

HYDRONIC TERMINALS

Fan Coil Unit and Air Handling Unit



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No man's knowledge here can go beyond
His experience.

——— *John Locke(1632-1704)*



The terminals have always been one of the most critical elements in any hydraulic air-conditioning system. That is why CLIMAVENETA conscientiously and continuously improves its range to meet market demands.

Wide range

The Climaveneta range of hydraulic terminals comprises many types of product



Horizontal Concealed FCU



Horizontal Cabinet FCU



Vertical Concealed FCU



Vertical Cabinet FCU



Cassette Type FCU



Ceiling Type AHU



Package AHU



AHU



Fan Coil Unit



Unit features

- Structure and bed plate in hot galvanized steel for maximum resistance to rust.
- Internal insulation with closed cell expanded polyethylene sheets thick enough to limit heat dispersion and noise emissions to a minimum.
- The high efficiency, low pressure drop finned coils made from copper tubes and high exchange surface area aluminum fins are 100% tested against leaks with dried air at 2.8 MPa.
- The high useful head fan assemblies are fitted with balanced impellers to guarantee minimum noise levels.
- Electrical power and control switchboard complete with electronic air flow regulator and terminal board for connection to the mains and one of the remote control units available (optional).
- The versatility of unit together with the availability of a vast range of accessories, its compactness and low noise levels guarantees easy and flexible installation in all situations.

Coil

Standard and optional high capacity cooling coils. Field installed automatic air vents are optional for water cooling coils.

Coils are constructed of seamless copper tubes with brass headers and aluminum fins. Full depth collars, drawn in the fin stock, provide accurate control of fin spacing and completely cover the copper tubes to lengthen coil life. Tubes are expanded into the fins for a permanent primary to secondary surface bond, assuring maximum heat transfer efficiency.

The vertical position of the coil assures rapid condensate drainage to provide even airflow and full rated capacity at all conditions.



Motor

Tap wound, three-speed, permanent split capacitor motors are standard for concealed and cabinet units. Motors have sleeve bearings with oilers, inherent thermal overload protection and automatic reset. Motors are resiliently mounted to assure quiet, vibration free operation and are easily removed.





Fan

All fan wheels are forward curved, double width, double inlet, centrifugal type and are statically and dynamically balanced for smooth, quiet operation.

Split design fan casing allow quick service of fans and motors.

Heavy-gauge continuous galvanized steel rigidly supports motors, fan assembly, and fan housings as a single unit. The fan deck is self-locking to the basic chassis and is easily removed for service.



Casing and Cabinet

All units are constructed of heavy gauge steel for long life and durability.

Cabinet units and optional trim flange ceiling frames are finished with an electrostatically applied, baked-on Antique Ivory paint.



Draining Panel

The galvanized steel draining panel with copper connection is insulated on the external surface with fire rated closed cell foam.

The draining panel extends under the entire coil and coil connections. An optional galvanized steel secondary draining panel provides complete condensate drainage from valve package components.



Filter

All units have as standard a filter. The filter is easily removable through the bottom access panel. For Horizontal Concealed units a filter is supplied only with the optional air return box.



Speed Controller

A three-speed switch with off position is available for all sizes. The speed switch must be field mounted in a deep electrical box by others.

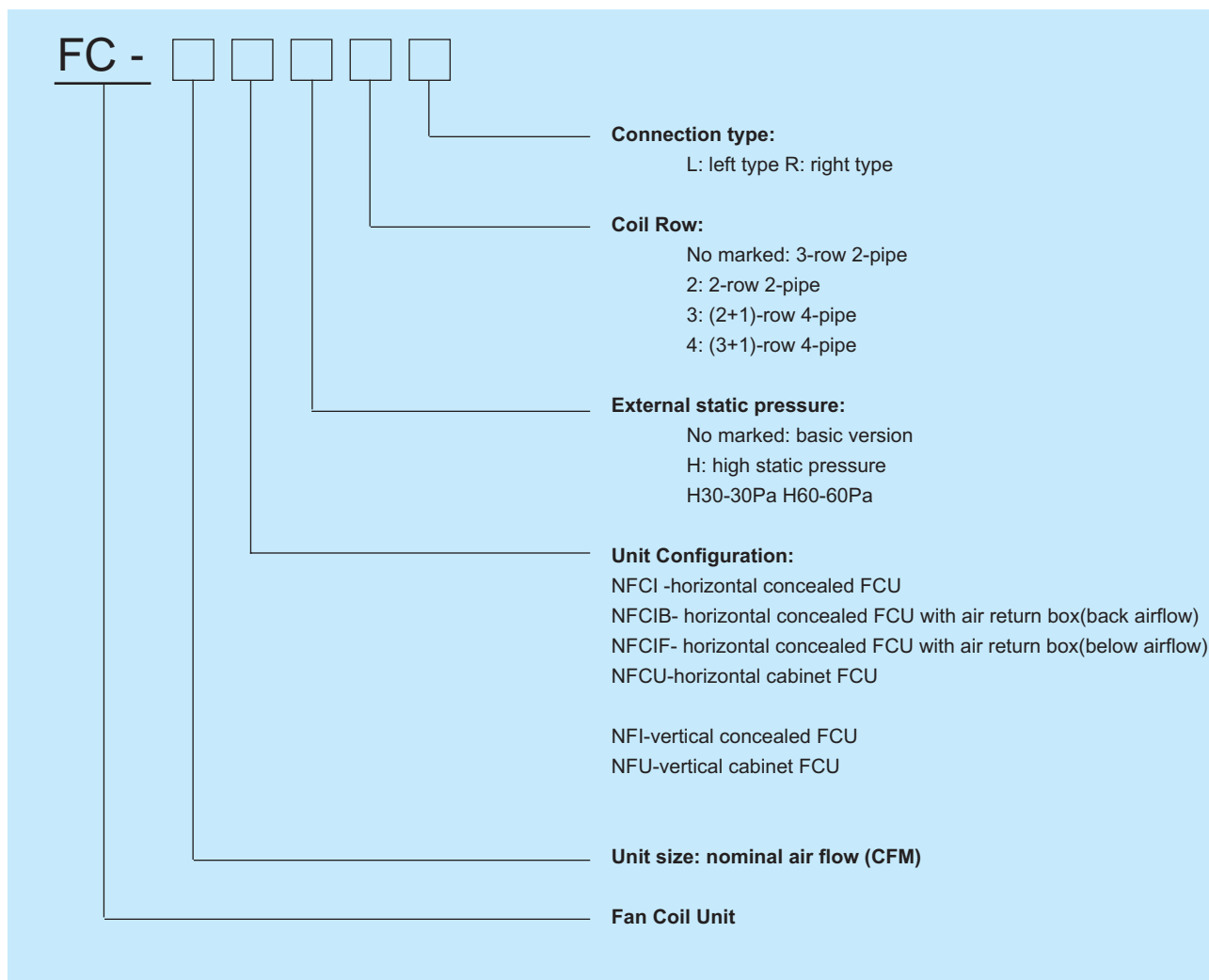


Control system

A wide variety of two- and four-pipe control systems are available with wall mounted thermostats or combination thermostat/ speed switches.



Nomenclature



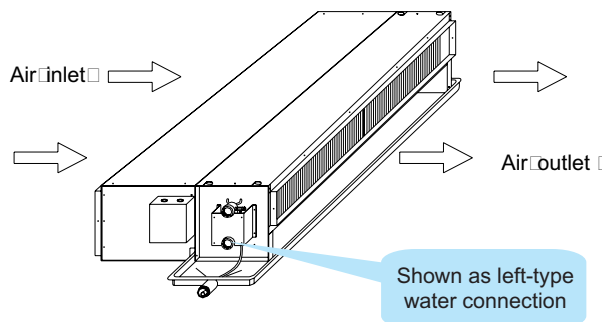
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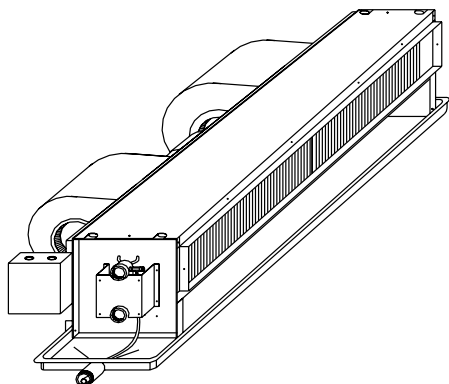
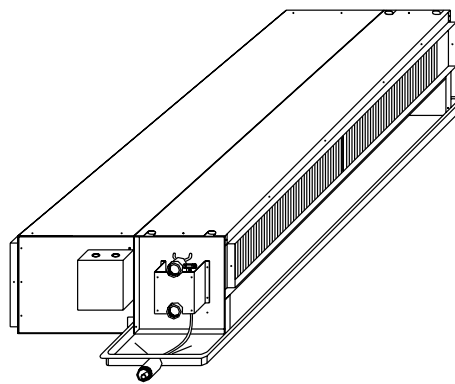
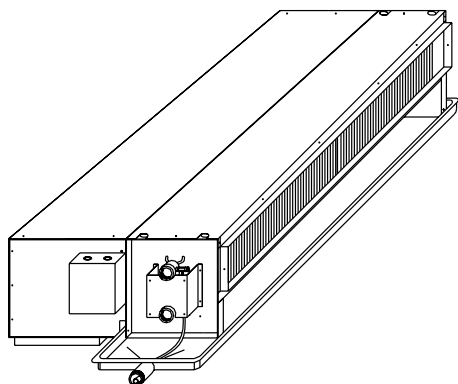
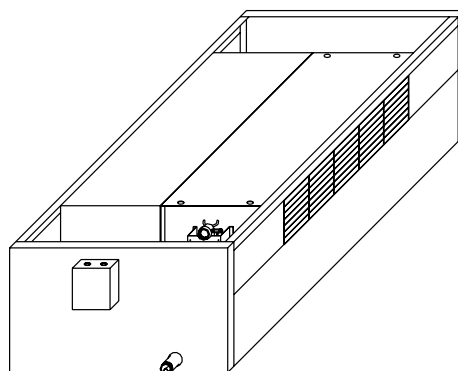
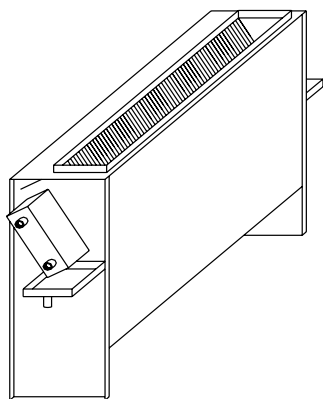
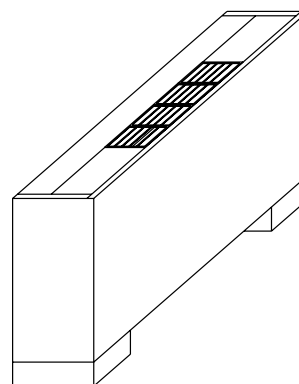
FC-200NFI2R means vertical concealed FCU with 2 rows, nominal ventilation volume 200CFM and all pipe connections on right.

FC-800NFCIBH604L means horizontal concealed FCU with 4 pipes system (3+1 rows), air return box-back air flow, nominal ventilation volume 800CFM, air outlet static pressure 60Pa and all pipe connections on left.

Choose the water connection type

Face to the air-outlet side, if the water connections are on your right-hand side, the water connection is right-type; if on your left-hand side, the water connection is left-type.



**Unit Configurations****NFCI----Horizontal Concealed FCU****NFCIB----Horizontal Concealed FCU with air return box****NFCIF----Horizontal Concealed FCU with air return box****NFCU---- Horizontal Cabinet FCU****NFI---- Vertical Concealed FCU****NFU- Vertical Cabinet FCU**



Fan Coil Unit General Data

3-row technical data (2-pipe system)

Item		FC- 200	FC- 300	FC- 400	FC- 500	FC- 600	FC- 800	FC- 1000	FC- 1200	FC- 1400	
Air Flow (m³/h)	High speed		350	530	710	870	1040	1380	1730	2040	2380
	Medium speed		260	390	530	660	780	1040	1300	1530	1790
	Low speed		180	270	360	440	520	690	870	1020	1190
Performance (3-row coil)	Cooling capacity (W)	H. S.	2410	3300	4420	5040	6210	8000	9640	11210	13250
		M. S.	2145	2937	3934	4486	5527	7120	8580	9977	11793
		L. S.	1759	2409	3227	3679	4533	5840	7037	8183	9673
	Heating capacity (W)	H. S.	3690	5370	7430	8380	10100	13250	16740	19340	23000
		M. S.	3100	4511	6241	7039	8484	11130	14062	16246	19320
		L. S.	2362	3437	4755	5363	6464	8480	10714	12378	14720
	Water flow(LPM)		6. 9	9. 5	12. 7	14. 4	17. 8	22. 9	27. 6	32. 1	37. 9
	Pressure drop(KPa)		5	12	24	30	42	15	20	36	31
Noise level dB(A)	Standard ESP(12 Pa)		35	36	40	41	43	44	46	48	49
	High ESP(30Pa)		38	39	43	46	46. 5	46	48	49	51
	High ESP(60Pa)		40	42	45	47	48	50	52	53	54
Power input (W)	Standard ESP(12 Pa)		34	36	46	67	85	112	134	170	197
	High ESP(30Pa)		42	45	63	77	93	125	154	186	223
	High ESP(60Pa)		46	65	84	100	118	174	210	250	300
PTC heating(optional)	Heating capacity (kW)		1	1	1. 5	1. 5	2	2. 5	3	3	3
Coil	Frame		high-efficiency type copper tube, with integral internal and external enhancement high quality aluminum fin								
	Water Inlet/outlet		DN20 Taper Pipe Female Thread (Rc3/4 ")								
	Drain pipe		DN20 Taper Pipe Male Thread(R3/4 ")								
	Aweather (m²)		0. 088	0. 112	0. 144	0. 16	0. 172	0. 226	0. 264	0. 312	0. 35
	Water pressure		1. 6 MPa								
Fan	Type		Double Air Inlet Centrifugal fan wheels , Forward Curved Laminae								
	Number		1	2				4			
Motor	Type		Capacitor start three-speed motor								
	Bearing		Maintenance-free high-precision bearings								
	Power supply		Single-phase 220V 50Hz								
	Number		1					2			

Note: all technical data based on

Rated condition	air temperature DB ()	air temperature WB ()	Water inlet ()	Water difference ()
Cooling mode	27	19.5	7	5
Heating mode	21		60	
Noise level	The measurement have been taken on surfaces positioned at d=1 meter distance from the unit in a standard anechoic chamber.			



2-row technical data (2-pipe system)

Item		FC- 200	FC- 300	FC- 400	FC- 500	FC- 600	FC- 800	FC- 1000	FC- 1200	FC- 1400	
Air Flow (m³/h)	High speed		410	560	760	910	1080	1480	1820	2150	2560
	Medium speed		310	420	560	710	840	1120	1430	1700	2020
	Low speed		220	300	380	500	590	790	980	1180	1410
Performance (2- row coil)	Cooling capacity (W)	H. S.	2090	2560	3670	4330	5030	6960	8230	9760	12140
		M. S.	1881	2278	3266	3940	4577	6264	7489	8882	11047
		L. S.	1568	1920	2679	3291	3823	5220	6173	7418	9226
	Heating capacity (W)	H. S.	3190	4180	6170	7200	8170	11520	14290	17000	22000
		M. S.	2712	3511	5183	6192	7026	9792	12289	14620	18920
		L. S.	2137	2801	3949	4896	5556	7718	9574	11560	14960
	Water flow(LPM)		6	7. 3	10. 5	12. 4	14. 4	19. 9	23. 6	28	34. 8
	Pressure drop(KPa)		5	12	24	30	42	15	20	36	31
Noise level dB(A)	Standard ESP(12 Pa)		35	36	40	41	43	44	46	48	50
	High ESP(30Pa)		38	39	43	46	46. 5	46	48	49	52
	High ESP(60Pa)		40	42	45	47	48	50	52	53	56
Power input (W)	Standard ESP(12 Pa)		34	36	46	67	85	112	134	170	197
	High ESP(30Pa)		42	45	63	77	93	125	154	186	223
	High ESP(60Pa)		46	65	84	100	118	174	210	250	300
PTC heating(optional)	Heating capacity (kW)		1	1	1. 5	1. 5	2	2. 5	3	3	3
Coil	Frame		high-efficiency type copper tube, with integral internal and external enhancement high quality aluminum fin								
	Water Inlet/outlet		DN20 Taper Pipe Female Thread (Rc3/4 ")								
	Drain pipe		DN20 Taper Pipe Male Thread(R3/4 ")								
	Aweather (m²)		0.088	0. 112	0. 144	0. 16	0. 172	0. 226	0. 264	0. 312	0. 35
	Water pressure		1. 6 MPa								
Fan	Type		Double Air Inlet Centrifugal fan wheels , Forward Curved Laminae								
	Number		1	2				4			
Motor	Type		Capacitor start three-speed motor								
	Bearing		Maintenance-free high-precision bearings								
	Power supply		Single-phase 220V 50Hz								
	Number		1					2			

Note: all technical data based on

Rated condition	air temperature DB ()	air temperature WB ()	Water inlet ()	Water difference ()
Cooling mode	27	19.5	7	5
Heating mode	21		60	
Noise level	The measurement have been taken on surfaces positioned at d=1 meter distance from the unit in a standard anechoic chamber.			



4-row (3+1) technical data (4-pipe system)

Item			FC- 200	FC- 300	FC- 400	FC- 500	FC- 600	FC- 800	FC- 1000	FC- 1200	FC- 1400
Air Flow (m³/h)	High speed		340	510	680	850	1020	1360	1700	1890	2220
	Medium speed		255	380	510	640	765	1020	1275	1450	1640
	Low speed		170	260	340	430	510	680	850	950	1140
Performance (3-row coil)	Cooling capacity (W)	H. S.	2200	2900	4200	4830	5840	7390	9200	10890	13100
		M. S.	1958	2581	3738	4299	5198	6577	8188	9692	11659
		L. S.	1606	2117	3066	3526	4263	5395	6716	7950	9563
	Heating capacity (W)	H. S.	3300	5020	6780	7800	9300	11900	15700	18210	21800
		M. S.	2772	4217	5695	6552	7812	9996	13188	15296	18312
		L. S.	2112	3213	4339	4992	5952	7616	10048	11654	13952
	Water flow(LPM)		6. 3	8. 3	12	13. 8	16. 7	21	27	31. 5	37. 3
	Pressure drop(KPa)		5	12	24	30	42	15	20	36	31
Performance (1-row coil)	Heating capacity (W)	H. S.	1800	2800	3500	4700	5500	6300	7800	10300	11500
		M. S.	1512	2352	2940	3948	4620	5292	6552	8652	9660
		L. S.	1152	1792	2240	3008	3520	4032	4992	6592	7360
	Water flow(LPM)		2. 6	4	5	6. 7	7. 9	9	11. 2	14. 8	16. 5
	Pressure drop(KPa)		1. 0	3. 5	8. 2	12. 5	17. 1	19. 5	23. 3	28. 2	32. 7
Noise level dB(A)	Standard ESP(12 Pa)		35	36	40	41	43	44	46	48	49
	High ESP(30Pa)		38	39	43	46	46. 5	46	48	49	51
	High ESP(60Pa)		40	42	45	47	48	50	52	53	54
Power input (W)	Standard ESP(12 Pa)		34	36	46	67	85	112	134	170	197
	High ESP(30Pa)		42	45	63	77	93	125	154	186	223
	High ESP(60Pa)		46	65	84	100	118	174	210	250	300
PTC heating(optional)	Heating capacity (kW)		1	1	1. 5	1. 5	2	2. 5	3	3	3
Coil	Frame		high-efficiency type copper tube, with integral internal and external enhancement high quality aluminum fin								
	Water Inlet/outlet		DN20 Taper Pipe Female Thread (Rc3/4 ")								
	Drain pipe		DN20 Taper Pipe Male Thread(R3/4 ")								
	Aweather (m²)		0. 088	0. 112	0. 144	0. 16	0. 172	0. 226	0. 264	0. 312	0. 35
	Water pressure		1. 6 MPa								
Fan	Type		Double Air Inlet Centrifugal fan wheels , Forward Curved Laminae								
	Number		1	2				4			
Motor	Type		Capacitor start three-speed motor								
	Bearing		Maintenance-free high-precision bearings								
	Power supply		Single-phase 220V 50Hz								
	Number		1					2			

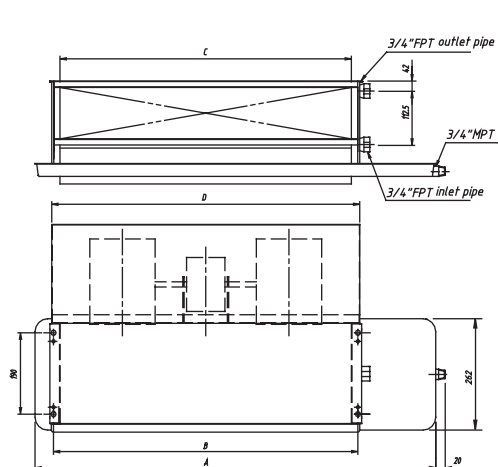
Note: all technical data based on

Rated condition	air temperature DB ()	air temperature WB ()	Water inlet ()	Water difference ()
Cooling mode	27	19.5	7	5
Heating mode	21		60	
Noise level	The measurement have been taken on surfaces positioned at d=1 meter distance from the unit in a standard anechoic chamber.			



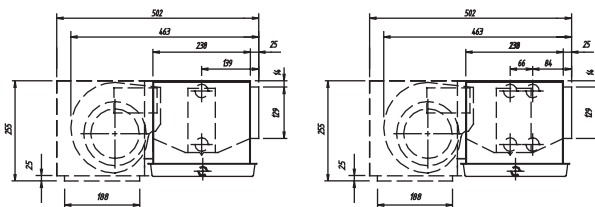
Dimensions

Configuration—Model NFCI



Note:

1. Air flow from 350 to 2380 m³/h
2. Air return box is optional, two types: back and below
3. High static pressure fan is optional.
4. Fresh air inlet of return box is optional.
5. Extended draining panel is optional.
6. Stainless steel draining panel is optional.
7. suspender dimension is $\Phi 8$

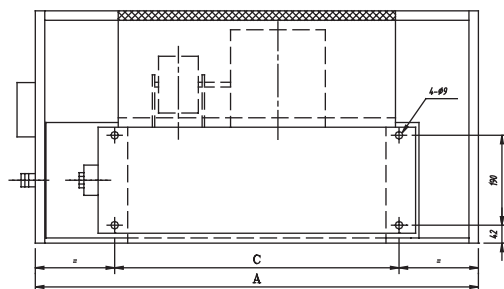
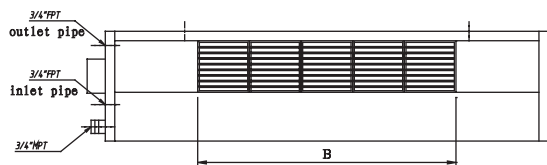


2-pipe

4-pipe

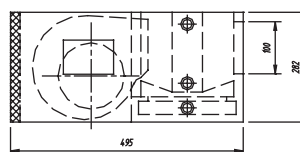
Model	A	B	C	D
FC-200	700	470	440	480
FC-300	820	590	560	600
FC-400	980	750	720	760
FC-500	1060	830	800	840
FC-600	1120	890	860	900
FC-800	1390	1160	1130	1170
FC-1000	1580	1350	1320	1360
FC-1200	1820	1590	1560	1600
FC-1400	2010	1780	1750	1790

Configuration—Model NFCU

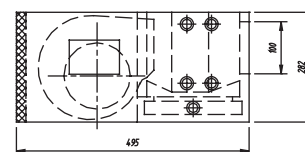


Note:

1. Air flow from 350 to 2380 m³/h
2. Air return box of two types: back and below
3. Cleanable air filters no need of any special tools.



2-pipe



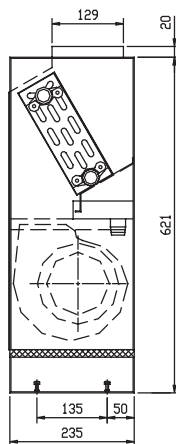
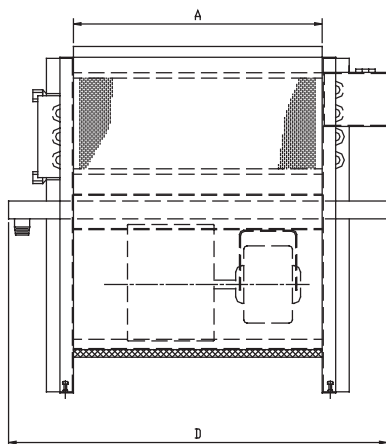
4-pipe

Model	A	B	C
FC-200	760	400	470
FC-300	880	600	590
FC-400	1040	700	750
FC-500	1120	800	830
FC-600	1180	900	890
FC-800	1450	1100	1160
FC-1000	1640	1300	1350
FC-1200	1880	1600	1590
FC-1400	2070	1700	1780

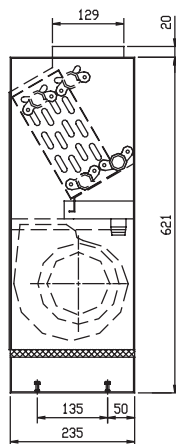


Dimensions

Configuration—Model NFI



2-pipe



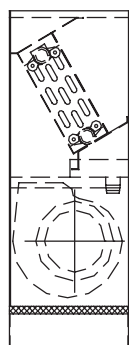
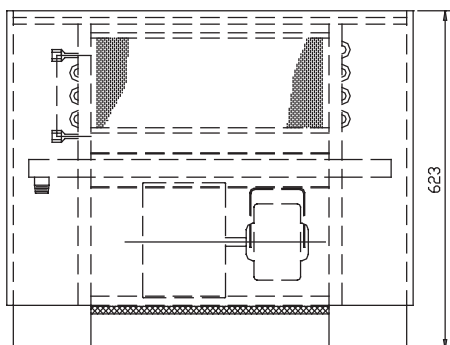
4-pipe

Model	A	D
FC-200	448	600
FC-300	568	720
FC-400	728	880
FC-500	808	960
FC-600	868	1020
FC-800	1138	1290
FC-1000	1328	1480
FC-1200	1568	1720
FC-1400	1758	1910

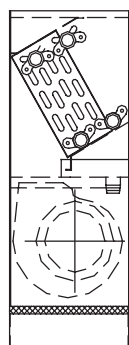
Note:

1. Air flow from 350 to 2380 m³/h.
2. Extended draining panel is optional.
3. Stainless steel draining panel is optional.

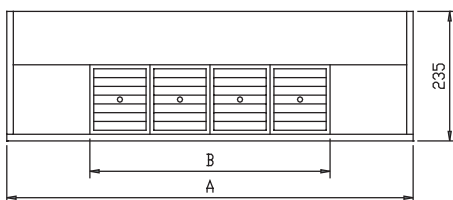
Configuration—Model NFU



2-pipe



4-pipe



Model	A	B
FC-200	878	400
FC-300	998	600
FC-400	1158	700
FC-500	1238	800
FC-600	1298	900
FC-800	1568	1100
FC-1000	1758	1300
FC-1200	1998	1600
FC-1400	2188	1700

Note:

1. Air flow from 350 to 2380 m³/h.
2. Stainless steel draining panel is optional.
3. Cleanable air filters :no need of any special tools



Cassette Type Fan Coil Unit

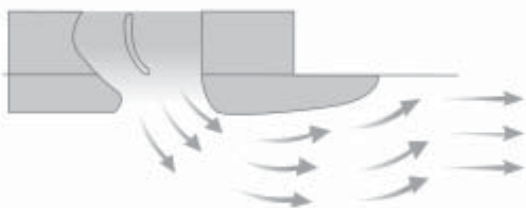


FC-NHDU4/XHDU4 belongs to cassette type fan-coils of Climaveneta. This range of products is characterized by the universal version and offers units with single coil or double coil. The versatility of these hydronic terminal units and the guaranteed low pressure loss make them suitable for all types of installations.

The 2-pipe systems feature 1 heat exchanger. Seasonable changeover from heating to cooling, and vice-versa, is possible. The 4-pipe systems are quite impressive due to their 2 separate heat exchangers for heating and cooling operations. This means that they allow spontaneous changer-over to the heating or cooling mode in any zone, as required.

Improved air diffusion

Efficiently preventing condensation forming on the front panel, and also preventing the ceiling stained around the air distribution..



Traditional design

The air adheres to the ceiling flowing, so it makes the ceiling stained.



Improved by CLIMAVENETA

Prohibiting air upward flow. So airflow does not touch the ceiling.

Easy to maintain



CLIMAVENETA cassettes provide easy access from bottom of unit for servicing all components. Simply remove the blower grille, and all parts are accessible from below. One element of good indoor air quality is filtered room air. The filter system in the cassette fan-coils combines a snug-fitting filter with ready access so that change-outs are fast and easy.



Easy access for cleanability

Accessibility and cleanability go hand-in-hand. Together, they contribute to good IAQ by eliminating opportunities for dirt accumulation and microbial growth. With that in mind, we designed the FC-NHDU4/XHDU4 fan coil unit with easy access to the coil and fan and removable draining panel. What about the cabinet's interior surfaces? No problem. They're lined with an impermeable, closed-cell insulation that's fully cleanable – and eliminates the risk of fiberglass entering the airstream.



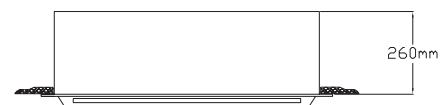
Unbeatable low noise level

The profile of the impeller blades reduces the sound level considerably. The unit's aerodynamic profile and internal sound insulation ensure silent operation.

Easy installation

Compact structure is designed for easier installation. It is 26kg in weight and 260mm in height for the minimum capacity model, which is one of the most compact units in market.

Hydraulic connections directly to the connector with standard spacing. Single-point power connection with factory-installed transformer to reduce jobsite labor.

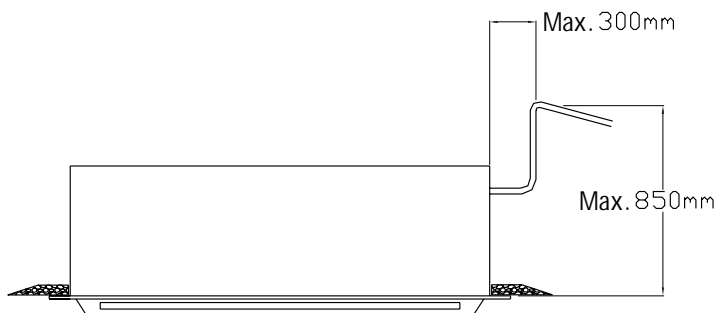




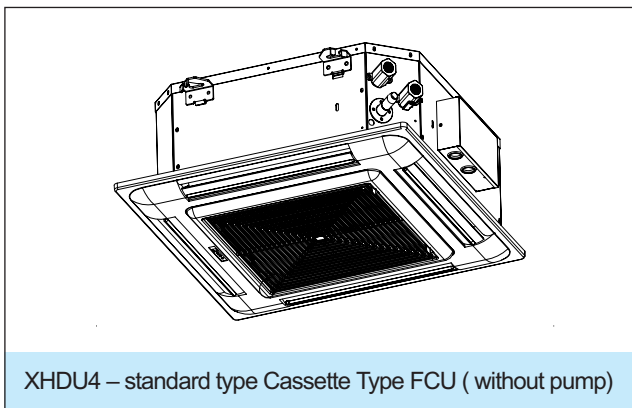
Condensate pump

Condensate pump with 850mm maximum head provided with alarm contact and switch that interrupts the chiller water flow in case of a pump malfunction.

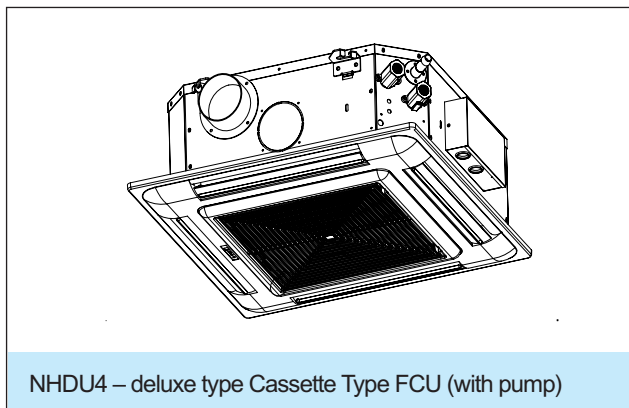
Max. head (Q=24/h)	850mm
Max. flow rate	95L/h
Power source	9W 220V 50Hz
Overheat protection	Impedance type
Noise (1m away)	28dBA)
Classification of water proof	IP20 or IP54
Dimension (mm)	LxWxH=88x75x93



Unit Configurations



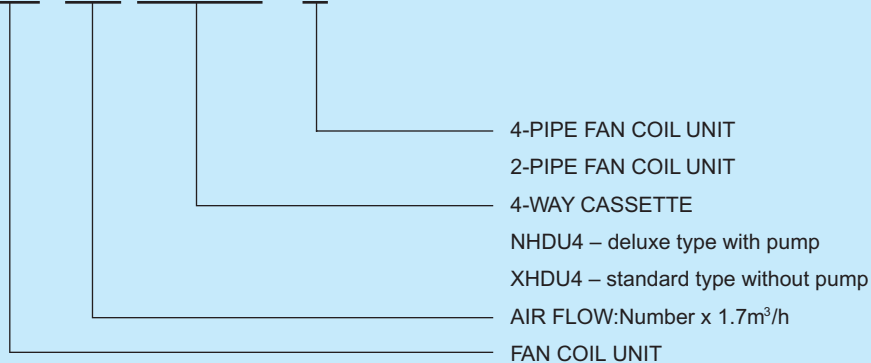
XH DU4 – standard type Cassette Type FCU (without pump)



NH DU4 – deluxe type Cassette Type FCU (with pump)

Nomenclature

FC -200 NH DU4 – 4





Technical Performance Data

FC-NH DU4-2 WATER CASSETTE (2-pipe, with pump)

MODEL			200	300	400	500	600	800	1000	1200	1400
Air Flow	H	m ³ /h	340	510	680	850	1020	1360	1700	2040	2380
	M		255	380	510	635	765	1020	1275	1530	1785
	L		170	255	340	425	510	680	850	1020	1190
Cooling Capacity	H	kW	2	2.9	3.8	4.8	5.9	7.5	9.5	11.5	13
	M		1.6	2.5	3.1	3.9	4.8	6.2	7.9	9.6	11
	L		1.2	1.8	2.3	2.9	3.6	4.7	6	7.2	8.3
Sensible Cooling Capacity	H	kW	1.3	2.1	2.6	3.3	4.1	5.2	6.7	8	9.2
	M		1.1	1.6	2.1	2.7	3.3	4.2	5.4	6.5	7.4
	L		0.8	1.2	1.5	1.9	2.4	3.1	4	4.8	5.5
Heating Capacity	H	kW	3.2	4.6	6	7.3	9.1	11.8	14.6	17.1	19.5
	M		2.6	3.6	4.8	5.8	7.2	9.4	11.6	13.7	15.7
	L		1.8	2.6	3.5	4.2	5.2	6.7	8.4	9.9	11.3
Water Flow		LPM	5.8	8.5	10.8	13.6	16.8	21.5	27.2	33	37.3
Operation Noise (pressure level)		dB (A)	35/32/29	39/36/33	41/38/35	40/35/31	45/42/39	46/39/33	44/37/34	48/42/36	52/46/39
Power Supply			220V-50Hz								
Power Input		W	26/21/18	28/23/19	45/31/19	56/39/31	80/62/51	109/67/48	114/82/43	160/103/55	212/156/100
Motor Current		A	0.16	0.17	0.23	0.26	0.37	0.5	0.51	0.83	0.98
Controller			REMOTE OR WALL THERMOSTATE								
Pressure Drop		KPa	7.2	13.4	19.9	21.5	25.4	35.9	15.9	20.1	25.2
Drain Pipe Connection		mm	19.05								
Weight		Kg	28	28	28	37	37	37	60	60	60
Water Connection			SOCKET								
Water Connection	Inlet	Inch	ZG3/4"								
	Outlet	Inch	ZG3/4"								

1. Air flow is based on outlet air static pressure at 0pa

2. Cooling capacity is based on:

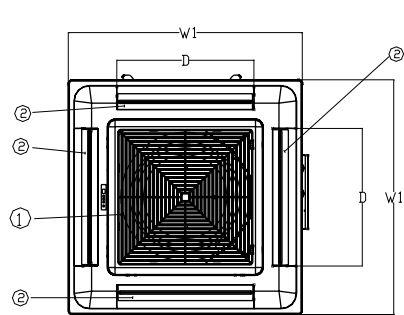
27°CDB/19.5°CWB air inlet temperature, 7°C water inlet and 12°C water outlet temperature.

3. Heating capacity is based on:

20°CDB air inlet temperature, 60°C water inlet and 50°C water outlet temperature.



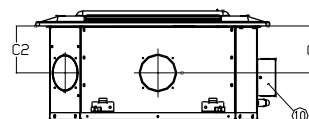
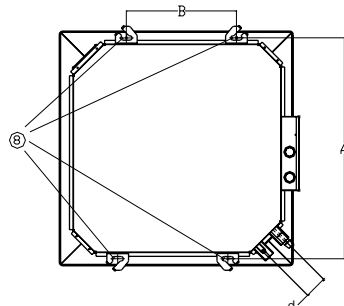
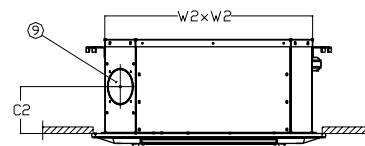
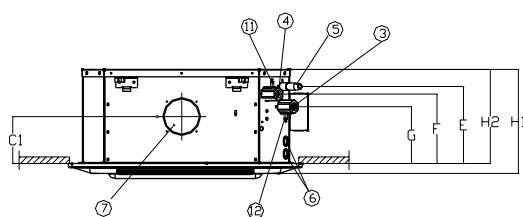
FC-NH DU4-2 Cassette Type Fan Coil Unit (2- pipe, with pump) dimension



- | | |
|---------------------------|--------------------------------------|
| ① Air return grille | ⑦ Bypass air outlet |
| ② Air outlet grille | ⑧ Suspender hole(Ø12*32) |
| ③ Water inlet pipe | ⑨ Fresh air inlet flange control box |
| ④ Water outlet pipe | ⑩ Control box |
| ⑤ Draining pipe | ⑪ Vent |
| ⑥ Power supply connection | ⑫ Draining |

NH DU4 – deluxe type

With pump



X direction

Over dimension form

Type	FC- 200	FC- 300	FC- 400	FC- 500	FC- 600	FC- 800	FC- 1000	FC- 1200	FC- 1400
W1		650			850			1050	
W2		574			730			930	
H1		288			318			318	
H2		260			290			290	
A		616			776			976	
B		304			440			640	
C1		142			146			146	
C2		142			130			130	
D		379			450			650	
E		215			245			245	
F		193			223			223	
G		158			188			188	
d		59			60.5			60.5	



FC-XHDU4-2 WATER CASSETTE (2-pipe, without pump)

MODEL			200	300	400	500	600	800	1000	1200	1400
Air Flow	H	m ³ /h	340	510	680	850	1020	1360	1700	2040	2380
	M		255	380	510	635	765	1020	1275	1530	1785
	L		170	255	340	425	510	680	850	1020	1190
Cooling Capacity	H	kW	2	2.9	3.8	4.8	5.9	7.5	9.5	11.5	13
	M		1.6	2.5	3.1	3.9	4.8	6.2	7.9	9.6	11
	L		1.2	1.8	2.3	2.9	3.6	4.7	6	7.2	8.3
Sensible Cooling Capacity	H	kW	1.3	2.1	2.6	3.3	4.1	5.2	6.7	8	9.2
	M		1.1	1.6	2.1	2.7	3.3	4.2	5.4	6.5	7.4
	L		0.8	1.2	1.5	1.9	2.4	3.1	4	4.8	5.5
Heating Capacity	H	kW	3.2	4.6	6	7.3	9.1	11.8	14.6	17.1	19.5
	M		2.6	3.6	4.8	5.8	7.2	9.4	11.6	13.7	15.7
	L		1.8	2.6	3.5	4.2	5.2	6.7	8.4	9.9	11.3
Water Flow		LPM	5.8	8.5	10.8	13.6	16.8	21.5	27.2	33	37.3
Operation Noise (pressure level)		dB (A)	35/32/29	39/36/33	41/38/35	40/35/31	45/42/39	46/39/33	44/37/34	48/42/36	52/46/39
Power Supply			220V - 50Hz								
Power Input		W	26/21/18	28/23/19	45/31/19	56/39/31	80/62/51	109/67/48	114/82/43	160/103/55	212/156/100
Motor Current		A	0.16	0.17	0.23	0.26	0.37	0.5	0.51	0.83	0.98
Controller			REMOTE OR WALL THERMOSTATE								
Pressure Drop		KPa	7.2	13.4	19.9	21.5	25.4	35.9	15.9	20.1	25.2
Drain Pipe Connection		mm	19.05								
Weight		Kg	28	28	28	37	37	37	60	60	60
Water Connection			SOCKET								
Water Connection	Inlet	Inch	ZG3/4"								
	Outlet	Inch	ZG3/4"								

1. Air flow is based on outlet air static pressure at 0Pa

2. Cooling capacity is based on:

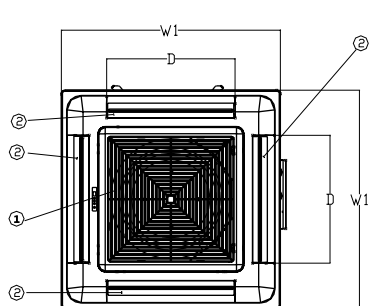
27°CDB/19.5°CWB air inlet temperature, 7°C water inlet and 12°C water outlet temperature.

3. Heating capacity is based on:

20°CDB air inlet temperature, 60°C water inlet and 50°C water outlet temperature.

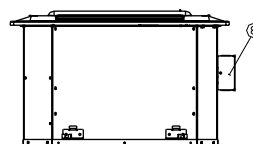
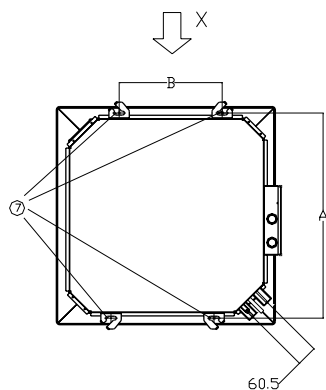
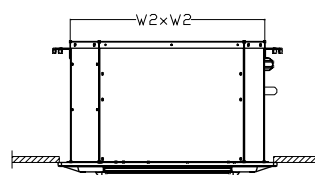
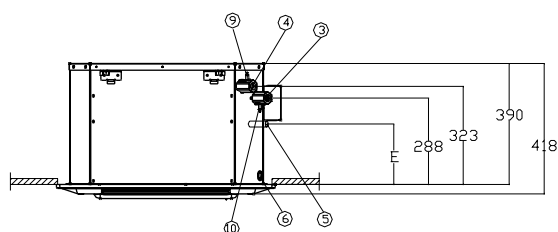


FC-XHDU4-2 Cassette Type Fan Coil Unit (2- pipe, without pump) dimension



- | | |
|---------------------------|--------------------------------------|
| ① Air return grille | ⑦ Bypass air outlet |
| ② Air outlet grille | ⑧ Suspender hole(Ø12*32) |
| ③ Water inlet pipe | ⑨ Fresh air inlet flange control box |
| ④ Water outlet pipe | ⑩ Control box |
| ⑤ Draining pipe | ⑪ Vent |
| ⑥ Power supply connection | ⑫ Draining |

XHDU4 – standar type
Without pump



Over dimension form

Type	FC-200	FC-300	FC-400	FC-500	FC-600	FC-800	FC-1000	FC-1200	FC-1400
W1		650			850			1050	
W2		574			730			930	
A		616			776			976	
B		282			440			640	
D		379			450			650	
E		140			90			90	



Air Handling Unit



Plug & Play air handling units

The entire range is a result of Climaveneta's great experience matured over the years in designing air handling units. Thought and designed to satisfy both traditional and specific applications, this line has been created to suit both large and small applications.

Achieved by applying strict quality awareness and production organization.

The ever rising costs of specialized labour, and the subsequent need to install in less hours, have led to design and project units which are more complete in themselves and ready to operate without any need of technical assistance at the installation site.

Quality

The MAC range has been totally designed observing the strictest safety norms and to comply with the requirements of different kinds of applications.

Unit ready-for-use

The unit offers the following exclusive advantages:

- Wide regulation possibilities,
- Completely tested,
- Fewer requirements of specialized personnel on site,
- The entire system acquires added value and becomes more reliable as a result.

Structure

Unit applies aluminum alloy framework and the surface is anode oxidized, elegant and graceful, with high anti-corrosion ability.

The adoption of non-bridge design, aluminum framework is conjoined by high-strength nylon tee joint, panel and framework are separated by PVC which ensures bridge avoided. Skeleton and double skinned panel are mounted by special aluminum alloy without any bare bolt.

Unit's interior applies reinforcement structure, the unit can maintain rigid under high pressure.

The adoption of modular assembly, module size is 150mm, unit dimensions are changing based on benchmark of 150mm.



Insulation

Standard insulation is hot injected polyurethane with an average density of 48 kg/m^3 .

Double skinned panels with steps can be used to ensure an unbroken inner surface between the panels and sections. Upon request, and wherever critical air treatment process sufficient to pose the risk of the formation of condensation are present, the panel can be provided with special gaskets inserted between the sheets of metal forming a box in order to prevent heat transfer.

Sound absorbing medium

Aerodynamically shagged and positioned on the front, the unit's sound absorbing medium has been studied to drastically reduce medium-and high-frequency noise.

The sound absorption pack can be wrapped in different materials to resist even the most corrosive surroundings.

Coil

The unit's coils have been expressly constructed to European and international standards and specially sized to measure for satisfaction of precise client needs in terms of performance, type of air handling required and foreseen running time.

The coil is made of high quality seamless copper and aluminum fin, produced by OAK assembly line, by hydraulic or mechanical expanded pipe&tube absolutely tight, this structure can bring into the best effect of heat exchanging.

Handle

These anti-panic handles feature opening from both inside and outside the unit with the same type of handle. Sturdily constructed, each door is fitted with a handle and safety lock to prevent unauthorized access.

Inspection window

Constructed in UV-resistant double polycarbonate glass with gasket and internal fixing system.

This porthole always features double glass and internal bolts. The absence of any other holes on the external panel ensures air-tight sealing. A pre-wired light switch is applied, in certain sections, to allow the inside to be illuminated.

Fan assemblies

The adoption of well-known brand of DIDW, centrifugal fan and bearing ensures the static and dynamic balance level of G4.0 which greatly improves the life duration of bearing. Controlled by micro-computer procedure which leads to self-adjusting, so that the fan can work in high efficiency and energy saving condition. Fan is located on damping shelf and connected with box by high-intensity fire-retardant flexibility joint.

This type of assembly reduces axial level differences to a minimum in order to ensure longer working life for the fan bearings during starting. The entire fan assembly is solidly fastened to the frame connected to the unit's body by vibration-damping joints.

All this guarantees correct fan assembly while insulating the unit against the vibration transmitted during operation.

Filtration

Special attention has been dedicated to the selection and positioning of the filters in the containing section.

In addition to commercially-available fixing systems, exclusive systems expressly built to pass tightness tests (e.g. DOP tests for absolute filters) are also available. Filtration systems can be fitted on request with pressure gauges or differential pressure switches for clogging control.

The units are always built for the removal of the filters from the dirty side in order to optimize the system's seal and prevent dust and contaminants from entering the areaulic circuit during filter replacement.

Humidification

All humidification systems (wet film, dry steam, high pressure atomizing, electric heating or electrode type) are sized to the maximum level of efficiency.



Heat recovery

The recovery sections are made with either static or rotary recuperators or closed-loop coils.

Generously sized, the heat recovery sections permit significant reductions in operating costs and the complete respect of all the energy-saving regulations currently in force.

Choose the AHU configuration that works for your system

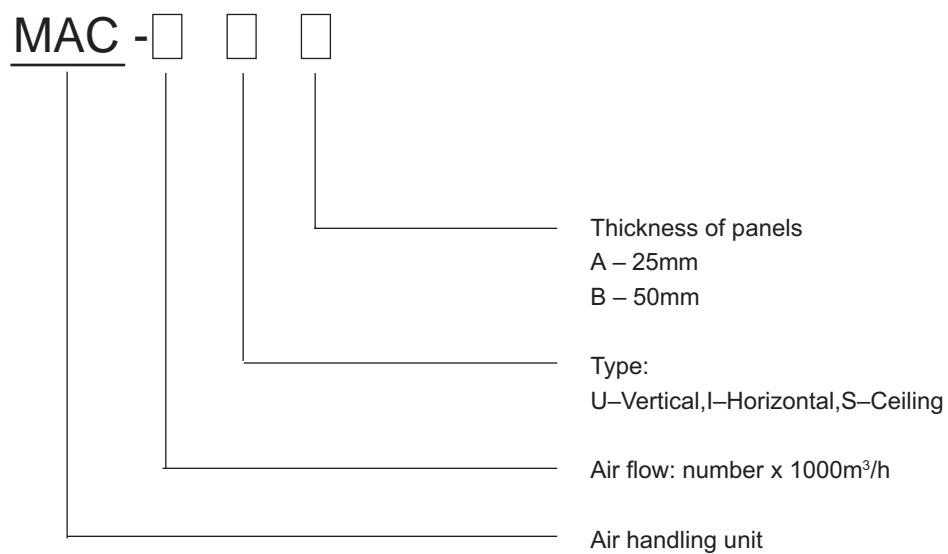
Make your choice from over 20 different ready-to-use models capable of meeting any and all air handling requirements.



For special requirements, please contact our sales/technical department.



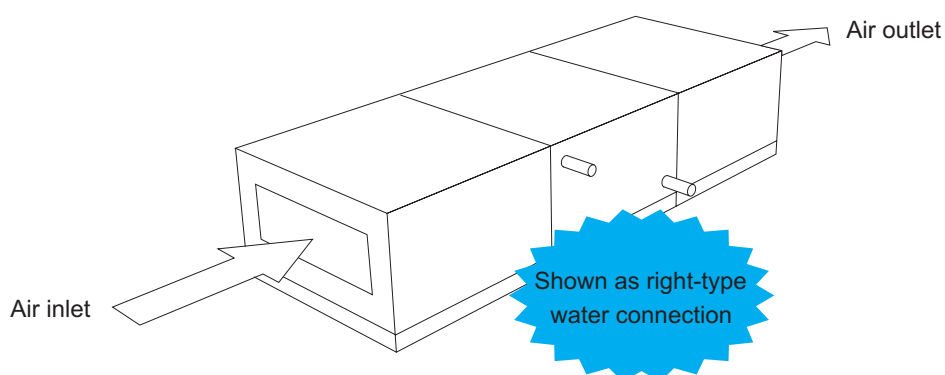
Nomenclature



e.g.: **MAC-50IB**

Horizontal air handling unit : thickness of PU foam panels is 50mm, nominal air flow is 50000m³/h .

Choose the water connection type



Face to the air-inlet side, if the water connections are on your right-hand side, the water connection is right-type; if on your left-hand side, the water connection is left-type.



Quick Selection

MODEL MAC	AIR FLOW m³/h	MODULUS (M)	AWEATHER m²	AIRFLOW VELOCITY OF COIL SURFACE(m/s)							REFERENCE FAN
				2.0	2.25	2.5	2.75	3.0	3.25	3.5	
2.5	2500	0604	0.288	2074	2333	2592	2851	3110	3370	3629	180
3.5	3500	0704	0.351	2527	2843	3159	3475	3791	4107	4423	225
4	4000	0804	0.414	2981	3353	3726	4099	4471	4844	5216	250
5	5000	0606	0.498	3586	4034	4482	4930	5378	5827	6275	250
6	6000	0806	0.708	5098	5735	6372	7009	7646	8284	8921	280
8	8000	0906	0.816	5875	6610	7344	8078	8813	9547	10282	315
9	9000	1006	0.924	6653	7484	8316	9148	9979	10811	11642	355
10	10000	0808	1.005	7236	8141	9045	9950	10854	11759	12663	355
12	12000	1008	1.313	9454	10635	11817	12999	14180	15362	16544	400
15	15000	1010	1.676	12067	13576	15084	16592	18101	19609	21118	450
15	15000	1208	1.601	11527	12968	14409	15850	17291	18732	20173	450
18	18000	1408	1.908	13738	15455	17172	18889	20606	22324	24041	500
20	20000	1210	2.075	14940	16808	18675	20543	22410	24278	26145	500
23	23000	1410	2.474	17813	20039	22266	24493	26719	28946	31172	560
25	25000	1212	2.49	17928	20169	22410	24651	26892	29133	31374	560
28	28000	1610	2.86	20592	23166	25740	28314	30888	33462	36036	560
30	30000	1412	2.953	21262	23919	26577	29235	31892	34550	37208	630
35	35000	1612	3.431	24703	27791	30879	33967	37055	40143	43231	630
35	35000	1414	3.515	25308	28472	31635	34799	37962	41126	44289	630
40	40000	1614	4.085	29412	33089	36765	40442	44118	47795	51471	710
40	40000	1812	3.91	28152	31671	35190	38709	42228	45747	49266	710
45	45000	1616	4.739	34121	38386	42651	46916	51181	55446	59711	800
45	45000	1814	4.655	33516	37706	41895	46085	50274	54464	58653	800
50	50000	1816	5.4	38880	43740	48600	53460	58320	63180	68040	800
50	50000	2014	5.225	37620	42323	47025	51728	56430	61133	65835	800
55	55000	2214	5.738	41314	46478	51642	56806	61970	67135	72299	800
60	60000	2016	5.892	42422	47725	53028	58331	63634	68936	74239	900
65	65000	2216	6.541	47095	52982	58869	64756	70643	76530	82417	900
70	70000	2416	7.191	51775	58247	64719	71191	77663	84135	90607	900
75	75000	2218	7.459	53705	60418	67131	73844	80557	87270	93983	1000
80	80000	2616	7.841	56455	63512	70569	77626	84683	91740	98797	1000
90	90000	2418	8.2	59040	66420	73800	81180	88560	95940	103320	1000
90	90000	2816	8.491	61135	68777	76419	84061	91703	99345	106987	1000
100	100000	2618	8.941	64375	72422	80469	88516	96563	104610	112657	1120
100	100000	2818	9.732	70070	78829	87588	96347	105106	113864	122623	1120
110	110000	3018	10.473	75406	84831	94257	103683	113108	122534	131960	1120
120	120000	2820	10.93	78696	88533	98370	108207	118044	127881	137718	1250
120	120000	3218	11.164	80381	90428	100476	110524	120571	130619	140666	1250
130	130000	3020	11.762	84686	95272	105858	116444	127030	137615	148201	1250
140	140000	3220	12.594	90677	102011	113346	124681	136015	147350	158684	1250
150	150000	3222	13.974	100613	113189	125766	138343	150919	163496	176072	1400
160	160000	3224	15.354	110549	124367	138186	152005	165823	179642	193460	1400
170	170000	3424	16.369	117857	132589	147321	162053	176785	191517	206249	1400
180	180000	3426	17.84	128448	144504	160560	176616	192672	208728	224784	1400
200	200000	3626	18.946	136411	153463	170514	187565	204617	221668	238720	1120 × 2

NOTE:

- 1.25mm thickness panels up to MAC-40.
- The selection of fans is only for reference.



Technical Performance Data

4-row coil performance data

MAC	AIR FLOW m ³ /h	SECTIONAL MODULUS (M)	RETURN AIR CONDITION				FRESH AIR CONDITION				AIR PRESSURE DROP Pa
			COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	WATER PRESSURE DROP	COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	WATER PRESSURE DROP	
			kW	kW	m ³ /h	kPa	kW	kW	m ³ /h	kPa	
2.5	2500	0604	13.6	21.1	2.34	5.6	31.6	37.8	5.4	26.7	97
3.5	3500	0704	18.8	29.1	3.24	11.4	38.8	49.6	6.7	6	122
4	4000	0804	22.3	34	3.828	17.2	46.3	57.9	8.0	9.2	117
5	5000	0606	26.3	41.1	4.518	6.4	60.8	73.8	10.5	30.2	115
6	6000	0806	35.4	53.1	6.09	13.6	74.3	90.4	12.8	7.4	87
8	8000	0906	45.9	69	7.878	23.9	95.8	117.5	16.5	12.8	112
9	9000	1006	52.5	78.4	9.012	33.1	110.1	133.4	18.9	18	111
10	10000	0808	56.3	85.4	9.678	16.2	117.1	145.6	20.1	8.6	111
12	12000	1008	72	106.6	12.36	30.2	151.4	181.3	26.0	16.5	97
15	15000	1010	90.6	134	15.552	27.8	190.8	227.9	32.8	15.2	92
15	15000	1208	83.5	127.8	14.328	6.4	192	227.5	33.0	29.1	99
18	18000	1408	102.7	155.4	17.646	10.7	234.1	274.5	40.3	47.4	101
20	20000	1210	110.6	169.6	18.96	6.6	254.2	301.9	43.7	29.7	102
23	23000	1410	132.2	199.7	22.68	10.3	301.6	352.6	51.9	46	97
25	25000	1212	137.7	211.3	23.64	6.7	316.4	376.4	54.4	30.2	105
28	28000	1610	161.4	242.6	27.69	16.6	337.1	413.2	58.0	8.9	106
30	30000	1412	169.1	256.6	29.04	11	351.1	437.3	60.4	5.8	107
35	35000	1612	201	302.3	34.5	16.8	419.5	515	72.2	9	108
35	35000	1414	198.5	300.8	34.08	10.7	452.2	531.6	77.8	47.4	104
40	40000	1614	232.8	349	39.96	16	487	594.3	83.8	8.6	101
40	40000	1812	233	348.1	39.96	24.3	488.7	592.8	84.1	13.2	109
45	45000	1616	263.1	393.9	45.12	15.7	551.2	670.8	94.8	8.5	99
45	45000	1814	267.5	397.2	45.9	22.8	561.6	675.9	96.6	12.3	99
50	50000	1816	299.7	444	51.42	22.1	629.9	755.5	108.3	12	95
50	50000	2014	301.8	445.2	51.78	31	635.9	757.4	109.4	17	98
55	55000	2214	334.8	491.8	57.42	40.3	706.5	836.3	121.5	22.1	98
60	60000	2016	354.6	526	60.9	32.5	744.3	895.1	128.0	17.6	108
65	65000	2216	391.3	576.4	67.2	42.3	824.2	980.3	141.8	23.1	104
70	70000	2416	394.4	600.4	67.74	6.7	903.4	1065	155.4	29.4	99
75	75000	2218	449.6	663.1	77.16	42.8	946.9	1128	162.9	23.4	106
80	80000	2616	449.5	682.8	77.16	9.1	1023.5	1208.1	176.0	39.5	107
90	90000	2418	486.3	748.3	83.52	7.7	1111	1331.3	191.1	33.7	121
90	90000	2816	504.6	765.2	86.52	12	1144.2	1351.2	196.8	51.8	115
100	100000	2618	544.2	833.2	93.3	10.1	1236.7	1477.9	212.7	44	125
100	100000	2818	567.4	858.1	97.38	11.8	1287.7	1513.4	221.5	50.7	108
110	110000	3018	625.6	943.5	107.4	14.9	1413.9	1660.4	243.2	63.8	113
120	120000	2820	666.5	1012.6	114.48	12.8	1507.8	1788.1	259.3	54.7	121
120	120000	3218	681.8	1026.9	117	18.4	1535.9	1804.3	264.2	78.2	118
130	130000	3020	727.2	1100.7	124.8	15.9	1640	1939.1	282.1	67.8	123
140	140000	3220	787.8	1189.1	135.3	19.5	1772.3	2090.1	304.8	82.6	124
150	150000	3222	854.2	1285.4	146.7	18.7	1923.6	2257.8	330.9	79.4	117
160	160000	3224	920.5	1381.5	158.1	18	2074.7	2425.1	356.8	76.9	111
170	170000	3424	986.2	1474.6	169.2	21.5	2217.6	2583.5	381.4	91.5	111
180	180000	3426	1054.2	1572.4	180.72	20.8	2372.3	2753.4	408.0	88.3	106
200	200000	3626	1161.5	1733.8	199.2	26	2604.7	3033.2	448.0	110.3	114

NOTE: 1. Cooling capacity based on: inlet/outlet water temp. 7/12°C; return air condition: air inlet 27°C DB/19.5°C WB; fresh air condition: air inlet 34°C DB/28°C WB.

2. Heating capacity based on: inlet water temp. 60°C; air return condition: air inlet 21°C DB; fresh air condition: air inlet -4°C DB. When water inlet at 45°C, the factor is 0.67 (air return condition) and 0.8 (fresh air condition).



6-row coil performance data

MAC	AIR FLOW m ³ /h	SECTIONAL MODULUS (M)	RETURN AIR CONDITION				FRESH AIR CONDITION				AIR PRESSURE DROP Pa
			COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	WATER PRESSURE DROP	COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	WATER PRESSURE DROP	
			kW	kW	m ³ /h	kPa	kW	kW	m ³ /h	kPa	
2.5	2500	0604	18.6	26.3	3.2	15	38.9	44.3	6.7	8	152
3.5	3500	0704	25.6	36.2	4.4	30	53.6	61.1	9.2	16.28	192
4	4000	0804	27.6	40.4	4.8	5.4	62.9	70.7	10.8	24	242
5	5000	0606	36.1	51.5	6.2	17.2	75.4	87	13.0	9.3	181
6	6000	0806	47	64.8	8.1	34.3	98.9	108.9	17.0	18.8	137
8	8000	0906	56.9	81.9	9.8	7.5	128.4	142.6	22.1	33.1	172
9	9000	1006	65.2	93	11.2	10.4	146.2	161.3	25.1	45.5	170
10	10000	0808	75.5	105.4	13.0	41.7	158.5	177.4	27.3	22.7	174
12	12000	1008	89	125.8	15.3	9.4	199.2	217.7	34.3	41	149
15	15000	1010	111.9	157.9	19.2	8.7	250.6	273.1	43.1	37.8	142
15	15000	1208	112.8	158.2	19.4	16.6	236.4	266.5	40.7	9	156
18	18000	1408	137.5	191.1	23.6	27	288.6	321.8	49.6	14.7	158
20	20000	1210	149.8	210.2	25.7	17.1	313.4	354.2	53.9	9.2	161
23	23000	1410	176.8	245.2	30.4	26.3	371.3	412.7	63.9	14.3	152
25	25000	1212	186.7	262.2	32.0	17.4	390.5	442	67.2	9.4	164
28	28000	1610	214.8	297	36.9	41.8	451.7	500.9	77.7	22.7	165
30	30000	1412	226.7	316.4	38.9	27.9	475.9	533.1	81.9	15.2	167
35	35000	1612	267.6	371.1	45.9	42.3	562.8	624.9	96.8	23.1	169
35	35000	1414	266	370.5	45.6	27.2	558.5	623.9	96.1	14.8	162
40	40000	1614	309.3	427.1	53.1	40.1	650.4	718.7	111.9	21.9	158
40	40000	1812	308.6	425.9	52.9	60.5	649.8	716.7	111.8	33.2	170
45	45000	1616	349.1	481.6	59.9	39.4	734.3	810.2	126.3	21.5	154
45	45000	1814	352.4	483.7	60.5	56.2	742	813.4	127.6	30.7	154
50	50000	1816	394.2	539.7	67.6	54.3	830.1	907.3	142.8	29.7	148
50	50000	2014	373.8	525.9	64.2	9.9	833.7	908	143.4	41.6	150
55	55000	2214	414.6	580.9	71.1	12.8	922.4	1000.8	158.7	53.8	151
60	60000	2016	440.3	623.7	75.6	10.4	983.3	1078.9	169.1	43.7	167
65	65000	2216	485.8	682.4	83.4	13.5	1079.9	1176.3	185.7	56.4	160
70	70000	2416	530.6	740.8	91.1	17.1	1143.5	1260.4	196.7	21.7	155
75	75000	2218	558.7	785.7	95.9	13.7	1242.1	1354.8	213.6	57.2	163
80	80000	2616	603.4	842.9	103.5	23.1	1299.6	1433.8	223.5	29.4	168
90	90000	2418	660.6	932.4	113.4	20	1422.1	1589.7	244.6	25.4	189
90	90000	2816	676.5	945	116.1	30.4	1455.4	1606.7	250.3	38.4	179
100	100000	2618	736.1	1036.4	126.3	26.1	1583.2	1765.6	272.3	33.1	196
100	100000	2818	759.1	1056.5	130.2	29.7	1633.1	1795.2	280.9	37.6	169
110	110000	3018	835.2	1161	143.4	37.5	1794.8	1971.6	308.7	47.4	176
120	120000	2820	895.4	1253.1	153.6	32.4	1924	2131.4	330.9	40.9	189
120	120000	3218	909	1263.7	156.0	46	1952.4	2145.4	335.8	58	184
130	130000	3020	974	1359.8	167.1	40.1	2096	2311.1	360.5	50.6	191
140	140000	3220	1051.9	1466.5	180.6	48.8	2259.3	2490.8	388.6	61.7	193
150	150000	3222	1137.9	1581	195.3	46.7	2444.2	2683.8	420.4	58.9	183
160	160000	3224	1223.6	1695.2	210.0	44.9	2628.4	2876.2	452.1	56.7	174
170	170000	3424	1307.3	1806	224.4	53.4	2805.8	3061.9	482.6	67.3	173
180	180000	3426	1394.9	1921.7	239.4	51.4	2993.8	3256.5	514.9	64.8	165
200	200000	3626	1537.6	2122.9	264.0	64.6	3298.4	3597.8	567.3	81.3	178

NOTE: 1. Cooling capacity based on: inlet/outlet water temp. 7/12°C; return air condition: air inlet 27°C DB/19.5°C WB; fresh air condition: air inlet 34°C DB/28°C WB.

2. Heating capacity based on: inlet water temp. 60°C; air return condition: air inlet 21°C DB; fresh air condition: air inlet -4°C DB. When water inlet at 45°C, the factor is 0.67 (air return condition) and 0.8 (fresh air condition).



8-row coil performance data

MAC	AIR FLOW m ³ /h	SECTIONAL MODULUS (M)	RETURN AIR CONDITION				FRESH AIR CONDITION				AIR PRESSURE DROP Pa
			COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	WATER PRESSURE DROP	COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	WATER PRESSURE DROP	
			kW	kW	m ³ /h	kPa	kW	kW	m ³ /h	kPa	
2.5	2500	0604	21.9	29.1	3.8	27	45.4	48.6	7.8	14.4	208
3.5	3500	0704	28.4	39.2	4.9	6.8	62.8	67.4	10.8	29.2	259
4	4000	0804	33.3	45.4	5.7	10	73	77.6	12.6	42.6	246
5	5000	0606	42.9	57.5	7.4	31.6	88.9	96.1	15.3	16.8	248
6	6000	0806	51.9	69.5	8.9	7.7	113.2	118.4	19.5	32	185
8	8000	0906	68	91.6	11.7	13.8	140.6	153.2	24.2	7.3	236
9	9000	1006	77.5	103.6	13.3	19	160.4	173.2	27.6	10.1	233
10	10000	0808	84.8	112.7	12.8	7.6	183.6	194.4	31.6	39.8	219
12	12000	1008	105.1	139.5	18.1	17	217.5	233	37.4	9	204
15	15000	1010	132	174.9	22.7	15.6	273.2	292	47.0	8.3	194
15	15000	1208	132.6	174.9	22.7	29.7	274.9	292.1	47.3	15.8	213
18	18000	1408	160.6	210.7	27.5	47.8	333.4	351.7	57.3	25.5	215
20	20000	1210	176.1	232.7	30.2	30.6	365.1	388.6	62.8	16.3	220
23	23000	1410	206.2	270	35.4	46.3	428	450.4	73.6	24.7	207
25	25000	1212	219.6	290.5	37.7	31.1	455.3	485.2	78.3	16.6	224
28	28000	1610	238.8	321.2	41.0	9.7	520.3	547	89.5	39.2	224
30	30000	1412	265.7	349.7	45.6	49.8	551.6	583.8	94.9	26.5	228
35	35000	1612	297.5	400.8	51.0	9.8	648.8	682.9	111.6	39.9	228
35	35000	1414	311.2	408.9	53.4	48.3	646	682.5	111.1	25.7	221
40	40000	1614	343.4	460	58.9	9.3	747.3	783.7	128.5	37.5	213
40	40000	1812	344.1	460.3	59.1	14.1	746.2	782.1	128.3	56.9	229
45	45000	1616	387.4	518.8	66.4	9.1	842.8	882.9	145.0	36.8	208
45	45000	1814	391.8	521.4	67.2	13	848.3	884.8	145.9	27	209
50	50000	1816	437.7	581.1	75.1	12.6	947.1	985.6	162.9	26	200
50	50000	2014	440.2	582.3	75.6	17.7	949.3	985.9	163.3	31	205
55	55000	2214	487.1	642.2	83.5	22.8	1048	1085.7	180.3	44	206
60	60000	2016	520.9	693.3	89.4	18.7	1125.8	1175.6	193.6	34	228
65	65000	2216	571.5	755.8	98.1	24.1	1230.5	1278.6	211.6	36	219
70	70000	2416	621.9	818.1	106.8	30.3	1334.9	1381.4	229.6	38	212
75	75000	2218	657.8	870.8	112.8	24.4	1416.7	1473.6	243.7	48	223
80	80000	2616	707.6	931.9	121.5	41.1	1517.4	1573.2	261.0	41	229
90	90000	2418	779.7	1036.6	133.8	35.9	1678.5	1754.8	288.7	38	259
90	90000	2816	793.3	1045.6	136.2	43.9	1699.6	1764.7	292.3	53	244
100	100000	2618	867.4	1151.8	148.8	46.6	1864.2	1948	320.6	46	267
100	100000	2818	887.9	1166.6	152.4	42.4	1900.5	1967.5	326.9	52	231
110	110000	3018	976	1282	167.4	56	2087	2161.2	359.0	65	240
120	120000	2820	1050.9	1388.8	180.3	57.5	2252.8	2345.2	387.5	57	258
120	120000	3218	1062.5	1396.3	182.4	61.2	2270	2353.1	390.4	79	250
130	130000	3020	1141.4	1506	195.9	61	2443	2540.8	420.2	68	261
140	140000	3220	1231.7	1622.9	211.2	86.2	2633.5	2736.6	453.0	85	264
150	150000	3222	1329.3	1746.2	228.0	82.1	2840.1	2942.6	488.5	81	249
160	160000	3224	1426.7	1869	244.8	78.8	3046.2	3148.2	523.9	77	237
170	170000	3424	1521.9	1989.7	261.0	93.5	3245.3	3348.6	558.2	92	235
180	180000	3426	1619.9	2113.2	277.8	89.5	3452.5	3554.8	593.8	87	224
200	200000	3626	1788.8	2338.6	307.2	112.9	3811.1	3934.5	655.5	110	242

NOTE: 1. Cooling capacity based on: inlet/outlet water temp. 7/12°C; return air condition: air inlet 27°C DB/19.5°C WB; fresh air condition: air inlet 34°C DB/28°C WB.

2. Heating capacity based on: inlet water temp. 60°C; air return condition: air inlet 21°C DB; fresh air condition: air inlet -4°C DB. When water inlet at 45°C, the factor is 0.67 (air return condition) and 0.8 (fresh air condition).



Steam-heating performance data

kW

MAC	AIR FLOW m ³ /h	SECTIONAL MODULUS (M)	Inlet air temp. -4°C			inlet air temp. 5°C		
			steam pressure			steam pressure		
			0.1MPa	0.2MPa	0.3MPa	0.1MPa	0.2MPa	0.3MPa
2.5	2500	0604	26.2	29.0	31.2	24.3	27.1	29.3
3.5	3500	0704	41.1	45.5	48.8	38.1	42.5	45.8
4	4000	0804	45.4	50.3	54.0	42.2	47.0	50.7
5	5000	0806	58.7	65.0	69.7	54.4	60.7	65.5
6	6000	0806	70.4	78.0	83.7	65.3	72.9	78.6
8	8000	0906	89.9	99.5	106.8	83.4	93.0	100.3
9	9000	1006	102.3	113.2	121.5	94.8	105.8	114.1
10	10000	0808	117.4	129.9	139.5	108.9	121.4	131.0
12	12000	1008	136.3	150.9	162.0	126.5	141.1	152.1
15	15000	1010	176.0	194.9	209.2	163.3	182.1	196.5
15	15000	1208	170.4	188.7	202.5	158.1	176.3	190.2
18	18000	1408	204.5	226.4	243.0	189.7	211.6	228.2
20	20000	1210	227.2	251.6	270.0	210.8	235.1	253.6
23	23000	1410	269.9	298.8	320.8	250.4	279.3	301.2
25	25000	1212	284.0	314.5	337.6	263.5	293.9	317.0
28	28000	1610	318.1	352.2	378.1	295.1	329.1	355.0
30	30000	1412	340.8	377.3	405.1	316.1	352.6	380.4
35	35000	1612	397.7	440.2	472.6	368.8	411.4	443.8
35	35000	1414	393.3	435.4	467.4	364.8	406.9	438.9
40	40000	1614	459.5	508.7	546.0	426.2	475.4	512.7
40	40000	1812	459.5	508.7	546.0	426.2	475.4	512.7
45	45000	1616	528.1	584.7	627.6	489.9	546.4	589.4
45	45000	1814	516.9	572.2	614.3	479.4	534.8	576.8
50	50000	1816	586.8	649.6	697.4	544.3	607.1	654.8
50	50000	2014	586.8	649.6	697.4	544.3	607.1	654.8
55	55000	2214	631.7	699.4	750.8	586.0	653.6	705.0
60	60000	2016	689.2	763.0	819.0	639.2	713.0	769.1
65	65000	2216	738.5	817.6	877.6	685.0	764.1	824.1
70	70000	2416	804.0	890.1	955.5	745.8	831.9	897.3
75	75000	2218	852.1	943.4	1012.7	790.4	881.6	950.9
80	80000	2616	938.9	1039.4	1115.8	870.8	971.4	1047.7
90	90000	2418	1022.5	1132.0	1215.2	948.4	1057.9	1141.1
90	90000	2816	1056.2	1169.3	1255.2	979.7	1092.8	1178.7
100	100000	2618	1148.6	1271.6	1365.0	1065.4	1188.4	1281.8
100	100000	2818	1136.1	1257.8	1350.2	1053.8	1175.5	1267.9
110	110000	3018	1263.5	1398.8	1501.5	1171.9	1307.2	1410.0
120	120000	2820	1348.4	1492.8	1602.4	1250.7	1395.1	1504.7
120	120000	3218	1348.4	1492.8	1602.4	1250.7	1395.1	1504.7
130	130000	3020	1477.0	1635.2	1755.3	1370.0	1528.1	1648.2
140	140000	3220	1608.1	1780.3	1911.1	1491.6	1663.8	1794.5
150	150000	3222	1685.5	1866.0	2003.0	1563.4	1743.8	1880.9
160	160000	3224	1817.8	2012.5	2160.3	1686.1	1880.8	2028.6
170	170000	3424	1931.4	2138.3	2295.3	1791.5	1998.3	2155.4
180	180000	3426	2045.1	2264.1	2430.4	1896.9	2115.9	2282.2
200	200000	3626	2272.3	2515.6	2700.4	2107.6	2351.0	2535.7

**Sectional Dimension****25mm panel:**unit length $L = M \times 150 + N_0 \times 40$ unit width $W = M \times 150 + 40$ unit height $H = M \times 150 + 120$ **50mm panel:**unit length $L = M \times 150 + N_0 \times 70$ unit width $W = M \times 150 + 70$ unit height $H = M \times 150 + 150$ Note: M is number of length, width and height module , N_0 is number of sections.**25mm panel**

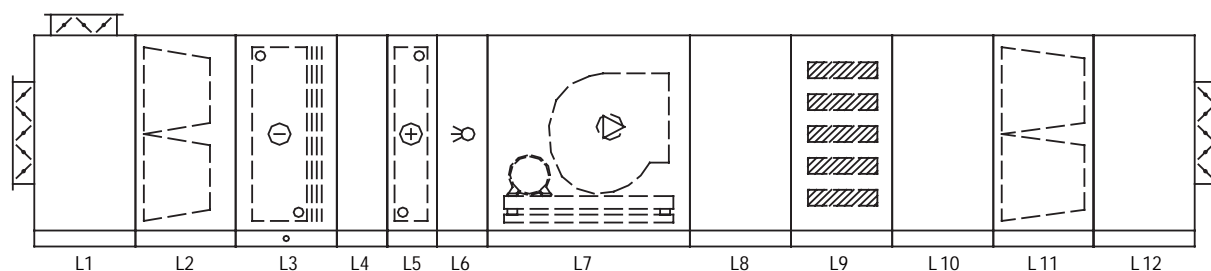
AIR FLOW	SECTIONAL MODULUS	WIDTH	HEIGHT
2500	0604	940	720
3500	0704	1090	720
4000	0804	1240	720
5000	0606	940	1020
6000	0806	1240	1020
8000	0906	1390	1020
9000	1006	1540	1020
10000	0808	1240	1320
12000	1008	1540	1320
15000	1010	1540	1620
15000	1208	1840	1320
18000	1408	2140	1320
20000	1210	1840	1620
23000	1410	2140	1620
25000	1212	1840	1920
28000	1610	2440	1620
30000	1412	2140	1940
35000	1612	2440	1940
35000	1414	2140	2240
40000	1614	2440	2240
40000	1812	2740	1940

50mm panel

AIR FLOW	SECTIONAL MODULUS	WIDTH	HEIGHT	AIR FLOW	SECTIONAL MODULUS	WIDTH	HEIGHT
2500	0604	970	750	50000	1816	2770	2570
3500	0704	1120	750	50000	2014	3070	2270
4000	0804	1270	750	55000	2214	3370	2270
5000	0606	970	1050	60000	2016	3070	2570
6000	0806	1270	1050	65000	2216	3370	2570
8000	0906	1420	1050	70000	2416	3670	2570
9000	1006	1570	1050	75000	2218	3370	2870
10000	0808	1270	1350	80000	2616	3970	2570
12000	1008	1570	1350	90000	2418	3670	2870
15000	1010	1570	1650	90000	2816	4270	2570
15000	1208	1870	1350	100000	2618	3970	2870
18000	1408	2170	1350	100000	2818	4270	2870
20000	1210	1870	1650	110000	3018	4570	2870
23000	1410	2170	1650	120000	2820	4270	3170
25000	1212	1870	1950	120000	3218	4870	2870
28000	1610	2470	1650	130000	3020	4570	3170
30000	1412	2170	1970	140000	3220	4870	3170
35000	1612	2470	1970	150000	3222	4870	3470
35000	1414	2170	2270	160000	3224	4870	3770
40000	1614	2470	2270	170000	3424	5170	3770
40000	1812	2770	1970	180000	3426	5170	4070
45000	1616	2470	2570	200000	3626	5470	4070
45000	1814	2770	2270				



Modules of unit sections

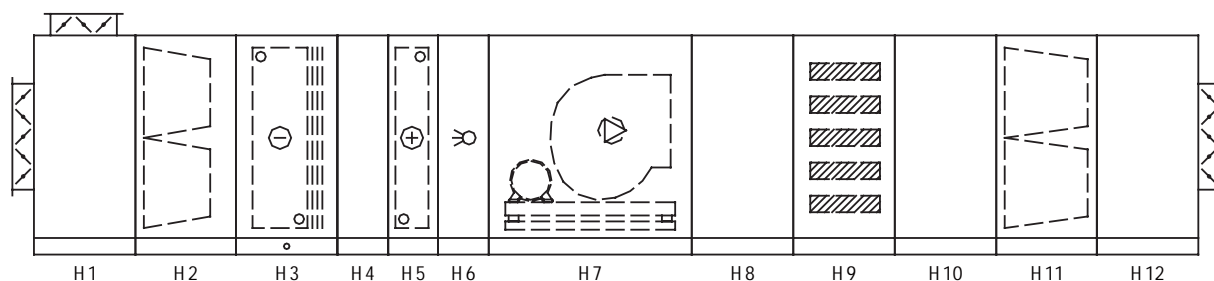


MAC	AIR FLOW m³/h	SECTION MODULUS (M)	L1 AIR MMXG	L2 PLATE PRE-FILTER	L3 BAO PRE-FILTER	L4 BAO MEDIUM FILTER	L5 COOLING	L6 BYPASS BOX	L7 HEATING	L8 STEAM HUMIDIFICATION	L9 WET FILM HUMIDIFICATION	L10 FAN	L11 FLOW EQUALIZATION	L12 MUFFLER	L13 SERVICE	L14 HIGH EFFICIENCY FILTER	L15 OUTLET
2.5	2500	0604	4	1	3	4	4	1	2	4	1	4	4	6	4	3	4
3.5	3500	0704	4	1	3	4	4	1	2	4	1	5	4	6	4	3	4
4	4000	0804	4	1	3	4	4	1	2	4	1	5	4	6	4	3	4
5	5000	0606	4	1	3	4	4	1	2	4	1	6	4	6	4	3	4
6	6000	0806	4	1	3	4	4	1	2	4	1	5	4	6	4	3	4
8	8000	0906	4	1	3	4	4	1	2	4	1	6	4	6	4	3	4
9	9000	1006	4	1	3	4	4	1	2	4	1	6	4	6	4	3	4
10	10000	0808	4	1	3	4	4	1	2	4	1	8	4	6	4	3	4
12	12000	1008	4	1	3	4	4	1	2	4	1	7	4	6	4	3	4
15	15000	1010	4	1	3	4	4	1	2	4	1	10	4	6	4	3	4
15	15000	1208	4	1	3	4	4	1	2	4	1	7	4	6	4	3	4
18	18000	1408	4	1	3	4	4	1	2	4	1	8	4	6	4	3	4
20	20000	1210	4	1	3	4	4	1	2	4	1	8	4	6	4	3	4
23	23000	1410	4	1	3	4	4	1	2	4	1	9	4	6	4	3	4
25	25000	1212	4	1	3	4	4	1	2	4	1	12	4	6	4	3	4
28	28000	1610	4	1	3	4	4	1	2	4	1	9	4	6	4	3	4
30	30000	1412	4	1	3	4	4	1	2	4	1	10	4	6	4	3	4
35	35000	1612	6	1	3	4	5	1	2	4	1	10	6	6	4	3	5
35	35000	1414	6	1	3	4	5	1	2	4	1	10	6	6	4	3	5
40	40000	1614	6	1	3	4	5	1	2	4	1	11	6	6	4	3	5
40	40000	1812	6	1	3	4	5	1	2	4	1	11	6	6	4	3	5
45	45000	1616	6	1	3	4	5	1	2	4	1	12	6	6	4	3	5
45	45000	1814	6	1	3	4	5	1	2	4	1	12	6	6	4	3	5
50	50000	1816	6	1	3	4	5	1	2	4	1	12	6	6	4	3	5
50	50000	2014	6	1	3	4	5	1	2	4	1	12	6	6	4	3	5
55	55000	2214	6	1	3	4	5	1	2	4	1	12	6	6	4	3	5
60	60000	2016	6	1	3	4	5	1	2	4	1	13	6	6	4	3	6
65	65000	2216	6	1	3	4	5	1	2	4	1	13	6	6	4	3	6
70	70000	2416	6	1	3	4	5	1	2	4	1	13	6	6	4	3	6
75	75000	2218	6	1	3	4	5	1	2	4	1	14	6	6	4	3	6
80	80000	2616	6	1	3	4	5	1	2	4	1	14	6	6	4	3	8
90	90000	2418	8	1	3	4	5	1	2	4	1	14	6	6	4	3	8
90	90000	2816	8	1	3	4	5	1	2	4	1	14	6	6	4	3	8
100	100000	2618	8	1	3	4	6	1	2	4	1	16	6	6	4	3	8
100	100000	3018	8	1	3	4	6	1	2	4	1	16	6	6	4	3	8
110	110000	3018	8	1	3	4	6	1	2	4	1	16	8	6	4	3	8
120	120000	2820	8	1	3	4	6	1	2	4	1	18	8	6	4	3	8
120	120000	3218	8	1	3	4	6	1	2	4	1	18	8	6	4	3	8
130	130000	3020	10	1	3	4	6	1	2	4	1	18	8	6	4	3	8
140	140000	3220	10	1	3	4	6	1	2	4	1	18	8	6	4	3	8
150	150000	3222	10	1	3	4	6	1	2	4	1	20	8	6	4	3	8
160	160000	3224	10	1	3	4	6	1	2	4	1	20	8	6	4	3	10
170	170000	3424	10	1	3	4	6	1	2	4	1	20	8	6	4	3	10
180	180000	3426	10	1	3	4	6	1	2	4	1	20	8	6	4	3	10
200	200000	3626	10	1	3	4	6	1	2	4	1	16	8	6	4	3	10

NOTE: 1. 25mm thickness panels up to MAC-40.



Weight of sections



MAC	AIR FLOW m³/h	SECTION MODULUS (M)	H1 AIR MIXING	H2			H3				H4 EMPTY BOX	H5 HEATING	H6 STEAM HUMIDIFICATION	WET FILM HUMIDIFICATION	H7 FAN	H8 FLOW EQUALIZATION	H9 MUFFLER	H10 SERVICE	H11 FILTER	H12 HIGH EFFICIENCY FILTER	H12 OUTLET
				PLATE PRE-FILTER	BAG PRE-FILTER	BAG MEDIUM FILTER	COOLING - ROW														
							2	4	6	8											
2.5	2500	0604	179	24	70	93	99	112	124	136	21	56	115	24	135	87	133	87	71	179	
3.5	3500	0704	193	28	80	106	113	128	142	156	24	64	124	27	180	99	152	99	81	193	
4	4000	0804	207	31	90	119	127	144	160	176	27	72	133	31	231	111	170	111	91	207	
5	5000	0606	193	28	78	104	113	132	150	168	23	66	121	27	191	95	146	95	80	193	
6	6000	0806	223	35	99	131	143	168	192	217	29	84	139	34	245	119	183	119	101	223	
8	8000	0906	238	39	109	144	158	186	214	241	32	93	148	38	305	131	202	131	112	238	
9	9000	1006	253	43	119	158	173	204	235	265	35	102	157	41	335	143	221	143	122	253	
10	10000	0808	239	39	108	143	160	192	225	257	31	96	145	38	319	127	197	127	111	239	
12	12000	1008	270	47	129	171	192	232	273	314	37	116	163	45	424	151	234	151	133	270	
15	15000	1010	288	52	139	184	210	261	312	363	39	130	169	49	478	159	248	159	144	288	
15	15000	1208	302	55	150	199	224	273	322	371	43	136	181	53	498	175	272	175	155	302	
18	18000	1408	334	63	171	227	256	313	370	427	49	156	199	60	622	199	309	199	177	334	
20	20000	1210	322	60	161	213	244	305	366	427	45	152	187	57	606	183	286	183	167	322	
23	23000	1410	356	69	183	242	278	349	421	492	51	174	205	65	745	207	324	207	190	356	
25	25000	1212	342	65	172	227	264	337	411	484	47	168	193	62	717	191	300	191	179	342	
28	28000	1610	390	77	205	270	312	394	475	557	57	197	223	73	839	346	362	230	213	390	
30	30000	1412	378	74	194	256	300	386	472	557	53	193	211	70	873	322	339	214	203	378	
35	35000	1612	573	83	217	286	396	494	592	690	59	217	229	78	981	358	377	238	227	493	
35	35000	1414	551	80	206	271	378	478	578	678	55	211	217	75	949	334	353	222	216	475	
40	40000	1614	601	89	229	302	422	536	651	765	61	237	235	84	1126	370	392	246	241	519	
40	40000	1812	621	92	240	316	438	548	658	769	65	241	247	87	1154	394	415	262	251	535	
45	45000	1616	628	95	242	318	448	579	710	840	63	257	241	89	1276	382	407	254	255	545	
45	45000	1814	650	99	253	333	466	595	723	852	67	263	253	92	1316	406	431	270	266	563	
50	50000	1816	680	105	266	350	495	642	788	935	69	286	258	98	1411	417	446	278	280	590	
50	50000	2014	700	108	276	364	511	653	796	939	73	290	270	101	1443	441	469	294	290	606	
55	55000	2214	750	118	300	395	555	712	869	1026	79	316	288	110	1571	477	508	318	315	650	
60	60000	2016	732	115	290	382	541	704	867	1031	75	314	276	107	1623	453	485	302	306	732	
65	65000	2216	783	125	315	414	587	767	946	1126	81	342	294	116	1765	489	524	326	332	783	
70	70000	2416	835	135	339	446	633	829	1025	1221	87	371	312	126	1906	525	564	350	358	835	
75	75000	2218	817	133	330	433	619	821	1023	1225	83	369	300	123	1962	501	541	334	349	817	
80	80000	2616	887	145	363	478	680	892	1104	1316	93	399	330	135	2142	561	603	374	384	1114	
90	90000	2418	1090	143	355	466	668	888	1108	1329	89	399	318	132	2118	537	580	358	376	1090	
90	90000	2816	1178	155	388	510	726	954	1183	1411	99	427	348	144	2289	597	642	398	410	1178	
100	100000	2618	1156	154	380	499	812	1050	1289	1528	95	429	336	142	2464	764	620	382	403	1156	
100	100000	2818	1221	164	405	532	866	1123	1380	1637	101	460	354	151	2632	812	659	406	430	1221	
110	110000	3018	1287	175	430	565	920	1195	1471	1746	107	490	372	161	2800	860	699	430	457	1287	
120	120000	2820	1265	173	422	554	906	1192	1477	1763	103	492	360	159	2983	828	677	414	450	1265	
120	120000	3218	1353	185	455	598	974	1268	1562	1856	113	520	390	171	3195	908	738	454	484	1353	
130	130000	3020	1592	184	448	588	963	1269	1575	1881	109	525	378	169	3171	876	717	438	478	1333	
140	140000	3220	1671	195	474	621	1019	1345	1672	1998	115	557	396	179	3358	923	756	461	506	1400	
150	150000	3222	1723	205	493	645	1063	1422	1781	2140	117	593	402	187	3757	939	775	469	528	1448	
160	160000	3224	1774	215	511	669	1108	1500	1891	2283	119	630	408	196	3924	955	793	477	550	1774	
170	170000	3424	1858	227	539	705	1168	1584	2001	2417	125	667	426	207	4140	1003	834	501	580	1858	
180	180000	3426	1911	237	559	730	1215	1666	2116	2567	127	705	432	215	4316	1019	852	509	603	1911	
200	200000	3626	1997	250	587	767	1277	1755	2232	2709	133	744	450	226	4006	1067	893	533	634	1997	

NOTE: 1. 25mm thickness panels up to MAC—40.



MOTOR POWER

kW

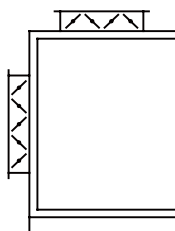
MAC	AIR FLOW m³/h	SECTION MODULUS (M)	ESP(Pa)			4-ROW			6-ROW			8-ROW		
			A	B	C	A	B	C	A	B	C	A	B	C
2.5	2500	0604	250	300	400	0.55	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.1
3.5	3500	0704	250	300	400	0.75	1.1	1.1	1.1	1.1	1.5	1.1	1.1	1.5
4	4000	0804	250	300	400	1.1	1.1	1.5	1.1	1.5	1.5	1.5	1.5	1.5
5	5000	0606	250	300	400	1.5	1.5	2.2	1.5	1.5	2.2	1.5	1.5	2.2
6	6000	0806	300	400	500	2.2	2.2	2.2	2.2	2.2	3.0	2.2	2.2	3.0
8	8000	0906	300	400	500	2.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0
9	9000	1006	300	400	500	3.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
10	10000	0808	300	400	500	3.0	3.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
12	12000	1008	300	400	500	4.0	4.0	5.5	4.0	4.0	5.5	4.0	5.5	5.5
15	15000	1010	300	400	500	4.0	4.0	5.5	4.0	4.0	5.5	4.0	5.5	5.5
15	15000	1208	300	400	500	4.0	4.0	5.5	4.0	4.0	5.5	4.0	5.5	5.5
18	18000	1408	300	400	500	4.0	5.5	5.5	4.0	5.5	5.5	5.5	5.5	7.5
20	20000	1210	300	400	500	5.5	5.5	7.5	5.5	5.5	7.5	5.5	7.5	7.5
23	23000	1410	300	400	500	5.5	7.5	7.5	5.5	7.5	7.5	7.5	7.5	7.5
25	25000	1212	300	400	500	5.5	7.5	7.5	5.5	7.5	7.5	7.5	7.5	7.5
28	28000	1610	400	500	600	7.5	11	11	11	11	11	11	11	11
30	30000	1412	400	500	600	7.5	11	11	11	11	11	11	11	11
35	35000	1612	400	500	700	11	11	15	11	11	15	11	11	15
35	35000	1414	400	500	700	11	11	15	11	11	15	11	11	15
40	40000	1614	400	500	700	11	15	15	11	15	18.5	15	15	18.5
40	40000	1812	400	500	700	11	15	15	11	15	18.5	15	15	18.5
45	45000	1616	400	500	700	11	15	18.5	15	15	18.5	15	15	22
45	45000	1814	400	500	700	11	15	18.5	15	15	18.5	15	15	22
50	50000	1816	400	500	700	15	15	18.5	15	18.5	22	15	18.5	22
50	50000	2014	400	500	700	15	15	18.5	15	18.5	22	15	18.5	22
55	55000	2214	400	600	900	18.5	18.5	30	18.5	22	30	18.5	22	30
60	60000	2016	400	600	900	18.5	22	30	18.5	22	30	18.5	30	30
65	65000	2216	400	600	900	18.5	22	30	18.5	22	30	18.5	30	30
70	70000	2416	400	600	900	22	30	45	22	30	45	30	30	45
75	75000	2218	400	600	900	22	30	45	22	30	45	30	30	45
80	80000	2616	400	600	900	22	30	45	22	30	45	30	30	45
90	90000	2418	500	700	900	30	37	45	30	45	45	30	45	55
90	90000	2816	500	700	900	30	37	45	30	45	45	30	45	55
100	100000	2618	500	700	900	30	37	60	37	45	55	37	45	55
100	100000	2818	500	700	900	30	37	60	37	45	55	37	45	55
110	110000	3018	500	700	900	37	45	60	37	45	55	37	55	55
120	120000	2820	500	700	900	37	55	55	45	55	55	45	55	55
120	120000	3218	500	700	900	37	55	55	45	55	60	45	55	55
130	130000	3020	500	700	900	45	55	55	45	55	75	55	55	75
140	140000	3220	500	700	900	55	55	75	55	55	75	55	55	75
150	150000	3222	500	700	900	55	55	75	55	55	75	55	55	90
160	160000	3224	500	700	900	55	55	90	55	55	90	55	74	90
170	170000	3424	500	700	900	55	75	90	55	75	90	55	90	110
180	180000	3426	500	700	900	55	75	90	55	75	90	55	90	110
200	200000	3626	500	700	900	74	90	90	74	90	110	74	90	110

NOTE: The datas are of the basic air handling unit (including filter ,cooling coil and fan) .



Section description

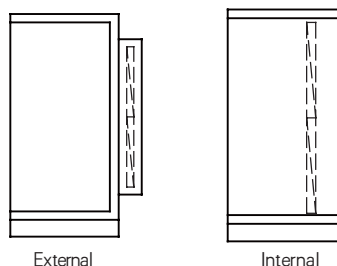
MIXTURE



- Dimidiate throttle: manually operation or electric control
- The location, dimension of throttle and length of mixture section can be custom-built

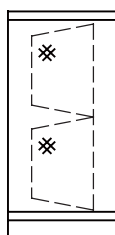
FILTRATION

1) Plate pre-filter



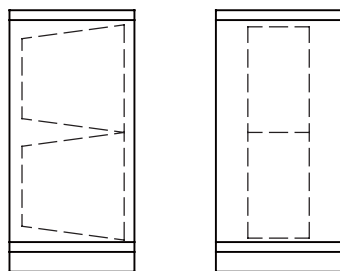
- External: Plate pre-filter is located on the air inlet outside the case.
- Internal: Type of installation options: mobile and fixed.
- The structure of filter is solid and reliable easy for maintenance.

2) Bag pre-filter



- The adoption of synthetic fibre has the ideal function of small resistance, large anti-dust capacity, long service life.
- The character of the interior space in reasonable size ensures the lowest cost. G3, G4 is optional.
- Type of installation options: mobile (side-pumping) and fixed.

3) Bag medium filter and high efficiency filter



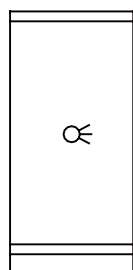
- Type of installation options: fixed.
- Filtration efficiency can meet different customers' requests.
- The configuration of filter guarantees the normal operation and durable life.

Main parameters of filter

Type	Material	Grade	Rate	Testing method	Beginning pressure(Pa)	End pressure(Pa)
Plate pre-filter	synthetic fibre	G3	≥80%	Weight method	30	90
Bag pre-filter	synthetic fibre	G3 G4	80-90% >90%	Weight method	50	150
Bag medium filter	synthetic fibre or glass fibre	F5 F6 F7 F8 F9	40-60% 60-80% 80-90% 90-95% ≥95%	Colorimetry	60	180
high efficiency filter	glass fibre	H10 H11 H13	85% 95% 99.95%	MPPS	250	450



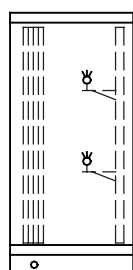
Humidification Section



Air flow

Type	Isothermal humidification			
	Dry-steam humidifier	Electrode humidifier	Electric heating	Steam-steam humidifier
Serviceable range	Non-purification system	All kinds of air conditioning system	All kinds of air conditioning system	All kinds of air conditioning system

Isothermal humidification



Air flow

Type	Isenthalpic humidification	
	high pressure atomizing humidifier	wet film humidifier
Serviceable range	Non-purification system	All kinds of air conditioning system

Isenthalpic process humidification

Parameters of steam-humidifier

model	15			20			40		50	
aperture	Φ2	Φ4	Φ6	Φ8	Φ9	Φ10	Φ12	Φ14	Φ16	Φ18
Steam pressure(MPa)	Max.humi.(kg/h)									
0.02	1	4	9	22	28	35	56	76	146	186
0.1	2.2	9	21	49	62	76	103	140	193	245
0.2	3.8	21	34	69	107	132	159	216	312	396
0.3	4.6	18	41	98	153	188	218	296	447	568
0.4	6.3	25	58	125	195	226	276	376	591	760

Parameters of high pressure atomizing humidifier

model	25	50	75	100	125	125	150	300	400	500
atomizing (kg/h)	25	50	75	100	125	125	150	300	400	500
Effective humidification (kg/h)	8-12	15-25	25-38	33-50	42-63	42-63	50-75	100-150	133-200	165-250
Qty. of muzzles	2	4	5	6	8	8	10	15	20	25
power	AC 220V/50Hz									
pressure	0.3-0.4							0.4-0.5		

**Parameters of wet film humidifier**

Sectional modulus (M)	Air flow m³/h	humidification (kg/h)			
		Thickness of humidifier (mm)			
		50 (air pressure drop 20Pa)	100 (air pressure drop 35Pa)	150 (air pressure drop 50Pa)	200 (air pressure drop 75Pa)
0604	2500	5.8	11.5	14.4	15.8
0704	3500	7.0	14.0	17.6	19.3
0804	4000	8.3	16.6	20.7	22.8
0606	5000	10.0	19.9	24.9	27.4
0806	6000	14.2	28.3	35.4	38.9
0906	8000	16.3	32.6	40.8	44.9
1006	9000	18.5	37.0	46.2	50.8
0808	10000	20.1	40.2	50.3	55.3
1008	12000	26.3	52.5	65.7	72.2
1010	15000	33.5	67.0	83.8	92.2
1208	15000	32.0	64.0	80.1	88.1
1408	18000	38.2	76.3	95.4	104.9
1210	20000	41.5	83.0	103.8	114.1
1410	23000	49.5	99.0	123.7	136.1
1212	25000	49.8	99.6	124.5	137.0
1610	28000	57.2	114.4	143.0	157.3
1412	30000	59.1	118.1	147.7	162.4
1612	35000	68.6	137.2	171.6	188.7
1414	35000	70.3	140.6	175.8	193.3
1614	40000	81.7	163.4	204.3	224.7
1812	40000	78.2	156.4	195.5	215.1
1616	45000	94.8	189.6	237.0	260.6
1814	45000	93.1	186.2	232.8	256.0
1816	50000	108.0	216.0	270.0	297.0
2014	50000	104.5	209.0	261.3	287.4
2214	55000	114.8	229.5	286.9	315.6
2016	60000	117.8	235.7	294.6	324.1
2216	65000	130.8	261.6	327.1	359.8
2416	70000	143.8	287.6	359.6	395.5
2218	75000	149.2	298.4	373.0	410.2
2616	80000	156.8	313.6	392.1	431.3
2418	90000	164.0	328.0	410.0	451.0
2816	90000	169.8	339.6	424.6	467.0
2618	100000	178.8	357.6	447.1	491.8
2818	100000	194.6	389.3	486.6	535.3
018	110000	209.5	418.9	523.7	576.0
2820	120000	218.6	437.2	546.5	601.2
3218	120000	223.3	446.6	558.2	614.0
3020	130000	235.2	470.5	588.1	646.9
3220	140000	251.9	503.8	629.7	692.7
3222	150000	279.5	559.0	698.7	768.6
3224	160000	307.1	614.2	767.7	844.5
3424	170000	327.4	654.8	818.5	900.3
3426	180000	356.8	713.6	892.0	981.2
3626	200000	378.9	757.8	947.3	1042.0



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