

LARGE DUCTED FAN COIL UNITS

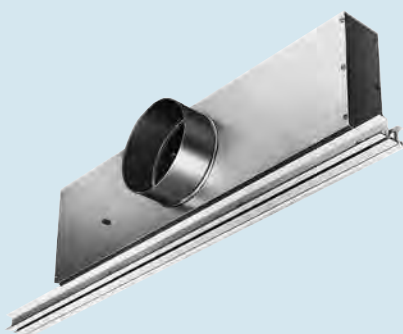


Air treatment 42DW



Options/accessories

- Factory-installed two- or four-way valves
- High-efficiency filter



35BD linear diffuser (supply and return air)



Aquasmart New System Manager

Features

- Four sizes with two-pipe, two-pipe plus electric heater or four-pipe coils; air flow range 220-726 l/s, cooling capacity 4.4-11.7 kW, heating capacity 6.5-19.8 kW.
- Compact ducted chilled-water fan coil units for installation above false ceilings.
- Reliable, efficient heating and cooling for commercial and residential applications.
- Minimised size, using a V-shaped coil, and reduced height of 285 mm.
- Air return from the rear or below for increased installation flexibility.
- Air outlet modularity (sleeve or spigots), outlets on the front or at the sides.
- High-capacity unit with low sound levels.
- Four-speed motor, offering a choice of two medium comfort speeds.
- High-pressure centrifugal fans.
- Compatible with the 35BD air diffuser range.
- Safe factory-installed electric heater for single or two-stage hot water heating.
- Low hydraulic pressure drop with a valve mounted, compatible with all chiller pump kits.
- Quick installation with factory-installed options (controls, valves).
- Improved market competitiveness.

Standard controls

Electronic thermostat

- Two versions, A and B with potentiometer
- EC versio, 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



Physical data



Unit size		42DWC 07				42DWC 09				42DWC 12			
Fan speed		Low	Medium	High	Super high	Low	Medium	High	Super high	Low	Medium	High	Super high
Fan													
Air flow	l/s	228	250	260	273	253	303	349	372	478	563	632	668
	m³/h	820	900	935	983	910	1090	1255	1338	1720	2025	2275	2403
Static pressure	Pa	33	50	55	59	35	50	65	75	35	50	60	70
Cooling mode													
Total cooling capacity	kW	5.08	5.5	5.67	5.88	5.88	6.81	7.69	8.05	9.29	10.4	11.2	11.6
Sensible cooling capacity	kW	4	4.33	4.47	4.66	4.54	5.32	6.05	6.37	7.03	7.95	8.66	9.68
Water flow rate	l/s	0.24	0.26	0.27	0.28	0.28	0.33	0.37	0.38	0.55	0.49	0.53	0.54
	l/h	849	947	980	1010	1012	1173	1320	1385	1992	1776	1897	1950
Water pressure drop	kPa	16	21	23	25	16	22	27	30	38	45	54	60
Heating mode, 2 pipes													
Heating capacity	kW	6.74	7.28	7.60	7.78	7.95	9.31	10.10	11.02	12.21	13.79	15.19	16.58
Water pressure drop	kPa	16	21	23	25	16	22	27	30	38	45	55	60
Heating mode, 4 pipes													
Heating capacity	kW	-	-	-	-	-	-	-	-	-	-	-	-
Water flow rate	l/h	-	-	-	-	-	-	-	-	-	-	-	-
	l/h	-	-	-	-	-	-	-	-	-	-	-	-
Water pressure drop	kPa	-	-	-	-	-	-	-	-	-	-	-	-
Electric heater capacity	W	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Sound levels													
Sound power level	dBA	55	57	58	59	56	60	64	65	62	66	68	70
Sound pressure level*	dBA	38	40	41	42	39	43	47	48	45	49	51	53
NR value		35	37	38	39	35	40	44	45	41	45	48	50
Power supply	V-ph-Hz	230-1-50				230-1-50				230-1-50			
Power input	W	117	130	143	150	125	170	200	225	265	310	360	380
Current draw	A	0.51	0.57	0.62	0.65	0.54	0.74	0.87	0.98	1.15	1.35	1.57	1.65
Dimensions													
Coil outlet/inlet diameter	inch	3/4				3/4				3/4			
Length	mm	925				925				1325			
Height	mm	285				285				285			
Depth	mm	750				750				750			
Weight (without/with electric heater)	kg	35/39				37/41				48/53			

Unit size		42DWC 16				42DWC 09				42DWC 16			
Fan speed		Low	Medium	High	Super high	Low	Medium	High	Super high	Low	Medium	High	Super high
Fan													
Air flow	l/s	600	656	692	726	253	303	349	372	600	656	692	726
	m³/h	2160	2360	2490	2614	910	1090	1255	1338	2160	2360	2490	2614
Static pressure	Pa	40	50	55	61	35	50	65	75	40	50	55	61
Cooling mode													
Total cooling capacity	kW	12.00	12.70	13.40	13.71	5.56	6.39	7.06	7.32	10.60	11.30	11.70	11.66
Sensible cooling capacity	kW	9.39	10.00	10.70	10.53	4.25	4.95	5.51	5.82	8.68	9.35	9.74	9.68
Water flow rate	l/s	0.59	0.64	0.64	0.67	0.27	0.30	0.34	0.35	0.51	0.54	0.55	0.56
	l/h	2135	2305	2309	2425	955	1097	1210	1259	1831	1929	1966	2004
Water pressure drop	kPa	48.3	56.1	54.3	58.4	21	25	30	33	43	48	50	52
Heating mode, 2 pipes													
Heating capacity	kW	16.7	17.9	18.9	19.76	-	-	-	-	-	-	-	-
Water pressure drop	kPa	45	56.1	54.2	58.4	-	-	-	-	-	-	-	-
Heating mode, 4 pipes													
Heating capacity	kW	-	-	-	-	7.02	7.70	8.35	8.83	14.30	15.30	15.90	15.93
Water flow rate	l/h	-	-	-	-	0.17	0.19	0.20	0.22	0.36	0.38	0.39	0.39
	l/h	-	-	-	-	604	677	732	777	1278	1353	1395	1400
Water pressure drop	kPa	-	-	-	-	13	12	17	18	53	60	63	65
Electric heater capacity	W	3000	3000	3000	3000	-	-	-	-	-	-	-	-
Sound levels													
Sound power level	dBA	68	70	72	73	56	60	64	65	68	70	72	73
Sound pressure level*	dBA	51	53	55	56	39	43	47	48	51	53	55	56
NR value		48	49	51	52	35	40	44	45	48	49	51	52
Power supply	V-ph-Hz	230-1-50				230-1-50				230-1-50			
Power input	W	370	410	430	450	135	175	197.5	220	400	460	485	510
Current draw	A	1.61	1.78	1.87	1.96	0.59	0.76	0.86	0.96	1.74	2	2.11	2.22
Dimensions													
Coil outlet/inlet diameter	inch	3/4				3/4				3/4			
Length	mm	1325				925				1325			
Height	mm	285				285				285			
Depth	mm	750				750				750			
Weight (without/with electric heater)	kg	53/58				37				53			

Based on Eurovent rating standards:

Cooling: Entering/leaving air temperature = 27°C db/19°C wb – entering/leaving water temperature = 7°C/12°C.

Heating (2 pipes): Entering air temperature = 20°C – entering water temperature = 50°C, same water flow rate as in cooling.

Heating (4 pipes): Entering air temperature = 20°C – entering/leaving water temperature = 70°C/60°C.

* Based on a hypothetical sound attenuation for the room and the system of -17 dB(A).