

ROOM FAN COIL UNITS



Air treatment

42N

IDROFAN®

Accessories

- Supporting feet
- Supporting feet and cover panel
- Return air grille for cabinet unit
- Rear closing panel
- Cabinet on concealed units,
- Discharge air sleeve (concealed units only)
- Supporting brackets
- A and B-type thermostats
- Special installation kit
- Cold draught prevention kit - all two-pipe sizes
- Automatic changeover switch
- Air sensor with 15 m cable
- Water sensor kit with 15 m cable
- Infrared remote controller and infrared remote receiver kit
- ZUI1 or ZUI2 interface
- SUI1 or SUI2 (with/without fan speed selection)

Features

- Eleven sizes with two-pipe, two-pipe changeover or four-pipe coils, with an air flow range from 35 to 422 l/s, a cooling capacity range from 0.8 to 6.4 kW, and a heating capacity range from 1.1 to 9.5 kW.
- The 42N_S is available with a new-generation three- or five-speed AC motor. The 42N_E is available with a variable-speed low energy consumption EC motor.
- Concealed or cabinet chilled-water fan coil system, designed for vertical and horizontal installation in a room or above a false ceiling.
- Economical cooling and heating for hotels, commercial and residential applications.
- Cabinet version complete with control terminal.
- Combines aesthetic slim-line design with high installation flexibility.
- Two fan types, a tangential fan for ultra-low noise level and a centrifugal fan for high air distribution system compatibility.
- Factory-mounted PTC electric heater with low and high capacity settings.
- Low hydraulic pressure drop with a valve mounted.
- Quick installation with factory-mounted options (controls, valves).
- LEC models enhance unit performance offering reduced energy costs, improved comfort, maximum flexibility and extended operating life.

Standard controls

Electronic thermostat

- Two versions, A and B, with potentiometer
- 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 and electrical data, units with AC motors

42N_S, 2-pipe coil	15					20					26		
Fan speed	5	4	3	2	1	5	4	3	2	1	3	2	1
Fan type	One, tangential					One, centrifugal					One, centrifugal		
Air flow	l/s-m ³ /h					59-215 80-285 92-330 107-385 128-460					93-335 149-536 196-706		
Cooling mode*													
Total cooling capacity	kW					1.39 1.81 2.08 2.34 2.54					2.10 3.00 3.60		
Sensible cooling capacity	kW					1.03 1.42 1.60 1.85 2.03					1.65 2.35 2.90		
Water flow rate	l/s-l/h					0.07-239 0.09-311 0.10-358 0.11-402 0.12-437					0.10-361 0.14-516 0.17-619		
Water pressure drop	kPa					2.8 4.2 5.3 6.4 7.3					5.4 9.5 12.7		
Heating mode**													
Heating capacity	kW					1.70 2.10 2.54 2.87 3.18					2.56 3.68 4.38		
Water pressure drop	kPa					2.2 3.4 4.3 5.2 6.0					4.4 7.8 10.6		
Sound power/sound pressure***	dB(A)					29/20 38/29 42/33 46/37 50/41					44/35 54/45 61/52		
Electrical data													
Power input	W					29 30 31 34 36					45 55 65		
Current drawn	A					0.13 0.13 0.14 0.15 0.16					0.21 0.25 0.30		
Electric heater (high/low capacity)	800/500 W, 3.48/2.18 A					1000/500 W, 4.35/2.18 A					1000/500 W, 4.35/2.18 A		
Eurovent energy class FCEER/FCCOP	D/D					D/E					E/E		

42N_S, 2-pipe coil	30					42			45					65		
Fan speed	5	4	3	2	1	3	2	1	5	4	3	2	1	3	2	1
Fan type	Two, centrifugal					Two, centrifugal			Two, centrifugal					Two, centrifugal		
Air flow	l/s-m ³ /h					147-531 222-798 268-965			146-525 185-665 224-805 277-995 333-1195					237-853 331-1191 422-1519		
Cooling mode*																
Total cooling capacity	kW					3.00 4.00 4.50			2.60 3.37 3.98 4.74 5.45					3.90 5.45 6.35		
Sensible cooling capacity	kW					2.35 3.30 3.85			2.12 2.78 3.30 3.98 4.55					3.20 4.6 5.10		
Water flow rate	l/s-l/h					0.14-516 0.19-688 0.22-774			0.12-447 0.16-580 0.19-695 0.23-815 0.26-937					0.19-671 0.26-937 0.30-1092		
Water pressure drop	kPa					11.4 18.8 23.0			3.2 5.0 6.7 9.0 11.5					6.4 11.5 15.0		
Heating mode**																
Heating capacity	kW					4.05 5.55 6.40			4.00 5.05 5.90 6.90 8.08					6.10 8.00 9.50		
Water pressure drop	kPa					9.2 15.0 18.4			2.7 4.2 5.5 7.5 9.5					5.4 9.5 12.3		
Water content	l					1.8 1.8 1.8			2.1 2.1 2.1 2.1 2.1					2.1 2.1 2.1		
Sound power/sound pressure***	dB(A)					47/38 57/48 62/53			41/32 47/38 53/44 57/48 62/53					54/45 62/53 68/59		
Electrical data																
Power input	W					45 75 100			69 77 83 92 128					90 125 165		
Current drawn	A					0.21 0.35 0.45			0.31 0.34 0.37 0.41 0.55					0.41 0.55 0.72		
Electric heater (high/low capacity)	2000/1000 W, 8.70/4.35 A					2000/1000 W, 8.70/4.35 A			2000/1000 W, 8.70/4.35 A					2000/1000 W, 8.70/4.35 A		
Eurovent energy class FCEER/FCCOP	D/D					D/D			E/E					E/E		

Physical and electrical data, units with LEC motors

42N_E, 2-pipe coil	19					29					39					49					
Fan speed	%	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100
Fan type	One, tangential					One, centrifugal					Two, centrifugal					Two, centrifugal					
Air flow	l/s					59 80 92 107 128					97 126 153 182 207					146 185 224 277 333					
	m ³ /h					215 285 330 385 460					350 455 550 655 745					525 665 805 995 1195					
Cooling mode*																					
Total cooling capacity	kW					1.39 1.81 2.08 2.34 2.54					2.07 2.54 3.01 3.46 3.70					2.60 3.37 3.98 4.74 5.45					
Sensible cooling capacity	kW					1.03 1.42 1.60 1.85 2.03					1.40 1.96 2.35 2.84 3.10					2.12 2.78 3.30 3.98 4.55					
Water flow rate	l/s					0.07 0.09 0.10 0.11 0.12					0.10 0.12 0.14 0.17 0.18					0.12 0.16 0.19 0.23 0.26					
	l/h					239 311 358 402 437					356 437 518 595 636					447 580 685 815 937					
Water pressure drop	kPa					2.8 4.2 5.3 6.4 7.3					6.0 8.6 11.5 14.6 16.4					3.2 5.0 6.7 9.0 11.5					
Heating mode**																					
Heating capacity	kW					1.70 2.10 2.54 2.87 3.18					2.86 3.54 4.18 4.80 5.29					4.00 5.05 5.90 6.90 8.08					
Water pressure drop	kPa					2.2 3.4 4.3 5.2 6.0					4.8 6.9 9.2 11.7 13.1					2.7 4.2 5.5 7.5 9.5					
Sound power/sound pressure***	dB(A)					29/20 38/29 42/33 46/37 50/41					36/27 42/33 47/38 51/42 54/45					41/32 47/38 53/44 57/48 62/53					
Electrical data																					
Power input	W					3 5 7 10 15					5 9 15 23 35					8 14 25 39 65					
Current drawn	A					0.09 0.09 0.11 0.13 0.16					0.10 0.12 0.16 0.21 0.29					0.10 0.15 0.22 0.35 0.52					
Electric heater (high/low capacity)	800/500 W, 3.48/2.18 A					100/500 W, 4.35/2.18 A					2000/1000 W, 8.70/4.35 A					2000/1000 W, 8.70/4.35 A					
Eurovent energy class FCEER/FCCOP	A/A					A/A					A/A					A/A					

* Eurovent conditions: Entering air temperature = 27°C db/19°C wb - entering/leaving water temperature = 7°C/12°C, high fan speed.

** Eurovent conditions: Entering air temperature = 20°C, entering water temperature = 50°C, same water flow rate as in cooling mode.

*** Based on a hypothetical acoustic attenuation for the room and the air distribution system of -9 dB(A).

Note: For data on 4-pipe coils please refer to the specific product documentation.

Dimensions and weights

	Vertical units with cabinet				Horizontal units with cabinet				Horizontal concealed units				Vertical concealed units				
	S15	S20-26	S30-42	S45-65	S15	S20-26	S30-42	S45-65	S15	S20-26	S30-42	S45-65	S15	S20-26	S30-42	S45-65	
Length	mm	E19	E29	E39	E49	E19	E29	E39	E49	E19	E29	E39	E49	E19	E29	E39	E49
Width	mm	830	1030	1230	1430	830	1030	1230	1430	606	806	1006	1206	606	806	1006	1206
Height	mm	220	220	220	220	657	657	657	657	518	518	518	518	220	220	220	220
Weight	kg	657	657	657	657	220	220	220	220	220	220	220	220	640	640	640	640
		17	19	22	35	17	19	22	35	13	15	16	28	13	15	16	28