

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

Standard controls

Electronic thermostat

- 2 versions, A + B, with potentiometer
- Auto or manual 3-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 compatible
- IAQ and DCV management
- Motorised blinds & lighting control



Features

- Six sizes with integrated, factory-mounted cooling and heating coils, two-pipe or two-pipe with electric heater, and four-pipe applications, with an air flow range from 100 to 440 l/s, a cooling capacity range from 1.6 to 9 kW, and a heating capacity range from 2.2 to 16 kW.
- 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.
- Cassette chilled-water fan coil system designed for installation in false ceilings with an all-in-one air distribution grille integrated in the ceiling panel.
- Reliable and economical cooling and heating for light commercial applications, large offices, shops, restaurants, showrooms, lobbies and meeting rooms.
- Elegant air inlet grille, blends in with any room décor.
- The low-profile 42GW is light and easy to install. The small chassis fits neatly with standard ceiling tiles and is simple to install wherever it is needed.
- Four-way air distribution gives individual comfort while for localised control each diffuser may be adjusted or even shut down completely.
- The 42GW units were designed for extremely quiet operation with sound levels that set new comfort standards. The new design of the centrifugal fan and the fan/motor assembly ensures extra-quiet operation.
- The standard filter for the Idrofan cassette range has a pleated filtration surface, resulting in a 87% larger surface than a conventional filter.
- The special design of the diffuser ensures rapid blending of the supply and room air. Conditioned air is directed along the ceiling then evenly distributed throughout the room. Return air enters the cassette through a large grille.
- High-performance autonomous condensate drain pump encased in a special sound-insulating material for improved fast and quiet condensate removal
- Easy maintenance with direct access from below to all main components.

Physical and electrical data, units with AC motors

42GW	200C			300C			400C			500C			600C			700C***			
Coil type	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	443	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	9.60	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	7.35	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	0.46	0.32	0.19
	l/h	413	310	267	688	499	327	808	602	490	1084	774	585	1238	946	636	1651	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	19.8	9.9	4.0
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	13.00	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	17.3	9.1	3.9
Water content	l	0.55			1.1			1.1			1.6			2.4					
Sound power level	dB(A)	47	37	32	52	44	32	57	48	42	47	40	34	53	46	37	61	52	40
Sound pressure level**	dB(A)	38	28	23	43	35	23	48	39	33	38	31	25	44	37	28	52	43	31
Power input	W	58	35	25	54	32	16	94	55	35	63	39	27	85	59	33	185	130	60
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	0.85	0.58	0.26
Eurovent energy class FCEER/FCCOP	D/D				C/C			D/D			C/C			C/C			D/D		
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					
42GW	200D			300D			400D			600D			700D						
Coil type	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	443	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	9.10	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	7.10	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	0.43	0.32	0.18	
	l/h	378	284	249	602	464	344	705	559	447			1152	860	516	1565	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	39.0	23.8	8.9	
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	16.00	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	0.38	0.27	0.17	
	l/h	163	124	107	548	439	310	585	499	430			989	765	516	1376	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	23.4	13.6	6.4	
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	61	52	40	
Sound pressure level**	dB(A)	38	28	23	45	36	24	48	39	33			44	37	28	52	43	31	
Power input	W	58	35	25	54	32	16	94	55	35			85	59	33	185	130	60	
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	0.85	0.58	0.26	
Eurovent energy class FCEER/FCCOP	E/E				C/B			B/C			A/A			A/B			D/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																		
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			
42GW	209D			309D			409D			609D			709D						
Coil type	4 pipes																		
Voltage (d.c.)	V	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			321	229	139	443	299	166	
Power input	W	23	10	7	32	14	7	57	22	13			46	23	9	115	40	11	
Current input	A	0.19	0.10	0.08	0.29	0.14	0.08	0.46	0.21	0.12			0.40	0.22	0.10	0.89	0.35	0.12	
Eurovent energy class FCEER/FCCOP	B/B			A/A			B/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.

