



STANDARD AND CUSTOMIZED FAN COIL UNITS



 **biniclima**[®]

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THE COMPANY



Your partner for fan coil units

Bini Clima was established in 1919. The initial manufacturing of air heaters developed into a more extended product range, which includes highly efficient fan-coil units for every field of application since 1977. Thanks to the favorable geographical location in Northern Italy, the company has easy access to the best suppliers of high-quality components. Since 2010, Bini Clima is part of Euroclima Group.

The company complies with the highest quality standards when it comes to selecting reliable components and manufacturing its products on the sizable production area of approximately 11000 m². The innovative product design, the elaboration of sustainable solutions and the distinctive customer orientation characterize Bini Clima, making it an ideal partner in the field of air conditioning and ventilation.

Success story

The secret of Bini Clima's long-standing and continuous success lies in the efficient project-management and the distinctive customer-orientation. We understand and address to our customer's needs and offer customized solutions to optimize operating costs. This is achieved by:

- our professionalism and the commitment of all our employees
- our teamwork and the close relationships with our distributors, customers and suppliers
- our many years of experience and know-how in elaborating innovative solutions
- the quality, sustainability and reliability of our products



YOUR BEST PARTNER FOR FAN COIL UNITS

Customized terminals

Bini Cima offers a wide range of both standardized and customized terminal units for residential and commercial buildings such as hotels, offices, schools, stores, museums, cinemas etc.. We not only produce simple and cost effective products for comfort applications, but we can also comply with special requests such as marine or medical applications. Furthermore we can design special products for your own projects, built with the latest technology components. All Bini Cima fancoils can be delivered with factory fitted controls and accessories (valves, heating elements, etc.).



Our philosophy

- CUSTOMER – the trustful cooperation with our partners, customers and suppliers and our professionalism create the basis for long lasting partnerships
- EMPLOYEE – through the outstanding internal teamwork we are able to work efficiently and effectively
- COMMITMENT – our major commitment grants the best possible support to our customers, from design and production through to after-sale service

Our vision

The world and the market are changing very fast, we therefore continuously adapt our products and processes to meet the latest requirements and regulations. Our strategy is based on continuous development of environmentally friendly solutions in order to achieve the best possible indoor air quality. Innovation, sustainability and minimum operating costs are the key aspects we consider when designing new solutions.



GENERAL FEATURES

COIL	Copper tubes DN 9,52 mm (3/8") staggered for greater heat transfer, highly efficient aluminium fins. Coil headers made of brass, copper or steel with connections for 2 or 4 pipe systems. Manual air vent valves as standard, automatic air vent valves optional. Working pressure 14,4 bar (test 24 bar), working temperature 80°C (max 100°C).
FILTER	Regenerable synthetic fiber enclosed in a galvanized frame with wire mesh protection. The filter is easily removable for cleaning and maintenance. Filter efficiency G1, G2 and G3 (MERV 1-5). On request metallic, washable or highly efficient filters available.
FAN	Tangential, helicoidal and double inlet centrifugal fans with galvanized steel scrolls and aluminium or ABS impellers. The impellers are statically and dynamically balanced. In the "F" series, the fan deck is fixed with 2 screws and can be easily removed for maintenance.
MOTOR	Motors in accordance with European Standard ErP2015 n. 327/2011 (where indicated), provided with self-lubricating bearings and cast aluminum enclosure (temperature class B or F, thermal protection incorporated) with or without autotransformer. <u>AC-motor</u> – V230/1Ph/50-60Hz single phase, 3, 5, 6 or 7 speeds are available depending on model, 3 are wired to the fan speed switch. <u>EC-motor</u> – V230/1Ph/50-60Hz single phase, brushless, for continuous variable speed control (0...10V signal)
CASING	Frame construction made of galvanised steel, casing epoxy powder coated RAL 9010 (any RAL colour available on request). On request complete insulation on fan and coil section and cabinet (5 or 12 mm closed cells self-adhesive polyethylene, fireproof insulation class 1 European standard). Inclined drain pan made of galvanised steel, insulated 5 mm self-adhesive polyethylene as standard. On request drain pan made of stainless steel or epoxy powder coated. <u>DS series</u> – sandwich double skin self supporting panel 25 mm thick, outer skin 0,7 mm RAL 9010 polyester coating. Inner skin 1,0 mm galvanized sheet steel. Soundabsorbing rockwool insulation, non-combustible, fire class A1, density 20 kg/m ³ .
CONTROL	3-speed fan switch, wired electrical control box IP22 (IP55 on request), mechanical and electronic thermostats, unit or wall mounted available according to the fancoil model.
GRILLE	Supply grille made of ABS, light grey RAL 7047 (series "F" and "FE"), anodized and coated aluminium grille (other series).

GENERAL FEATURES

ACCESSORIES

THERMOSTAT	Mechanical or electronic, unit or wall mounted to control all the unit's functions (summer/winter switch, 3-speed fan switch), ready for valve control etc.. A great choice of regulations for standard and special applications is available.
VALVE	2, 3, 3 ways + bypass with on/off actuators (V230/1) and modulating actuators (0...10Vdc) for 2 or 4-pipe systems. They can be supplied loose or factory fitted.
HEATING ELEMENT	Stainless steel AISI 304 with alu-zinc fins, safety thermostat with manual reset (automatic on request), power contactor. Technical and constructional characteristics according to European safety regulations. Several heating elements can be connected parallelly to increase the heating capacity.
SUPPORTING FEET	For vertical units, made of sturdy galvanized steel epoxy coated, light grey RAL 7047, to be mounted on the units base for placement or screening of tubes.
PLENUM	Supply monoblock plenum with round spigot connections (max. DN 250 mm), return plenum is to be mounted separately. It can be internally insulated with closed cells self-adhesive polyethylene, fireproof insulation (class 1 European standard).
GERMICIDAL LAMP	High efficiency lamp, reduces the risk of contamination of coil fins. Used whenever a high degree of sterilization is required.

UNDERFLOOR UNITS



Bini Clima underfloor units with their special design are the optimal **solution for floor mounting installations** in hotels, offices, airports, museums, etc.

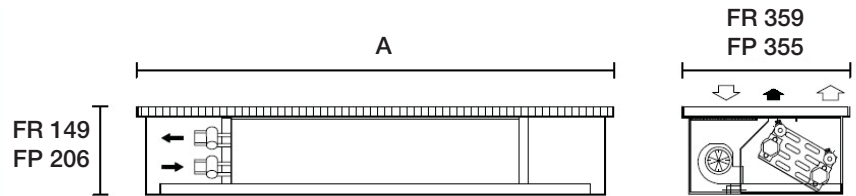
Low **noise**, clean air (air filtration), effective **air exchange** (available with external air intake or in combination with centralized air handling units), **design**, product **quality** and **long lasting lifetime** are the main advantages.

UNDERFLOOR UNITS

FR, FP, FR-EC, FP-EC

149 mm or 206 mm height

- tangential fan for low noise level
- by-pass (air curtain) to avoid air recirculation
- galvanized modular frame
- black epoxy paint
- walkable aluminium grille
- synthetic washable air filter
- 2 or 4 pipe systems
- coil with 4 or 3+1 rows
- IP55 electric box
- AC-motor (FR & FP) and EC-motor (FR-EC & FP-EC)



Size	FR	08	16	32
Nominal airflow ⁽⁰⁾	m ³ /h	225	462	625
Total cooling capacity ⁽¹⁾	kW	1,14	3,06	4,66
Sensible cooling capacity ⁽¹⁾	kW	0,93	2,19	3,11
Heating capacity ⁽²⁾	kW	1,73	3,94	5,50
Heating capacity ⁽³⁾	kW	3,17	6,67	9,22
Sound Power Level Lw ⁽⁴⁾	dB(A)	45,3	46,5	47,1
Sound pressure Level Lp ⁽⁴⁾	dB(A)	36,3	37,5	38,1
Width "A"	mm	1250	2000	2750

FR-EC	08	16	32	
Nominal airflow ⁽⁰⁾	m ³ /h	248	502	675
Total cooling capacity ⁽¹⁾	kW	1,18	3,26	4,99
Sensible cooling capacity ⁽¹⁾	kW	1,00	2,35	3,32
Heating capacity ⁽²⁾	kW	1,87	4,22	5,89
Heating capacity ⁽³⁾	kW	3,44	7,16	9,87
Sound Power Level Lw ⁽⁴⁾	dB(A)	52,2	55,0	56,5
Sound pressure Level Lp ⁽⁴⁾	dB(A)	43,2	46,0	47,5
Width "A"	mm	1250	2000	2750

Size	FP	08	16	32
Nominal airflow ⁽⁰⁾	m ³ /h	305	570	840
Total cooling capacity ⁽¹⁾	kW	2,15	4,35	6,39
Sensible cooling capacity ⁽¹⁾	kW	1,50	2,91	4,28
Heating capacity ⁽²⁾	kW	2,91	5,50	8,11
Heating capacity ⁽³⁾	kW	4,53	8,54	12,57
Sound Power Level Lw ⁽⁴⁾	dB(A)	46,3	47,4	48,5
Sound pressure Level Lp	dB(A)	37,3	38,4	39,5
Width "A"	mm	1250	2000	2750

FP-EC	08	16	32	
Nominal airflow ⁽⁰⁾	m ³ /h	320	560	840
Total cooling capacity ⁽¹⁾	kW	2,24	4,29	6,39
Sensible cooling capacity ⁽¹⁾	kW	1,56	2,86	4,28
Heating capacity ⁽²⁾	kW	2,80	5,02	7,51
Heating capacity ⁽³⁾	kW	4,73	8,41	12,57
Sound Power Level Lw ⁽⁴⁾	dB(A)	46,4	46,7	48,3
Sound pressure Level Lp	dB(A)	37,4	37,7	39,3
Width "A"	mm	1250	2000	2750

⁽⁰⁾ FR=4R (4T) / FP=4R(6T) - Maximum speed

⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C

⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling

⁽³⁾ Air: 20° C - Water in 70 / 60° C

⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

⁽⁰⁾ FR=4R (4T) / FP=4R(6T) - Voltage 10 Vdc

⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C

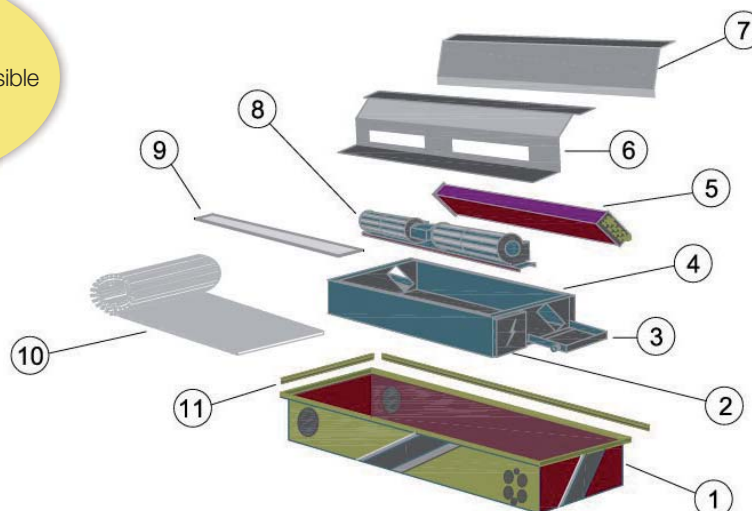
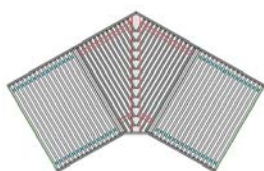
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling

⁽³⁾ Air: 20° C - Water in 70 / 60° C

⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-9dB(A)



GRILLE
anti-heel with "T"-fins
angle and round connection possible
any RAL color (on request)



- ① External black housing
- ② Electric box
- ③ Drain pan
- ④ Internal casing
- ⑤ Water coil
- ⑥ Fan plate
- ⑦ Air bypass plate
- ⑧ Tangential fan
- ⑨ Air filter
- ⑩ Aluminium roll-up grille
- ⑪ Aluminium frame

CASSETTES



The **innovative design** of Bini Clima cassettes grants **high performance with low sound**. It is the perfect unit if the design comes first and it perfectly matches any surroundings or decor. The highly efficient fan and the adjustable blades grant a **perfect air distribution**. The dimensions of the cassette are suitable for all **European standard modules** and allow a **quick and easy installation**.

Wide range of models and huge availability of accessories make these cassettes adaptable to any request.



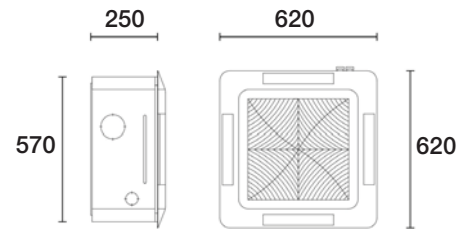
CASSETTES

CT, CT-EC

4-way single

- condensing pump, non-return valve and float included
- easily removable and washable filter
- 2 or 4 pipe systems
- coil with 2, 3 or 2+1 rows
- AC-motor (CT) and EC-motor (CT-EC)
- remote IR control or wall thermostat (on request)
- fins adjustable with remote control
- electric element and safety contactor (on request)
- fresh & adjacent room air spigot (on request)
- panel in ABS

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Size (single)	CT	2 pipes				4 pipes			
		2CT031	2CT049	3CT065	3CT075	2CT031	2CT049	3CT065	3CT075
Nominal airflow ⁽⁰⁾	m ³ /h	580	750	800	950	580	750	800	950
Total cooling capacity ⁽¹⁾	kW	3,10	4,92	6,57	7,55	3,10	4,92	5,33	6,05
Sensible cooling capacity ⁽¹⁾	kW	1,95	3,23	4,22	4,84	1,95	3,23	3,43	3,88
Heating capacity ⁽²⁾	kW	3,79	5,99	7,33	8,53	-	-	-	-
Heating capacity ⁽³⁾	kW	6,40	10,07	12,23	14,22	5,27	6,23	6,54	7,27
Sound Power Level Lw ⁽⁴⁾	dB(A)	48,0	56,0	58,0	61,0	48,0	56,0	58,0	61,0
Sound Pressure Level Lp ⁽⁴⁾	dB(A)	39,0	47,0	49,0	52,0	39,0	47,0	49,0	52,0

CT-EC	2 pipes		4 pipes	
	2CT049	3CT075	2CT049	3CT075
m ³ /h	760	980	760	980
kW	4,95	7,75	4,95	6,21
kW	3,26	4,96	3,26	3,97
kW	6,05	8,76	-	-
kW	10,21	14,61	6,31	7,38
dB(A)	60,0	61,0	60,0	61,0
dB(A)	51,0	52,0	51,0	52,0

⁽⁰⁾ 2CT=2R & 2+1R / 3CT=3R & 2+1R - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

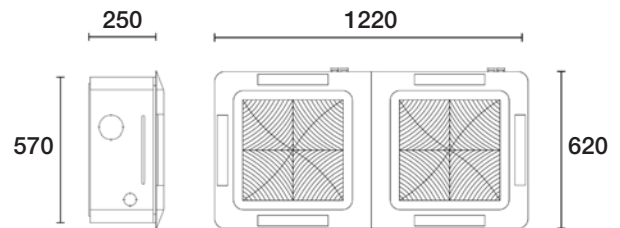
⁽⁰⁾ 2CT=2R & 2+1R / 3CT=3R & 2+1R - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-9dB(A)

CD, CD-EC

4-way double

- condensing pump, non-return valve and float included
- easily removable and washable filter
- 2 or 4 pipe systems
- coil with 2, 3 or 2+1 rows
- AC-motor (CD) and EC-motor (CD-EC)
- remote IR control or wall thermostat (on request)
- fins adjustable with remote control
- electric element and safety contactor (on request)
- fresh & adjacent room air spigot (on request)
- panel in ABS

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Size (double)	CD	2 pipes			4 pipes		
		090	102	122	090	102	122
Nominal airflow ⁽⁰⁾	m ³ /h	1100	1250	1510	1100	1250	1510
Total cooling capacity ⁽¹⁾	kW	9,01	10,24	12,17	6,90	7,60	8,69
Sensible cooling capacity ⁽¹⁾	kW	5,91	6,65	7,85	4,58	4,98	5,69
Heating capacity ⁽²⁾	kW	10,19	11,52	13,73	-	-	-
Heating capacity ⁽³⁾	kW	17,01	19,22	22,90	8,57	9,41	10,39
Sound Power Level ⁽⁴⁾	dB(A)	54,0	58,0	62,0	54,0	58,0	62,0
Sound Pressure Level ⁽⁴⁾	dB(A)	45,0	49,0	53,0	45,0	49,0	53,0

CD-EC	2 pipes		4 pipes	
	126	126	126	126
m ³ /h	1620	1620	1620	1620
kW	12,48	9,12	12,48	9,12
kW	8,07	5,99	8,07	5,99
kW	14,34	-	14,34	-
kW	23,97	10,93	23,97	10,93
dB(A)	61,0	61,0	61,0	61,0
dB(A)	52,0	52,0	52,0	52,0

⁽⁰⁾ CD=3R & 2+1R - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

⁽⁰⁾ CD=3R & 2+1R - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-9dB(A)

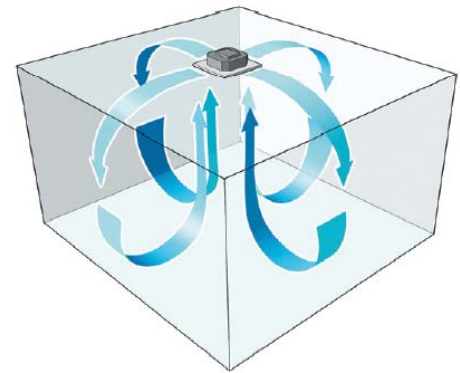
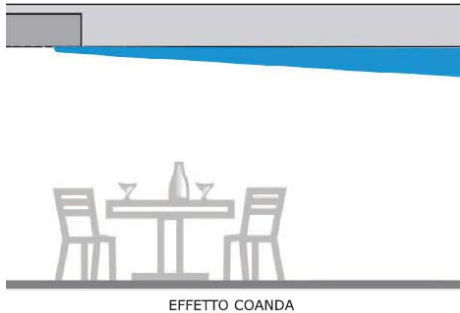
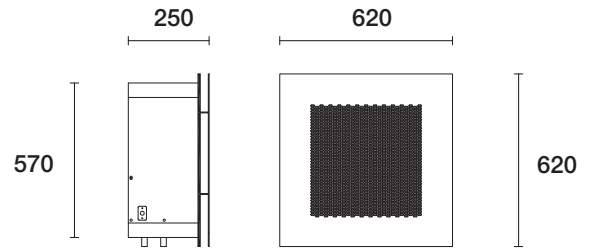
CASSETTES

CC, CC-EC

4-way coanda

- condensing pump, non-return valve and float included
- easily removable and washable filter
- 2 or 4 pipe systems
- coil with 2, 3 or 2+1 rows
- AC-motor (CC) and EC-motor (CC-EC)
- remote IR control or wall thermostat (on request)
- electric element and safety contactor (on request)
- fresh & adjacent room air spigot (on request)
- panel made of coated galvanized steel

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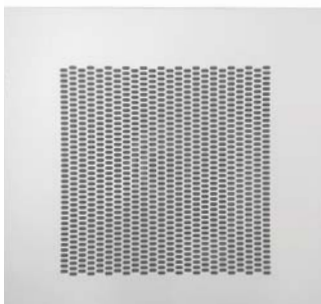


Size (single)	CC	2 pipes				4 pipes			
		2CC031	2CC049	3CC065	3CT075	2CC031	2CC049	3CC065	3CC075
Nominal airflow ⁽⁰⁾	m ³ /h	525	675	720	855	525	675	720	855
Total cooling capacity ⁽¹⁾	kW	2,90	4,55	6,01	6,97	2,90	4,55	4,98	5,63
Sensible cooling capacity ⁽¹⁾	kW	1,83	2,98	3,87	4,44	1,83	2,98	3,18	3,58
Heating capacity ⁽²⁾	kW	3,52	5,51	6,67	7,77	-	-	-	-
Heating capacity ⁽³⁾	kW	5,93	9,24	11,12	12,95	4,91	5,78	6,07	6,77
Sound Power Level Lw ⁽⁴⁾	dB(A)	48,4	56,4	58,5	61,5	48,4	56,4	58,5	61,5
Sound Pressure Level Lp ⁽⁴⁾	dB(A)	39,4	47,4	49,5	52,5	39,4	47,4	49,5	52,5

CC-EC		2 pipes		4 pipes	
		2CC049	3CC075	2CC049	3CC075
	m ³ /h	650	800	650	800
	kW	4,40	6,57	4,40	5,33
	kW	2,90	4,22	2,90	3,43
	kW	5,34	7,33	-	-
	kW	8,94	12,25	5,74	6,54
	dB(A)	55,5	60,5	55,5	58,5
	dB(A)	46,5	51,5	46,5	51,5

⁽⁰⁾ 2CC=2R & 2+1R / 3CC=3R & 2+1R - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

⁽⁰⁾ 2CC=2R & 2+1R / 3CC=3R & 2+1R - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-9dB(A)

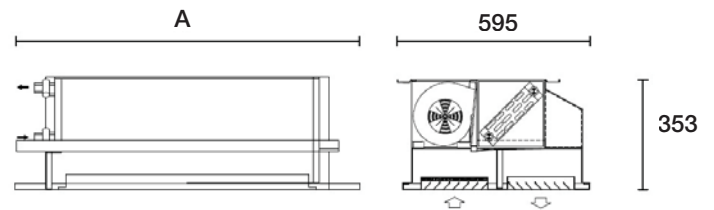


CASSETTES

CS

single 2-way

- easily removable and washable filter
- 2 or 4 pipe systems
- coil with 3 or 2+1 rows
- AC-motor
- fresh air spigot (on request)



Size	CS	30	35	40	50
Nominal airflow ⁽⁰⁾	m ³ /h	430	470	770	850
Total cooling capacity ⁽¹⁾	kW	2,84	3,04	4,66	5,07
Sensible cooling capacity ⁽¹⁾	kW	1,86	2,00	3,10	3,34
Heating capacity ⁽²⁾	kW	3,43	3,70	5,78	6,29
Heating capacity ⁽³⁾	kW	5,77	6,22	9,79	10,59
Sound Power Level Lw ⁽⁴⁾	dB(A)	52,8	53,2	55,6	56,8
Sound pressure Level Lp ⁽⁴⁾	dB(A)	43,8	44,2	46,6	48,8



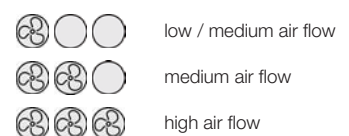
⁽⁰⁾ 3R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

DECORATIVE UNITS



Bini Clima decorative units with their unique design are the optimal solution for room installation in hotels, offices, hospitals, school etc.

Newest technologies, flexibility for special requirements, **wide performance range, effective control system** to **lower energy consumption, low noise**, clean air (air filtration), effective **air exchange, design**, production **quality** and **long lasting lifetime** are the main advantages.



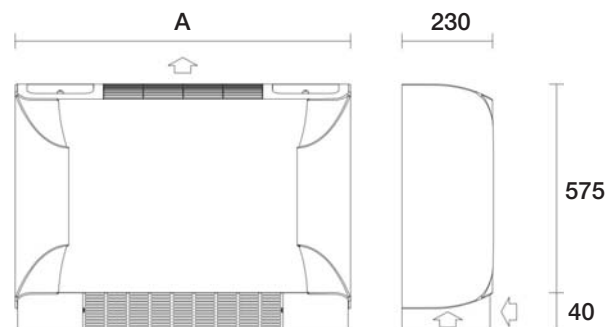
DECORATIVE UNITS

FB



vertical or horizontal

- FB vertical - bottom intake and vertical discharge with ABS-grille
- FBH horizontal - rear intake and frontal discharge with ABS-grille
- easily removable G2 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3 or 3+1 rows
- drain pan insulated 5 mm
- AC-motor



Size	FB	02	03	04	06
Nominal airflow ⁽⁰⁾	m ³ /h	370	505	700	995
Total cooling capacity ⁽¹⁾	kW	2,46	3,78	5,32	7,40
Sensible cooling capacity ⁽¹⁾	kW	1,74	2,48	3,43	4,76
Heating capacity ⁽²⁾	kW	3,14	4,43	6,08	8,58
Heating capacity ⁽³⁾	kW	5,31	7,44	10,16	14,33
Sound Power Level Lw ⁽⁴⁾	dB(A)	49,2	53,2	51,2	56,1
Sound pressure Level Lp ⁽⁴⁾	dB(A)	40,2	44,2	42,2	47,1
Width "A"	mm	840	1040	1240	1440

⁽⁰⁾ 3R (10T) - Maximum speed

⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C

⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling

⁽³⁾ Air: 20° C - Water in 70 / 60° C

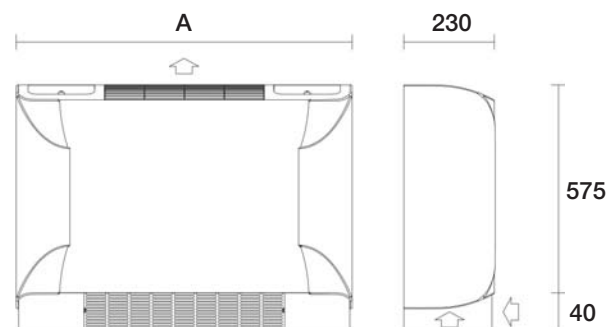
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

FE



vertical or horizontal

- FE-MV vertical - bottom intake and vertical discharge with ABS-grille
- FE-MH horizontal - rear intake and frontal discharge with ABS-grille
- easily removable G2 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3 or 3+1 rows
- drain pan insulated 5 mm
- EC-motor
- version without casing vertical FE-NV & horizontal FE-NH (on request)



Size	FE	02A	03	04	06A
Nominal airflow ⁽⁰⁾	m ³ /h	495	540	745	875
Total cooling capacity ⁽¹⁾	kW	2,16	3,12	4,55	5,36
Sensible cooling capacity ⁽¹⁾	kW	1,75	2,15	3,02	3,58
Heating capacity ⁽²⁾	kW	3,26	4,04	5,64	6,68
Heating capacity ⁽³⁾	kW	5,78	6,87	9,52	11,30
Sound Power Level Lw ⁽⁴⁾	dB(A)	56,7	57,0	54,6	57,3
Sound pressure Level Lp ⁽⁴⁾	dB(A)	47,7	48,0	45,6	48,3
Width "A"	mm	840	1040	1240	1440

⁽⁰⁾ 3R (10T) - Voltage 10 Vdc

⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C

⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling

⁽³⁾ Air: 20° C - Water in 70 / 60° C

⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

DECORATIVE UNITS

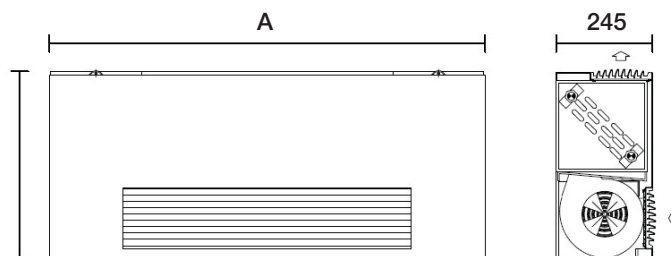
LM, UM



vertical - low & ultralow height

- frontal intake and vertical discharge (with ABS-grilles)
- filter directly mounted on the intake-grille
- 2 or 4 pipe systems
- coil with 3, 4 or 3+1 rows
- drain pan insulated 5 mm
- AC-motor
- version without casing LI & UI (on request)

LM 450
UM 405



Size	LM	02	03	04	06	08
Nominal airflow ⁽⁰⁾	m ³ /h	370	505	700	995	1360
Total cooling capacity ⁽¹⁾	kW	2,46	3,78	5,32	7,40	10,29
Sensible cooling capacity ⁽¹⁾	kW	1,74	2,48	3,43	4,76	6,57
Heating capacity ⁽²⁾	kW	3,14	4,43	6,08	8,58	11,81
Heating capacity ⁽³⁾	kW	5,31	7,44	10,16	14,33	19,72
Sound Power Level Lw ⁽⁴⁾	dB(A)	49,2	53,2	51,2	56,1	58,6
Sound pressure Level Lp ⁽⁴⁾	dB(A)	40,2	44,2	42,2	47,1	49,6
Width "A"	mm	840	1040	1240	1440	1840

Size	UM	02	03	04	06
Nominal airflow ⁽⁰⁾	m ³ /h	370	505	700	995
Total cooling capacity ⁽¹⁾	kW	2,60	3,86	5,19	7,19
Sensible cooling capacity ⁽¹⁾	kW	1,76	2,51	3,39	4,72
Heating capacity ⁽²⁾	kW	3,17	4,46	6,06	8,52
Heating capacity ⁽³⁾	kW	5,33	7,47	10,14	14,30
Sound Power Level Lw ⁽⁴⁾	dB(A)	49,2	53,2	51,2	56,1
Sound pressure Level Lp ⁽⁴⁾	dB(A)	40,2	44,2	42,2	47,1
Width "A"	mm	840	1040	1240	1440

⁽⁰⁾ 3R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

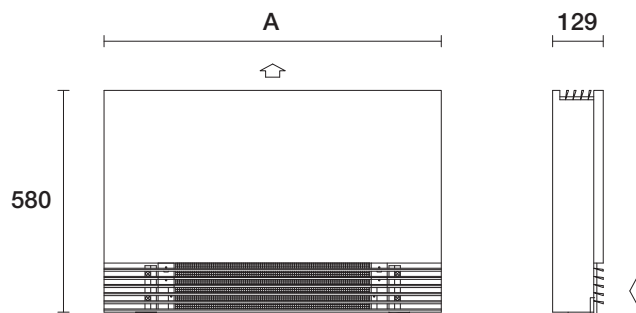
⁽⁰⁾ 4R (6T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

SLIM



vertical - slim

- frontal intake and vertical discharge (with ABS-grilles)
- filter directly mounted on the intake-grille
- 2 or 4 pipe systems
- coil with 4 or 3+1 rows
- drain pan insulated 5 mm
- AC-motor
- version without casing UI (on request)



Size	SLIM	1			
Nominal airflow ⁽⁰⁾	m ³ /h	160	320	460	580
Total cooling capacity ⁽¹⁾	kW	0,75	1,50	2,20	3,10
Sensible cooling capacity ⁽¹⁾	kW	0,61	1,25	1,90	2,60
Heating capacity ⁽²⁾	kW	0,99	2,00	2,80	4,20
Heating capacity ⁽³⁾	kW	1,55	3,10	4,60	6,30
Sound Power Level Lw ⁽⁴⁾	dB(A)	44	44	44	44
Sound pressure Level Lp ⁽⁴⁾	dB(A)	35	35	35	35
Width "A"	mm	684	894	1094	1294



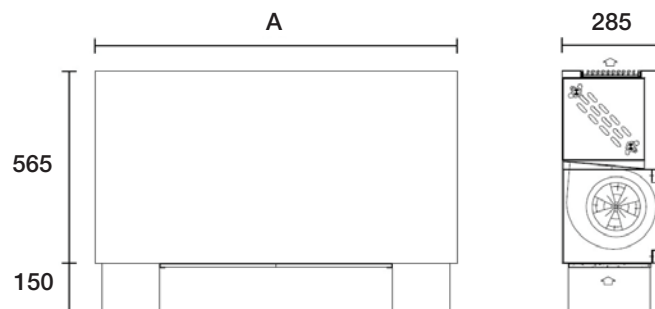
DECORATIVE UNITS

CKI, CMV



vertical

- bottom intake and vertical discharge with Alu-grille
- easily removable G3 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3, 4 or 3+1 rows
- drain pan insulated 5 mm
- AC-motor (CKI) and EC-motor (CMV)



Size	CKI	09	11	17	20	23	32
Nominal airflow ⁽⁰⁾	m ³ /h	710	990	1460	1550	2140	2625
Total cooling capacity ⁽¹⁾	kW	4,97	7,17	10,42	11,52	15,50	20,28
Sensible cooling capacity ⁽¹⁾	kW	3,29	4,72	6,79	7,51	10,05	12,98
Heating capacity ⁽²⁾	kW	6,00	8,50	12,34	13,49	18,21	23,14
Heating capacity ⁽³⁾	kW	10,04	14,23	20,70	22,58	30,48	38,62
Sound Power Level Lw ⁽⁴⁾	dB(A)	60,0	64,4	58,8	62,7	64,7	67,4
Sound pressure Level Lp ⁽⁴⁾	dB(A)	51,0	55,4	49,8	53,7	55,7	58,4
Width "A"	mm	800	1040	1240	1440	1640	2040

⁽⁰⁾ 4R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

CMV	09	11	17	20M	23	32M
m ³ /h	950	1240	1425	1720	2600	3015
kW	5,00	6,93	8,72	10,65	15,29	18,72
kW	3,51	4,78	5,81	7,05	10,12	12,24
kW	6,62	8,95	10,79	13,12	19,00	22,77
kW	11,34	15,28	18,21	22,15	32,13	38,33
dB(A)	64,1	65,2	68,5	65,1	71,5	69,2
dB(A)	55,1	56,2	59,5	56,1	62,5	60,2
mm	800	1040	1240	1440	1640	2040

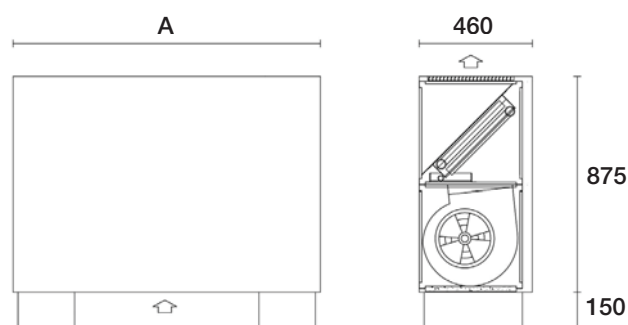
⁽⁰⁾ 4R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-9dB(A)

TIM, TIM-EC



vertical

- bottom intake and vertical discharge with Alu-grille
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor (TIM) and EC-motor (TIM-EC)



Size	TIM	20	25	30	35
Nominal airflow ⁽⁰⁾	m ³ /h	2315	3290	3700	3955
Total cooling capacity ⁽¹⁾	kW	15,68	21,46	24,72	27,07
Sensible cooling capacity ⁽¹⁾	kW	10,04	13,73	15,86	17,31
Heating capacity ⁽²⁾	kW	18,66	25,75	29,46	32,03
Heating capacity ⁽³⁾	kW	31,25	43,23	49,40	53,70
Sound Power Level Lw ⁽⁴⁾	dB(A)	69,1	69,1	71,5	72,5
Sound pressure Level Lp ⁽⁴⁾	dB(A)	60,1	60,1	62,5	63,5
Width "A"	mm	1050	1250	1450	1650

⁽⁰⁾ 4R (16T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

TIM-EC	20	25	30	35
m ³ /h	2475	3060	3705	4185
kW	15,06	18,76	22,79	26,05
kW	9,66	12,02	14,58	16,60
kW	19,34	24,01	29,09	33,07
kW	32,67	40,54	49,09	55,79
dB(A)	68,9	64,9	69,1	70,3
dB(A)	59,9	55,9	60,1	61,3
mm	1050	1250	1450	1650

⁽⁰⁾ 4R (16T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

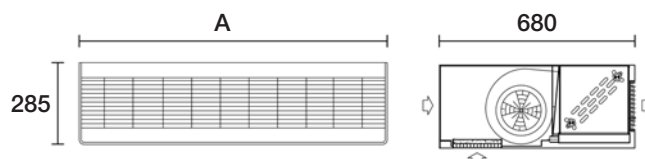
DECORATIVE UNITS

CKO, CMH



horizontal

- bottom intake or rear intake (on request) and horizontal discharge
- filter directly mounted on the Alu-intake-grille
- 2 or 4 pipe systems
- coil with 3, 4 or 3+1 rows
- drain pan insulated 5 mm
- AC-motor (CKO) and EC-motor (CMH)



Size	CKO	09	11	17	20	23	32
Nominal airflow ⁽⁰⁾	m ³ /h	710	990	1460	1550	2140	2625
Total cooling capacity ⁽¹⁾	kW	4,97	7,17	10,42	11,52	15,50	20,28
Sensible cooling capacity ⁽¹⁾	kW	3,29	4,72	6,79	7,51	10,05	12,98
Heating capacity ⁽²⁾	kW	6,00	8,50	12,34	13,49	18,21	23,14
Heating capacity ⁽³⁾	kW	10,04	14,23	20,70	22,58	30,48	38,62
Sound Power Level Lw ⁽⁴⁾	dB(A)	60,0	64,4	58,8	62,7	64,7	67,4
Sound pressure Level Lp ⁽⁴⁾	dB(A)	51,0	55,4	49,8	53,7	55,7	58,4
Width "A"	mm	800	1040	1240	1440	1640	2040

⁽⁰⁾ 4R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

CMH	09	11	17	20M	23	32M
m ³ /h	950	1240	1425	1720	2600	3015
kW	5,00	6,93	8,72	10,65	15,29	18,72
kW	3,51	4,78	5,81	7,05	10,12	12,24
kW	6,62	8,95	10,79	13,12	19,00	22,77
kW	11,34	15,28	18,21	22,15	32,13	38,33
dB(A)	64,1	65,2	68,5	65,1	71,5	69,2
dB(A)	55,1	56,2	59,5	56,1	62,5	60,2
mm	800	1040	1240	1440	1640	2040

⁽⁰⁾ 4R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-9dB(A)

TOM, TOM-EC



horizontal

- bottom intake and vertical discharge with Alu-grille
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor (TOM) and EC-motor (TOM-EC)



Size	TOM	20	25	30	35
Nominal airflow ⁽⁰⁾	m ³ /h	2315	3290	3700	3955
Total cooling capacity ⁽¹⁾	kW	15,68	21,46	24,72	27,07
Sensible cooling capacity ⁽¹⁾	kW	10,04	13,73	15,86	17,31
Heating capacity ⁽²⁾	kW	18,66	25,75	29,46	32,03
Heating capacity ⁽³⁾	kW	31,25	43,23	49,40	53,70
Sound Power Level Lw ⁽⁴⁾	dB(A)	69,1	69,1	71,5	72,5
Sound pressure Level Lp ⁽⁴⁾	dB(A)	60,1	60,1	62,5	63,5
Width "A"	mm	1050	1250	1450	1650

⁽⁰⁾ 4R (16T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

TOM-EC	20	25	30	35
m ³ /h	2475	3060	3705	4185
kW	15,06	18,76	22,79	26,05
kW	9,66	12,02	14,58	16,60
kW	19,34	24,01	29,09	33,07
kW	32,67	40,54	49,09	55,79
dB(A)	68,9	64,9	69,1	70,3
dB(A)	59,9	55,9	60,1	61,3
mm	1050	1250	1450	1650

⁽⁰⁾ 4R (16T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

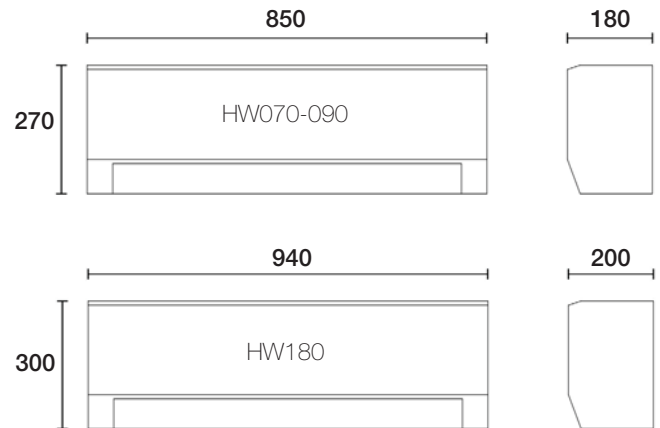
SPECIAL UNITS

HW



High Wall

- 3 speed fan with included IR remote control
- 2 pipe systems
- coil with 2 rows
- signalling LED
- removable, regenerable and washable filter
- auxiliary external or recessed drain pan (on request)
- 2 or 3 way + bypass valves



Size	HW	070	090	180
Nominal airflow ⁽⁰⁾	m ³ /h	360	560	850
Total cooling capacity ⁽¹⁾	kW	2,19	3,31	4,94
Sensible cooling capacity ⁽¹⁾	kW	1,47	2,15	3,30
Heating capacity 2R ⁽²⁾	kW	2,75	4,10	6,25
Heating capacity 2R ⁽³⁾	kW	4,67	6,90	10,59
Sound Power Level Lw ⁽⁴⁾	dB(A)	48,0	51,0	58,0
Sound pressure Level Lp ⁽⁴⁾	dB(A)	39,0	42,0	49,0

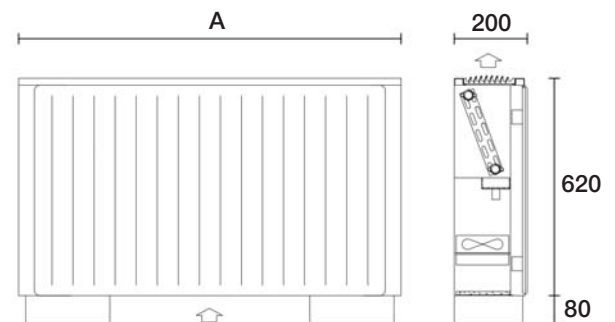
⁽⁰⁾ 2R - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

BR



Fan coil radiator

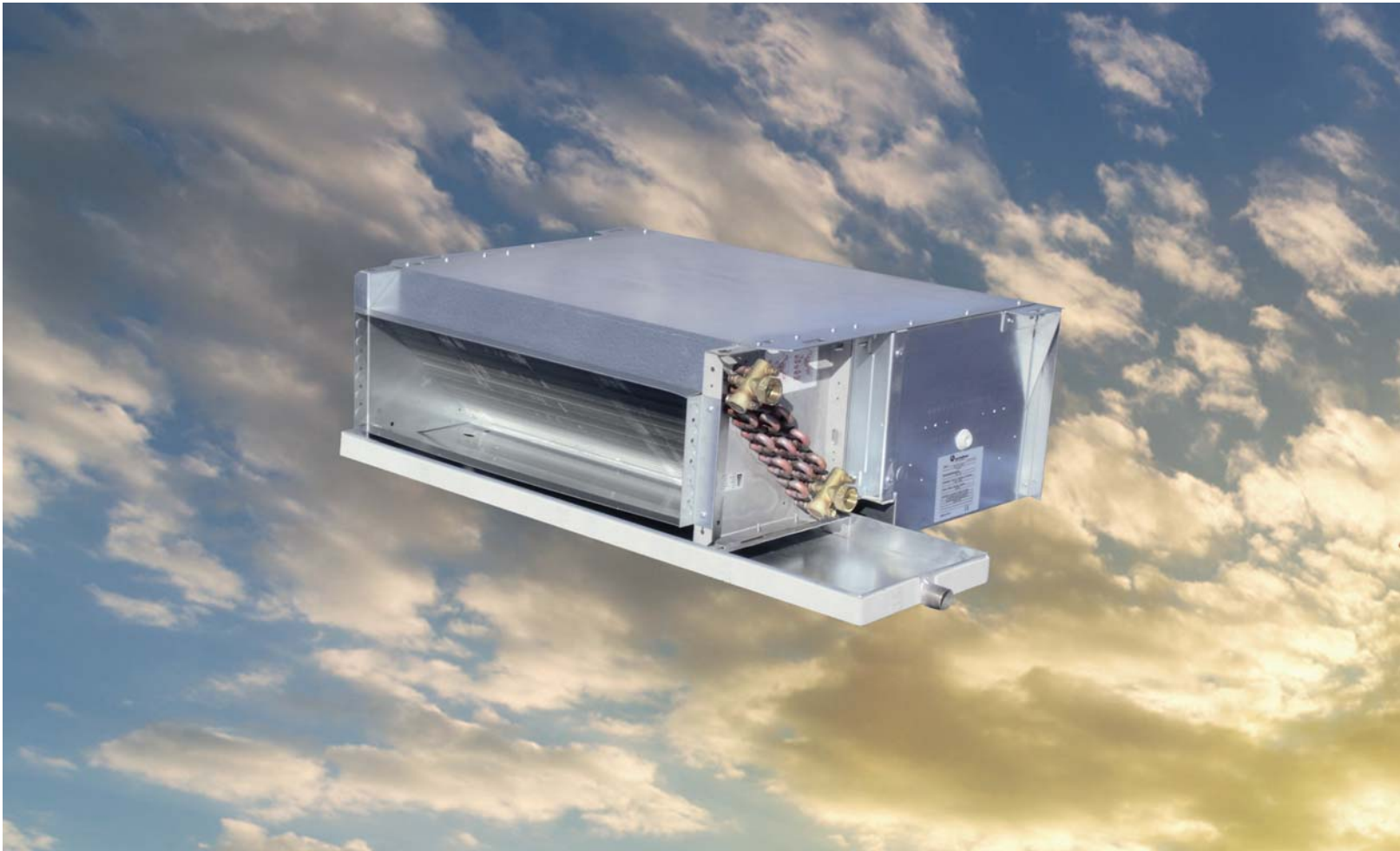
- bottom intake and vertical discharge with Alu-grille
- 3 speed fan
- 2 pipe systems
- coil with 2 rows
- easily removable filter
- drain pan insulated 5 mm
- 2 or 3 way + bypass valves



Size	BR	03
Nominal airflow ⁽⁰⁾	m ³ /h	500
Total cooling capacity ⁽¹⁾	kW	3,14
Sensible cooling capacity ⁽¹⁾	kW	2,04
Heating capacity ⁽²⁾	kW	3,85
Heating capacity ⁽³⁾	kW	0,80
Sound Power Level Lw ⁽⁴⁾	dB(A)	49,4
Sound pressure Level Lp ⁽⁴⁾	dB(A)	40,4
Width "A"	mm	1090

⁽⁰⁾ 2R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C - without ventilation
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-9dB(A)

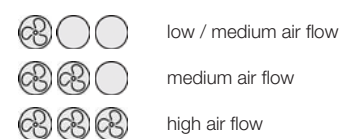
DUCTED UNITS



Bini Clima ducted units are the optimal solution for **limited space** mainly used for **installation in the false ceiling**.

The **design** of the units and the **optimally selected fans** guarantee **quiet operation** even at high external static pressure.

The units can be vertical or horizontal.



DUCTED UNITS

FOH, FOH-EC



horizontal

- rear or bottom intake (on request)
- horizontal discharge
- easily removable G2 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3 or 3+1 rows
- extended drain pan insulated 5 mm
- AC-motor (FOH) and EC-motor (FOH-EC)
- vertical version FIH (AC) & FIH-EC (EC)

FOH 50 Pa
FOH-EC 90 Pa



Size (data - ESP 0 Pa)	FOH	025	035	050	070	090
Nominal airflow ⁽⁰⁾	m ³ /h	450	505	900	1160	1360
Total cooling capacity ⁽¹⁾	kW	2,89	3,78	6,55	8,64	10,29
Sensible cooling capacity ⁽¹⁾	kW	2,02	2,48	4,20	5,58	6,57
Heating capacity ⁽²⁾	kW	3,68	4,43	7,62	10,04	11,81
Heating capacity ⁽³⁾	kW	6,25	7,44	12,73	16,79	19,72
Sound Power Level Lw ⁽⁴⁾	dB(A)	54,0	53,2	56,8	58,6	58,6
Sound pressure Level Lp ⁽⁴⁾	dB(A)	36,0	35,2	38,6	40,6	40,6
Width "A"	mm	700	900	1100	1500	1700

FOH-EC	025	035	050	070	090
m ³ /h	530	570	785	1065	1415
kW	2,32	3,26	4,74	6,44	8,62
kW	1,84	2,25	3,16	4,34	5,63
kW	3,21	4,23	5,88	8,08	10,57
kW	5,62	7,19	9,91	13,67	17,84
dB(A)	58,4	58,9	56,7	60,7	61,8
dB(A)	40,4	40,9	38,7	42,7	43,8
mm	700	900	1100	1500	1700

⁽⁰⁾ 3R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-18dB(A)

⁽⁰⁾ 3R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-18dB(A)

FK



horizontal

- rear or bottom intake (on request)
- horizontal discharge
- easily removable G2 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3 or 3+1 rows
- extended drain pan insulated 5 mm
- AC-motor

FK 120 Pa



Size (data - ESP 0 Pa)	FK	600	700
Nominal airflow ⁽⁰⁾	m ³ /h	1270	1460
Total cooling capacity ⁽¹⁾	kW	8,91	10,30
Sensible cooling capacity ⁽¹⁾	kW	5,72	6,63
Heating capacity ⁽²⁾	kW	10,48	12,14
Heating capacity ⁽³⁾	kW	17,59	20,35
Sound Power Level Lw ⁽⁴⁾	dB(A)	69,1	69,3
Sound pressure Level Lp ⁽⁴⁾	dB(A)	51,1	51,3
Width "A"	mm	1300	1500

⁽⁰⁾ 3R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-18dB(A)

DUCTED UNITS

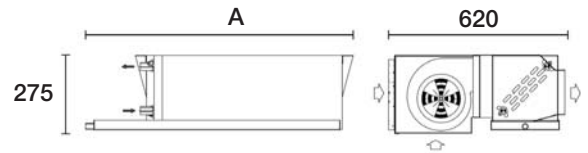
CKH, CEH



horizontal

- bottom or rear intake (on request)
- horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 3, 4 or 3+1 rows
- extended drain pan insulated 5 mm
- AC-motor (CKH) and EC-motor (CEH)
- vertical version CKV (AC) & CEV (EC)

**CKH 150 Pa
CEH 120 Pa**



Size (data - ESP 0 Pa)	CKH	09	11	17	20	23	32
Nominal airflow ⁽⁰⁾	m ³ /h	830	990	1680	1850	2490	2825
Total cooling capacity ⁽¹⁾	kW	5,59	7,17	11,55	13,24	17,38	21,48
Sensible cooling capacity ⁽¹⁾	kW	3,68	4,72	7,54	8,59	12,23	13,75
Heating capacity ⁽²⁾	kW	6,82	8,50	13,83	15,63	20,63	24,62
Heating capacity ⁽³⁾	kW	11,47	14,23	23,22	26,17	34,58	41,11
Sound Power Level Lw ⁽⁴⁾	dB(A)	63,3	64,4	66,9	66,7	68,1	69,1
Sound pressure Level Lp ⁽⁴⁾	dB(A)	45,3	46,4	48,9	48,7	50,1	51,1
Width "A"	mm	700	900	1100	1300	1500	1900

CEH	09	11	17	20M	23	32M
m ³ /h	948	1238	1422	1718	2595	3012
kW	5,03	6,91	8,71	10,67	15,33	18,35
kW	3,51	4,77	5,80	7,05	10,12	12,14
kW	6,60	8,96	10,77	13,11	18,99	22,60
kW	11,31	15,26	18,17	22,12	32,07	38,15
dB(A)	64,9	66,0	68,9	63,5	71,3	69,0
dB(A)	46,9	48,0	50,9	45,5	53,3	51,0
mm	700	900	1100	1300	1500	1900

⁽⁰⁾ 4R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency - Lp=Lw-18dB(A)

⁽⁰⁾ 4R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-18dB(A)

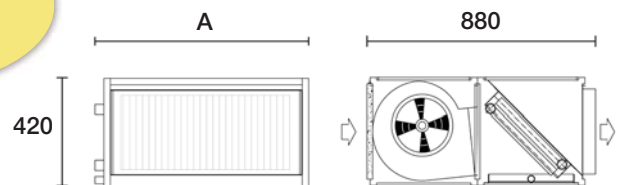
TO-EC



horizontal

- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- EC-motor

TO-EC 200 Pa



Size (data - ESP 0 Pa)	TO-EC	20	25	30	35	50	60
Nominal airflow ⁽⁰⁾	m ³ /h	2500	3060	3745	4180	5225	6870
Total cooling capacity ⁽¹⁾	kW	15,14	18,76	22,98	26,01	31,86	40,12
Sensible cooling capacity ⁽¹⁾	kW	9,74	12,05	14,68	16,59	20,30	25,66
Heating capacity ⁽²⁾	kW	19,49	24,00	29,31	33,01	40,63	51,88
Heating capacity ⁽³⁾	kW	32,94	40,54	49,52	55,66	68,57	87,74
Sound Power Level Lw ⁽⁴⁾	dB(A)	68,9	64,9	69,1	70,3	69,9	74,6
Sound pressure Level Lp ⁽⁴⁾	dB(A)	50,9	46,9	51,1	52,3	51,9	56,6
Width "A"	mm	1000	1200	1400	1600	1800	2000

⁽⁰⁾ 4R (16T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-18dB(A)

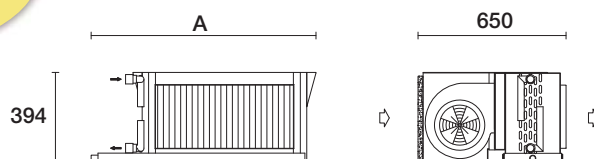
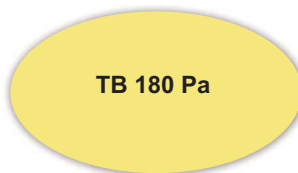
DUCTED UNITS

TB



vertical

- bottom intake and vertical discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- EC-motor



Size (data - ESP 0 Pa)	TB	10	11	22	23	31	32
Nominal airflow ⁽⁰⁾	m ³ /h	1530	1720	2990	3300	4390	4880
Total cooling capacity ⁽¹⁾	kW	10,97	12,02	21,88	23,56	31,50	33,96
Sensible cooling capacity ⁽¹⁾	kW	7,14	7,77	14,08	15,15	20,15	21,82
Heating capacity ⁽²⁾	kW	12,96	14,26	25,52	27,69	36,85	40,14
Heating capacity ⁽³⁾	kW	21,72	23,94	42,68	46,36	61,67	67,29
Sound Power Level Lw ⁽⁴⁾	dB(A)	69,0	68,7	72,2	72,1	73,5	73,3
Sound pressure Level Lp ⁽⁴⁾	dB(A)	51,0	50,7	54,2	54,1	55,5	55,3
Width "A"	mm	980	980	1580	1580	1980	1980

⁽⁰⁾ 4R (16T) - Voltage 10 Vdc

⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C

⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling

⁽³⁾ Air: 20° C - Water in 70 / 60° C

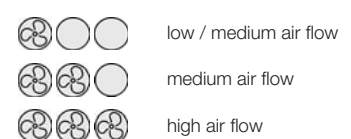
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-18dB(A)

DOUBLE SKIN SELF-SUPPORTING UNITS



Bini Cima double skin self-supporting units are the optimal solution for **limited space**, mainly used for **installation in the false ceiling**.

Thanks to the **double skin construction** (23 mm soundabsorbing rock wool insulation with 20 kg/m³) the unit can handle **high static pressure drops** with reduced noise values.



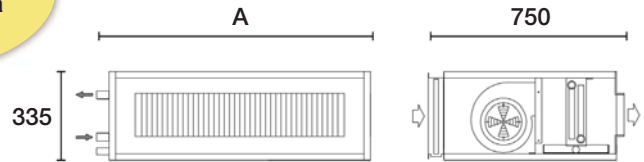
DOUBLE SKIN SELF-SUPPORTING UNITS

FH-DS, FH-DS-EC



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G2 (MERV 2-4) filter
- 2 or 4 pipe systems
- coil with 3 or 3+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor (FH-DS) and EC-motor (FH-DS-EC)

FH-DS 50 Pa
FH-DS-EC 90 Pa



Size (data - ESP 0 Pa)	FH-DS	025	035	050	070	090
Nominal airflow ⁽⁰⁾	m ³ /h	450	505	900	1160	1360
Total cooling capacity ⁽¹⁾	kW	2,89	3,78	6,55	5,64	10,29
Sensible cooling capacity ⁽¹⁾	kW	2,02	2,48	4,20	5,58	6,57
Heating capacity ⁽²⁾	kW	3,68	4,43	7,62	10,04	11,81
Heating capacity ⁽³⁾	kW	6,25	7,44	12,73	16,79	19,72
Sound Power Level Lw ⁽⁴⁾	dB(A)	42,4	44,7	44,1	48,4	47,9
Width "A"	mm	600	800	1000	1400	1600

FH-DS-EC	025	035	050	070	090
m ³ /h	530	570	785	1065	1415
kW	2,32	3,26	4,74	6,44	8,62
kW	1,84	2,25	3,16	4,34	5,63
kW	3,21	4,23	5,88	8,08	10,57
kW	5,62	7,19	9,91	13,78	17,84
dB(A)	49,9	50,4	48,5	51,9	52,8
mm	600	800	1000	1400	1600

⁽⁰⁾ 3R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

⁽⁰⁾ 3R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency

CK-DS, CE-DS



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 3, 4 or 3+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor (CK-DS) and EC-motor (CE-DS)

CK-DS 150 Pa
CE-DS 120 Pa



Size (data - ESP 0 Pa)	CK-DS	09	11	17	20	23	32
Nominal airflow ⁽⁰⁾	m ³ /h	830	990	1680	1850	2490	2825
Total cooling capacity ⁽¹⁾	kW	5,59	7,17	11,55	13,24	17,38	21,48
Sensible cooling capacity ⁽¹⁾	kW	3,68	4,72	7,54	8,59	12,23	13,75
Heating capacity ⁽²⁾	kW	6,82	8,50	13,83	15,63	20,63	24,62
Heating capacity ⁽³⁾	kW	11,47	14,23	23,22	26,17	34,58	41,11
Sound Power Level Lw ⁽⁴⁾	dB(A)	46,0	46,2	50,4	50,7	53,2	54,7
Width "A"	mm	600	800	1000	1200	1400	1800

CE-DS	09	11	17	20M	23	32M
m ³ /h	948	1238	1422	1718	2595	3012
kW	5,03	6,91	8,71	10,67	15,33	18,35
kW	3,51	4,77	5,80	7,05	10,12	12,14
kW	6,60	8,96	10,77	13,11	18,99	22,60
kW	11,31	15,26	18,17	22,12	32,07	38,15
dB(A)	52,8	53,7	56,1	53,3	58,1	54,7
mm	600	800	1000	1200	1400	1800

⁽⁰⁾ 4R (10T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

⁽⁰⁾ 4R (10T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

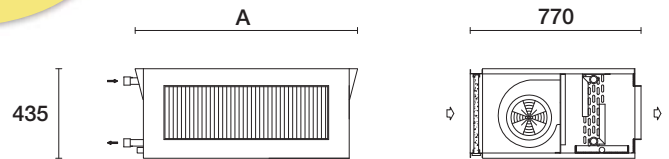
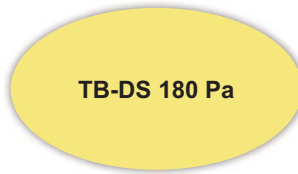
DOUBLE SKIN SELF-SUPPORTING UNITS

TB-DS



horizontal

- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- extended drain pan insulated 5 mm
- AC-motor



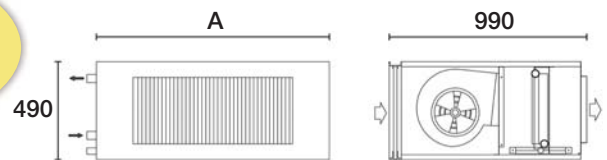
Size (data - ESP 0 Pa)	TB-DS	10	11	22	23	31	32
Nominal airflow ⁽⁰⁾	m ³ /h	1530	1720	2990	3300	4390	4880
Total cooling capacity ⁽¹⁾	kW	10,97	12,02	21,88	23,56	31,50	33,96
Sensible cooling capacity ⁽¹⁾	kW	7,14	7,77	14,08	15,15	20,15	21,82
Heating capacity ⁽²⁾	kW	12,96	14,26	25,52	27,69	36,85	40,14
Heating capacity ⁽³⁾	kW	21,72	23,94	42,68	46,36	61,67	67,29
Sound Power Level Lw ⁽⁴⁾	dB(A)	61,6	61,3	64,5	64,3	65,6	65,3
Width "A"	mm	935	935	1535	1535	1935	1935

⁽⁰⁾ 4R (14T) - Maximum speed
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: Octave band center frequency - Lp=Lw-18dB(A)

TO-DS-EC



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- EC-motor



Size (data - 0 Pa)	TO-DS-EC	20	25	30	35	50	60
Nominal airflow ⁽⁰⁾	m ³ /h	2500	3060	3745	4180	5225	6870
Total cooling capacity ⁽¹⁾	kW	15,14	18,76	22,98	26,01	31,86	40,12
Sensible cooling capacity ⁽¹⁾	kW	9,74	12,05	14,68	16,59	20,30	25,66
Heating capacity ⁽²⁾	kW	19,49	24,00	29,31	33,01	40,63	51,88
Heating capacity ⁽³⁾	kW	32,94	40,54	49,52	55,66	68,57	87,74
Sound Power Level Lw ⁽⁴⁾	dB(A)	58,9	55,5	59,1	60,1	59,8	63,8
Width "A"	mm	1000	1200	1400	1600	1800	2000

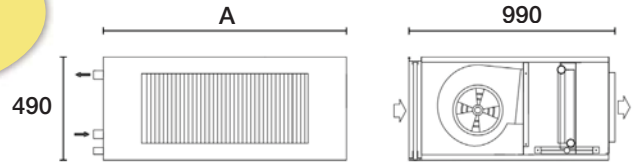
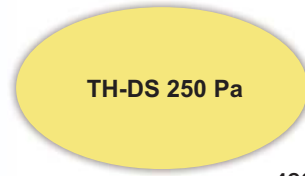
⁽⁰⁾ 4R (16T) - Voltage 10 Vdc
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

DOUBLE SKIN SELF-SUPPORTING UNITS

TH-DS



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 4, 5, 4+1 or 5+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- AC-motor
- single skin version TH (on request)



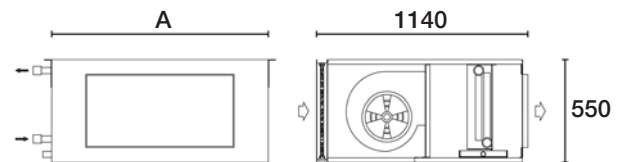
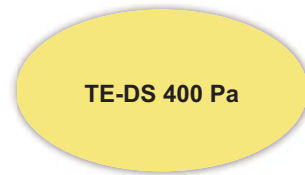
Size	(data - ESP 120 Pa)	TH-DS	20	25	30	35	50	60
Nominal airflow ⁽⁰⁾	m ³ /h		2660	3195	3500	3750	4800	6190
Total cooling capacity ⁽¹⁾	kW		18,71	22,63	25,55	27,83	34,83	43,18
Sensible cooling capacity ⁽¹⁾	kW		12,03	14,60	16,42	17,92	22,40	27,79
Heating capacity ⁽²⁾	kW		22,06	26,68	29,77	32,34	40,67	51,00
Heating capacity ⁽³⁾	kW		36,98	44,68	49,79	54,08	68,02	85,45
Sound power Level Lw ⁽⁴⁾	dB(A)		56,7	59,3	62,5	60,7	59,7	70,2
Width "A"	mm		1000	1200	1400	1600	1800	2000

⁽⁰⁾ 4R (16T) - Maximum speed - ESP 120 Pa
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

TE-DS



- 25 mm standard panel with rock wool (20 kg/m³)
- rear intake and horizontal discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- coil with 5, 6, 5+1 or 6+1 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- EC-motor



Size	(data - ESP 200 Pa)	TE-DS	20	30	60
Nominal airflow ⁽⁰⁾	m ³ /h		2826	4645	7647
Total cooling capacity ⁽¹⁾	kW				
Sensible cooling capacity ⁽¹⁾	kW				
Heating capacity ⁽²⁾	kW				
Heating capacity ⁽³⁾	kW		38,13	62,07	101,35
Sound power Level Lw ⁽⁴⁾	dB(A)		75,0	78,4	79,5
Width "A"	mm		1000	1400	2000

⁽⁰⁾ 5R (18T) - Voltage 10 Vdc - ESP 200 Pa
⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C
⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling
⁽³⁾ Air: 20° C - Water in 70 / 60° C
⁽⁴⁾ Lw: octave band center frequency

DOUBLE SKIN AIR HANDLING UNITS



The double skin Bini Clima air handling units are an ideal solution for **civil and industrial applications**.

Designed for **maximum application flexibility**, they are suitable for indoor installation and resolve brilliantly the **fresh air** problem wherever a central air handling unit is not or cannot be installed. The use of one unit on each floor grants a **zone-specific air regulation** and **eliminate the high costs** caused by the installation of a central air handling unit.

Air flow **from 2.500 to 20.000 m³/h**, **double skin panels** with sound-absorbing insulation, **vertical** or **horizontal** version available.

DOUBLE SKIN AIR HANDLING UNITS

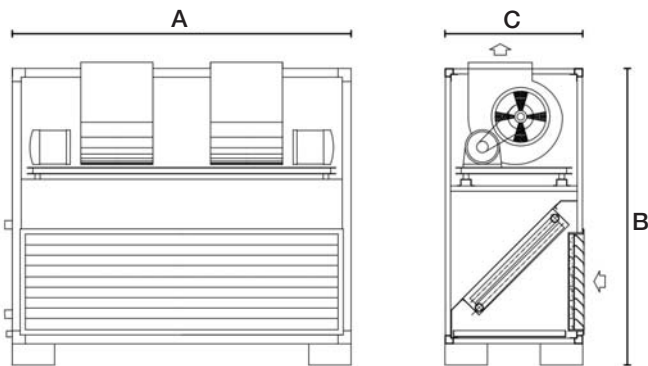
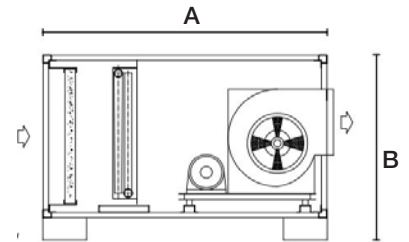
TM-DS



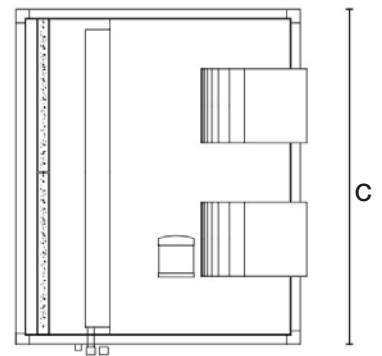
airflow up to 20.000 m³/h

- 25 mm standard panel with rock wool (20 kg/m³)
- TMH-DS - rear intake and horizontal discharge
- TMV-DS - frontal intake and vertical discharge
- easily removable G3 (MERV 5) filter
- 2 or 4 pipe systems
- 2 pipe system: coil with 4, 5 or 6 rows
- 4 pipe system: coil with 4+1, 4+2, 5+1, 5+2, 6+1 or 6+2 rows
- drain pan insulated 5 mm
- auxiliary drain pan insulated 5 mm (on request)
- 3-phase AC-motor
- supporting feet 100 mm included

**TMV-DS
TMH-DS
450 Pa**



VERTICAL VERSION



HORIZONTAL VERSION

Size	(data - ESP 200)	TM-DS	025	040	060	080	100	130	160	200
Nominal airflow ⁽⁰⁾	m ³ /h		2500	4000	6000	8000	10500	13000	16000	20000
Total cooling capacity ⁽¹⁾	kW		19,41	31,01	47,23	62,85	81,74	104,00	127,19	159,83
Sensible cooling capacity ⁽¹⁾	kW		12,86	20,45	30,82	41,16	53,76	67,54	82,91	103,59
Heating capacity ⁽²⁾	kW		22,58	35,99	54,17	72,28	94,56	118,23	145,22	181,54
Heating capacity ⁽³⁾	kW		37,78	60,19	90,47	120,79	158,11	197,37	242,53	302,96
Sound power Level Lw ⁽⁴⁾	dB(A)		75,6	77,7	74,7	82,8	83,3	82,4	82,7	82,1
TMH Width "A"	mm		1150	1350	1650	1850	1950	2050	2150	2250
TMH Height "B"	mm		600	700	850	900	950	1050	1150	1250
TMH Length "C"	mm		900	1050	1300	1550	1700	1900	2050	2250
TMV Width "A"	mm		600	700	850	1050	1100	1250	1300	1400
TMV Height "B"	mm		1250	1400	1500	1450	1550	1700	1800	2000
TMV Length "C"	mm		900	1050	1300	1550	1700	1900	2050	2250

⁽⁰⁾ 6R - Maximum speed - ESP 200 Pa

⁽¹⁾ Air: 27° C, 50 % - Water in: 7 / 12° C

⁽²⁾ Air: 20° C - Water in 50° C same water flow as cooling

⁽³⁾ Air: 20° C - Water in 70 / 60° C

⁽⁴⁾ Lw: octave band center frequency

CONTROLS AND REGULATIONS

**SERIES
B300-304**

Electronic multifunction thermostat BMS (Building Management System)



1

Communication protocol

BacNet & ModBus

2

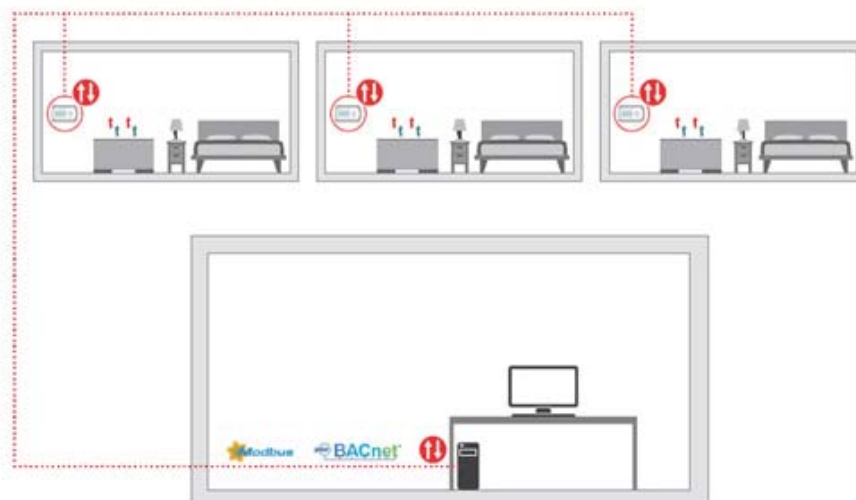


3



- **A300-304:** electronic thermostat without BMS
- suitable for 3-speed AC-motors & variable EC-motors (with signal 0...10 Vdc)
- summer / winter & set-temperature control
- regulated & continuous ventilation
- suitable for 2 or 4 pipe systems / with or without valves / with or without minimum water temperature thermostat
- temperature sensor fitted as standard & humidity sensor (on request)
- clock (on request)
- up to 5 digital outputs & 3 analog outputs
- back-lit LCD-display
- the parameters can be configured with a computer software

**USB connection for
parameter configuration
& software update**



CONTROLS AND REGULATIONS



A630 & A530 - Electronic analog thermostat unit mounted (AC-motors)

3-speed fan switch, summer/winter switch, desired room temperature control, continuous/thermostat controlled ventilation, for 2 or 4 pipes systems, with valve control (A530) or without valve control (A630), with or without minimum water temperature thermostat, with internal or remote temperature sensor.



A70 & A70D - Electronic thermostat (AC-motors)

3-speed fan switch, summer/winter switch, desired room temperature control, continuous/thermostat controlled ventilation, for 2 or 4 pipes systems, with or without valve control, with or without minimum water temperature thermostat, with internal or remote temperature sensor. A70 analog, A70D digital.



A111 - Electronic digital thermostat (EC motors)

Configurable with 0...10 Vdc for EC-motors, desired room temperature control, summer/winter switch, continuous/thermostat controlled ventilation, for 2 or 4 pipes systems, with or without valve control ON/OFF and modulating (24 Vac), with or without minimum water temperature thermostat, with internal or remote temperature sensor.



A94 - Power interface

Power supply 230Vac - controls up to 4 fancoils with 3 speeds. The signals transmitted from the thermostat respectively switch a relay which controls the wired speed of the motor (max. 3A - 250V for each motor).



TEL - IR Remote control for Cassettes & High Wall

3-speed fan switch, desired room temperature control, summer/winter switch, continuous/thermostat controlled ventilation.



EE & EH - Electrical heating element (V230/1)

Standard or high capacity heating elements from 700 to 5000 W including security thermostat with manual reset (automatic reset on request) and power contactor, wired to electric box. Dimensions from 350 to 1550 mm. Support for the parallel connection of several heating elements (on request).

CONTROLS AND REGULATIONS



Actuator V230/1

22C (ON/OFF) – NC with thermostatic wax element, (24Vac on request)
SMP28 (ON/OFF) – for 3-way globe valves DN from 1"
EMUJIC (MODULATING) – actuator 24Vac with LED signal



2 / 3-way valve + bypass

Available for DN 1/2" and DN 3/4"
Brass valve body with steel shaft, PN 16



2 / 3-way valve

Available for DN 1" and DN 1 1/2"
Brass valve body with steel shaft, PN 16



Stop valve, balancing valve, ball valve

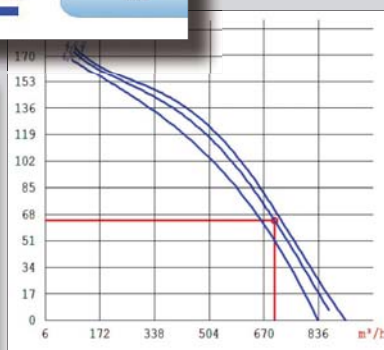
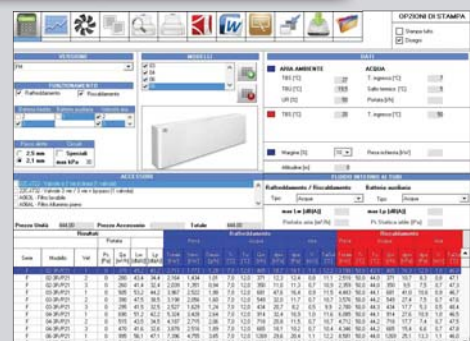
Stop valve on the water entry to manually regulate the water flow.
Balancing valve on the water exit to balance the water circuit.
Ball valve for DN from 1"



A49 - Condensate pump

Composed of pump block and detection unit, flow rate 10, 20 and 30 l/h for fancoils with low, medium and high air flow.

SOFTWARE



**Unit of measure
European &
British standard**

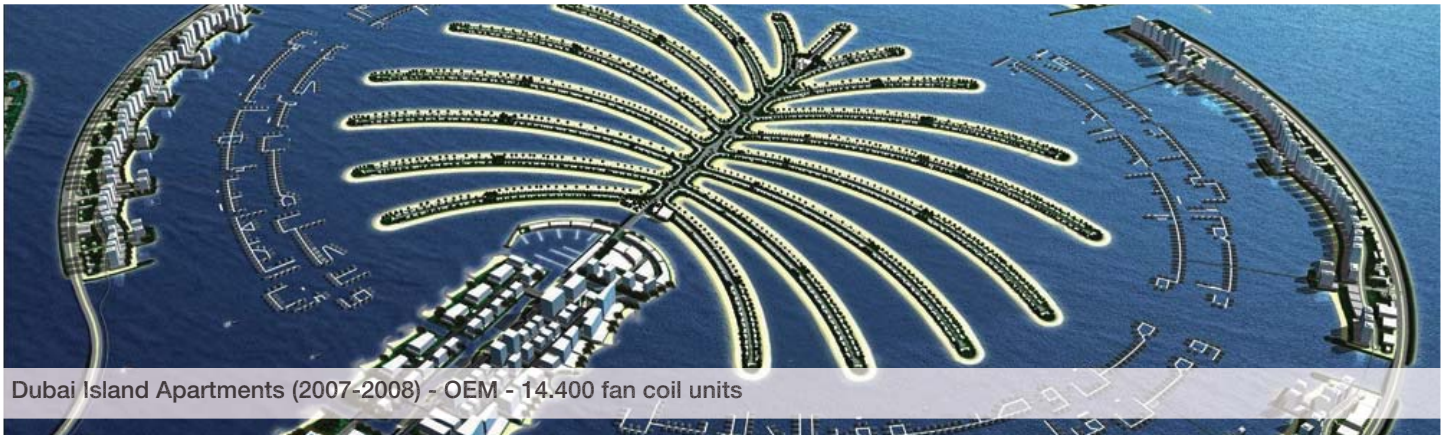
The Bini Clima FCU selection software is developed to select the proper unit for offices, retailers, installers and end users.

It is available in **7 languages**: Italian, English, French, German, Spanish, Russian and Dutch.

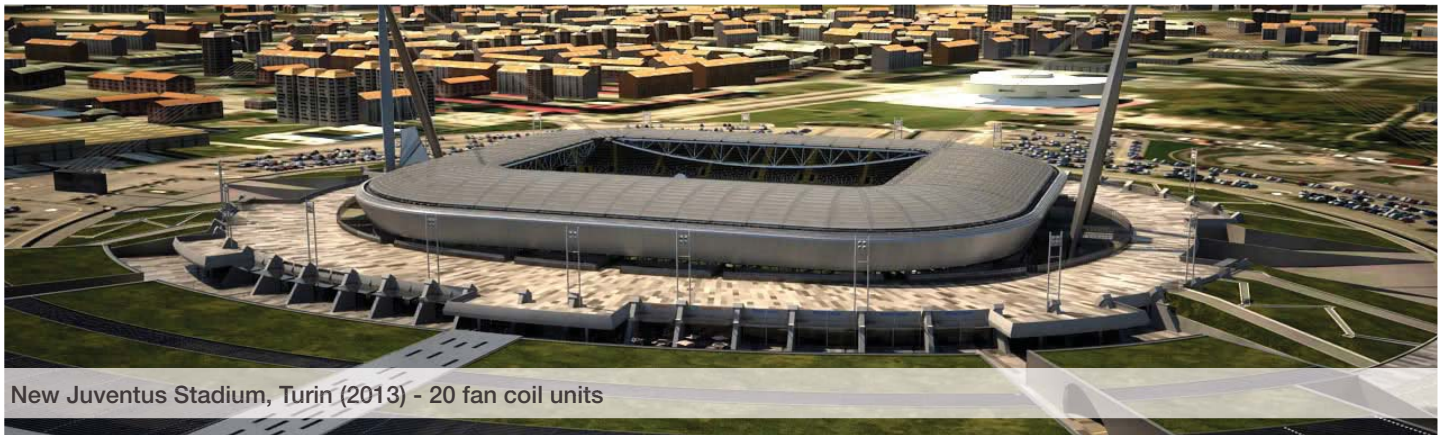
After setting the operating conditions, it is **simple to select the unit** and to print the **technical data** including **unit dimensions** as well as the **commercial offer**.

Unit and accessory prices, catalogues and **technical documentation** are integrated in the software.

REFERENCES UAE & MIDDLE EAST



REFERENCES ITALY



New Juventus Stadium, Turin (2013) - 20 fan coil units



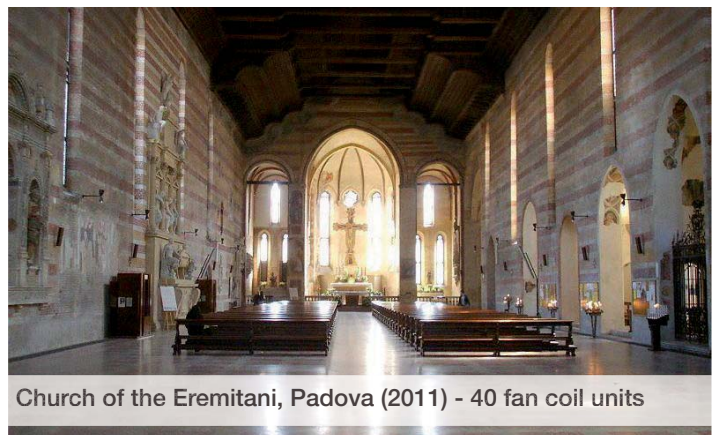
Bank of Italy Head Office, Rome (2003) - 300 fan coil units



Egyptian Museum, Turin (2012) - 25 fan coil units



UnipolSai Insurance, Turin (2011) - 38 fan coil units



Church of the Eremitani, Padova (2011) - 40 fan coil units

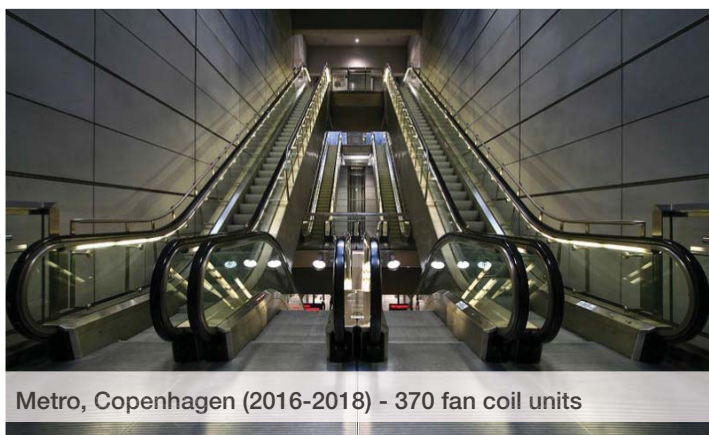
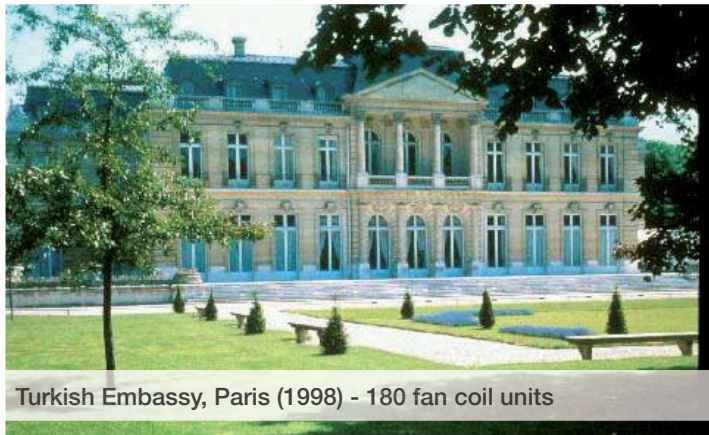


Ministry of Mercantile Marine, Rome (1998) - 200 fan coil units



Railway Station Santa Lucia, Venice (2000) - 90 fan coil units

REFERENCES EUROPE & NORTH AFRICA



REFERENCES AUSTRALIA & KUWAIT



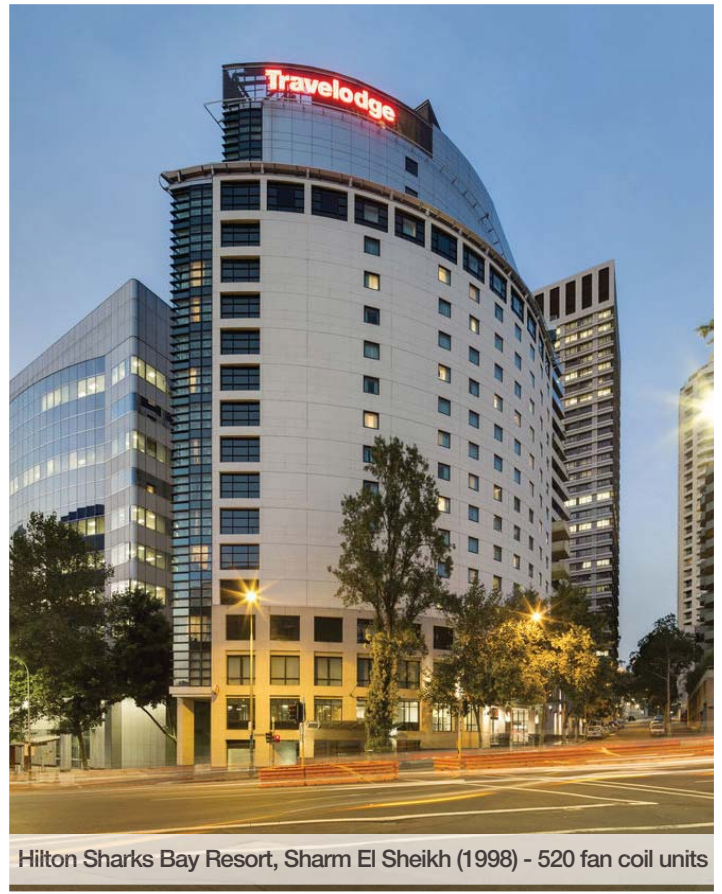
Domodedovo Airport, Moscow (2012-2014) - 1.300 fan coil Units



Gate Mall, Kuwait (2016) - 52 fan coil units



National Bank of Kuwait (2016) - 858 fan coil units



Hilton Sharks Bay Resort, Sharm El Sheikh (1998) - 520 fan coil units



Metro, Copenhagen (2016-2018) - 370 fan coil units



National Library, Alexandria, Egypt (2002) - 60 fan coil units

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