.70	8.11	6.00	4.50	10.00	7.40	4.60	11.60	9.30	5.20
Water pressure drop	kPa	10.9	5.6	4.0	11.1	5.2	1.9	16.2	8.1	5.0	18.1	10.1	6.2	10.5	6.6	3.3	17.96	11.15	4.80
Water content	l	0.55			1.1			1.1			1.6			2.4			2.4		
Sound power level	dB(A)	47	37	32	52	44	32	57	48	42	47	40	34	53	46	37	59	52	40
Sound pressure level**	dB(A)	38	28	23	43	35	23	48	39	33	38	31	25	44	37	28	59	52	40
Power input	W	58	35	25	54	32	16	94	55	35	63	39	27	85	59	33	123	90	43
Current input	A	0.27	0.17	0.12	0.24	0.14	0.07	0.41	0.24	0.16	0.30	0.17	0.12	0.46	0.27	0.14	0.63	0.41	0.19
Eurovent energy class FCEER/FCCOP	D/D				C/C			D/D			C/C			C/C			C/C		
Electric heater (high capacity)	W	1500			2500			2500			3000			3000			3000		
Current input (high capacity)	A	6.3			10.4			10.4			12.5			12.5			12.5		
42GW		200D			300D			400D			600D			701D					
Coil type		4 pipes			4 pipes			4 pipes			4 pipes			4 pipes					
Fan speed*		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Air flow	l/s	183	125	100	204	140	89	249	173	134	321	229	139	402	299	166			
Cooling mode																			
Total cooling capacity	kW	2.20	1.65	1.45	3.50	2.70	2.00	4.10	3.25	2.60	6.70	5.00	3.00	8.20	6.80	3.80			
Sensible cooling capacity	kW	2.00	1.48	1.27	2.70	2.10	1.50	3.30	2.60	2.05	5.10	3.80	2.20	6.20	5.20	2.70			
Water flow rate	l/s	0.11	0.08	0.07	0.17	0.13	0.10	0.20	0.16	0.12	0.32	0.24	0.14	0.39	0.32	0.18			
	l/h	378	284	249	602	464	344	705	559	447	1152	860	516	1410	1170	654			
Water pressure drop	kPa	13.7	8.2	6.6	10.1	6.6	4.0	13.1	8.9	6.2	23.2	14.1	5.9	33	24	9			
Water content	l	0.4			1.1			1.1			2.4			2.4					
Heating mode																			
Heating capacity	kW	1.90	1.44	1.24	6.37	5.10	3.60	6.80	5.80	5.00	11.50	8.90	6.00	14.50	11.50	7.30			
Water flow rate	l/s	0.05	0.03	0.03	0.15	0.12	0.09	0.16	0.14	0.12	0.27	0.21	0.14	0.35	0.27	0.17			
	l/h	163	124	107	548	439	310	585	499	430	989	765	516	1247	989	628			
Water pressure drop	kPa	31.4	21.1	17.0	25.5	16.1	7.8	29.2	21.0	15.4	13.6	8.9	4.6	20	14	6			
Water content	l	0.1			0.6			0.6			1.2			1.2					
Sound power level	dB(A)	47	37	32	54	45	33	57	48	42	53	46	37	59	52	40			
Sound pressure level**	dB(A)	38	28	23	45	36	24	48	39	33	44	37	28	50	43	31			
Power input	W	58	35	25	54	32	16	94	55	35	85	59	33	123	90	43			
Current input	A	0.27	0.17	0.12	0.24	0.14	0.07	0.41	0.24	0.16	0.46	0.27	0.14	0.63	0.41	0.19			
Eurovent energy class FCEER/FCCOP	E/E				B/B			B/B			A/A			A/A			C/B		C/C

Based on Eurovent conditions:

Cooling mode (2 and 4-pipe coil): entering air temperature 27°C db/19°C wb, entering/leaving water temperature 7/12°C, high fan speed.

Heating mode (2-pipe coil): entering air temperature 20°C, entering water temperature 50°C, high fan speed, water flow rate as cooling mode.

Heating mode (4-pipe coil): entering air temperature 20°C, entering water temperature 70°C, high fan speed, water Δt = 10 K

* Fan speeds: 1 = high, 2 = medium, 3 = low

** Sound pressure level and NR values are based on a hypothetical sound attenuation for the room of -9 dB(A).

Note: Electrical heater version is available on all 2-pipe units.

Physical and electrical data, units with LEC motors

Note: All other data is the same as for the units with AC motors

42GW		209C			309C			409C			509C			609C			709C		
Coil type		2 pipes			2 pipes			2 pipes			2 pipes			2 pipes			2 pipes		
Voltage (d.c.)	V	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2
Air flow	l/s	183	125	100	204	140	89	249	173	134	272	199	147	321	229	139	443	299	166
Power input	W	23	10	7	33	14	7	57	23	13	25	12	7	46	23	9	115	40	11
Current input	A	0.19	0.10	0.08	0.27	0.13	0.08	0.46	0.20	0.12	0.23	0.12	0.08	0.40	0.22	0.10	0.89	0.35	0.12
Eurovent energy class FCEER/FCCOP	A/A				A/A			B/B			A/A			A/A			A/A		A/A
42GW		209D			309D			409D			609D			709D					
Coil type		4 pipes			4 pipes			4 pipes			4 pipes			4 pipes			4 pipes		
Voltage (d.c.)	V	10	6	2	10	6	2	10	6	2	10	6	2	321	229	139	443	299	166
Air flow	l/s	183	125	100	204	140	89	249	173	134				46	23	9	115	40	11
Power input	W	23	10	7	32	14	7	57	22	13				0.40	0.22	0.10	0.89	0.35	0.12
Current input	A	0.19	0.10	0.08	0.29	0.14	0.08	0.46	0.21	0.12				37/5			39.6/5		
Eurovent energy class FCEER/FCCOP	B/B				A/A			B/A			A/A			A/A			A/A		A/A

Dimensions and weights

All units	42GW 200/209	42GW 300/309	42GW 400/409	42GW 500/509	42GW 600/609	42GW 700/709
Dimensions (H x L x D)	mm	298 x 569/627 x 569/627	298 x 569/627 x 569/627	298 x 569/627 x 569/627	302 x 822/879 x 822/879	302 x 822/879 x 822/879
Grille dimensions (H x L x D)	mm	36 x 720 x 720	36 x 720 x 720	36 x 720 x 720	37 x 960 x 960	37 x 960 x 960
Weight unit/weight grille	kg	14.8/3	16.5/3	16.5/3	37/5	39.6/5

Where two values are given the second value applies to units with two or four-way valves.

