Perfection™ Series

Process Air Handling Unit

2000-200,000m³/h

CLIMAVENETA

The solutions

Each application, from traditional to specific sectors, is characterised by high comfort levels and strict plant requirements.

Optimal Configuration

Perfection Series AHU is the ultimate solution in air handling technology. A single and compact unit can respond to different requirements.

The optimized configuration is ensured by dedicated software Climaveneta AHU-Optimizer that computes and presents all the necessary data for optimal configuration.

Attention to detail

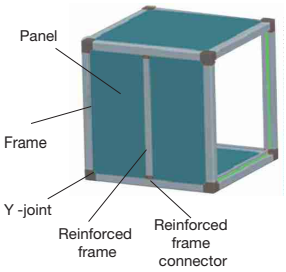
Each unit is designed in such a way so as to fit in each application.
Exceptional quality is built into every component, ensuring not only high efficiency but also exceptional versatility and reliability.

This contributes to extend the life cycle of the unit whilst reducing the maintenance costs.
As far as specific detail is concerned, the selection of the highest-quality components ensures reliability.

Unit Characteristic

Sturdy Casing

The frame of the casing is consisted of internal frame and surface external frame. They're made of high-strength aluminum alloy, with anodized treatment to resist corrosion. The internal and external frames are physical connected by dedicated thermal insulation materials which can avoid the cold bridge.
The PU foam is injected between the internal and external panels, with a thickness of 50mm.
Both internal and external panels are sprayed entirely which can prevent rust effectively.
The panel and frame are connected by external screws. It makes the unit with higher strength, more convenient to disassemble, and easier to maintain.
All corners on inner surface are in an arc which is smooth and flat.



Access Door

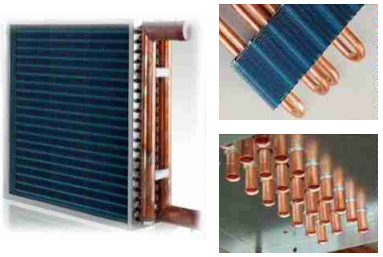
The access door is hinge type connected to the frame and non-cold bridge handles are installed. Elastic rubber seals are attached between the door and its frame to fully improve the thermal insulation performance and limit the air leakage.

Drain Pan

The gradient design on the drain pan for fast and fluent drainage.
The surface of the drain pan is sprayed entirely to prevent rust effectively.
Diverse materials also can be selected for the metal sheet of the drain pan.

Coil and Fins

The coil is made of seamless copper tubes and hydrophilic aluminum fins. All tubes are mechanically expanded to aluminum fins tightly to minimize thermal resistance.
The water flow direction inside tubes is opposite from the air flow direction, in order to improve the heat transfer efficiency from the water to the air.
The fins are designed and manufactured neatly and evenly without any cracks and burrs.

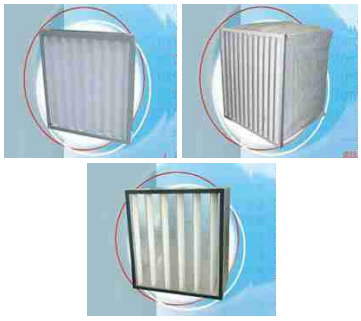


Fan and Motor

The fan is belt-drive type as standard configuration. Direct-dirve type is optional.
We insist on selecting the motor with high quality from well-known supplier.
The standard motor is three-phase asynchronous type, with IP55 protection and Class F insulation.
The vibration insulation between the motor base to the unit is by rubber pads or spring isolator.

Filter

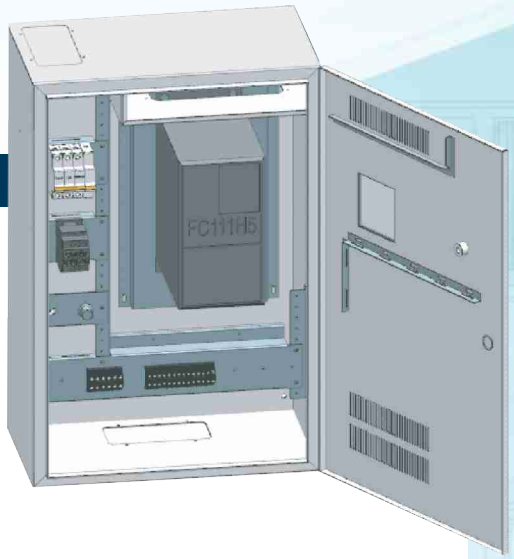
The panel type primary filter (G3/G4), pocket type secondary filter (M5/M6/F7/F8/F9), and EPA filter (E10/E11/E12) or HEPA filter (H13/H14) can be selected.
The use of fluffy multi-component materials, which can take into account dust holding and efficiency, has a cost-effective advantage.
A sealing strip between the filter and the frame is installed. The filter section is in compact structure, low air leakage and easy replacement.



Extensive Function

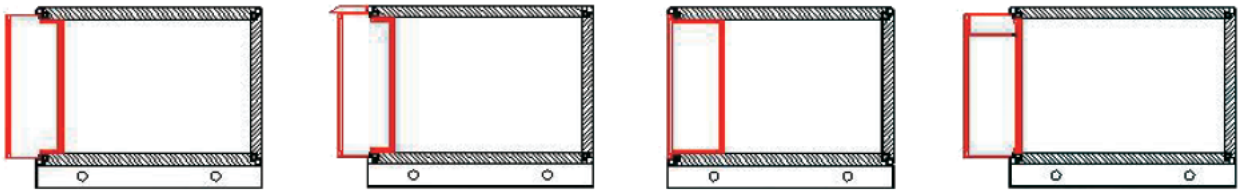
Filter: Available in pre-filter, pocket filter, high-efficiency filter, chemical filter, active carbon filter, electrostatic dust remover, plasma sterillization filter and etc.
Cooling/heating: Both copper tube aluminum fin type heating/cooling coil, steel tube steel fin type heating/cooling coil and electric heater can be selected.
Fan: Including belt-drive DIDW centrifugal fan, direct-drive centrifugal fan, plug-fan and so on.
Heat recovery kit: Heat wheel, counter flow plate-type heat exchanger and heat pipe are available
Humidifier: Wet-film, high-pressure micro mist, dry steam, electrode, electric heater type humidifier can be selected.
Attenuator: Baffle type, micro-perforated type, absorbent plate type, and impedance compound muffler are selectable.

Control Cabinets



The control cabinet is customized with a variety of control schemes. The cabinet is completed with an elegant appearance and reliable operation. The main electrical components are from internationally famous brands. Several installation modes can be selected according to the project request. In order to protect the safe and stable operation of the unit effectively, the control cabinet from CLIMAVENETA is one of your best choices.

Installation of Control Cabinet



Semi-embedded Installation (Recommended)

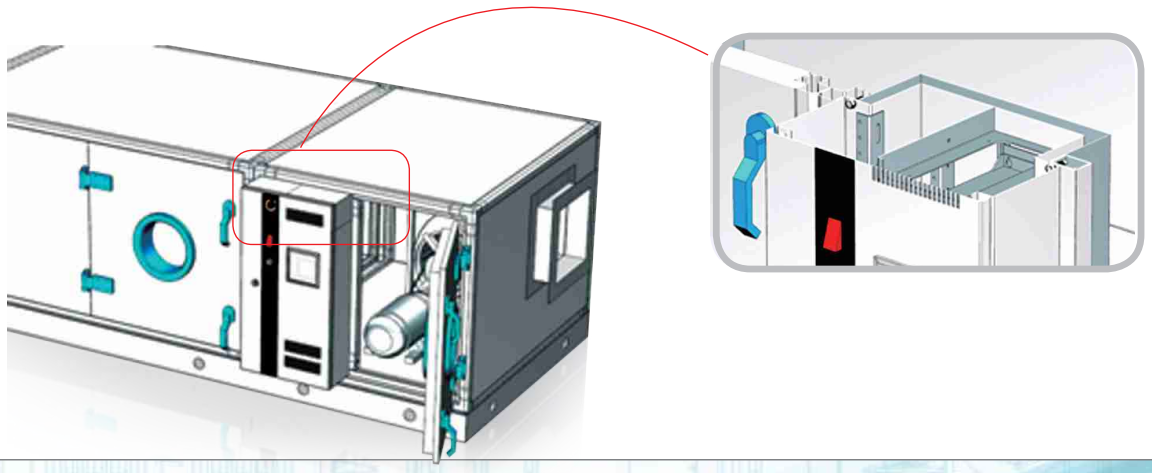
Outdoor Semi-embedded Installation

Embedded Installation

External Installation

Semi-embedded Installation

The semi-embedded installation for the integrated cabinet is recommended. It's safe and reliable. AHU dimension is still compact and the extra cost can be ignored.

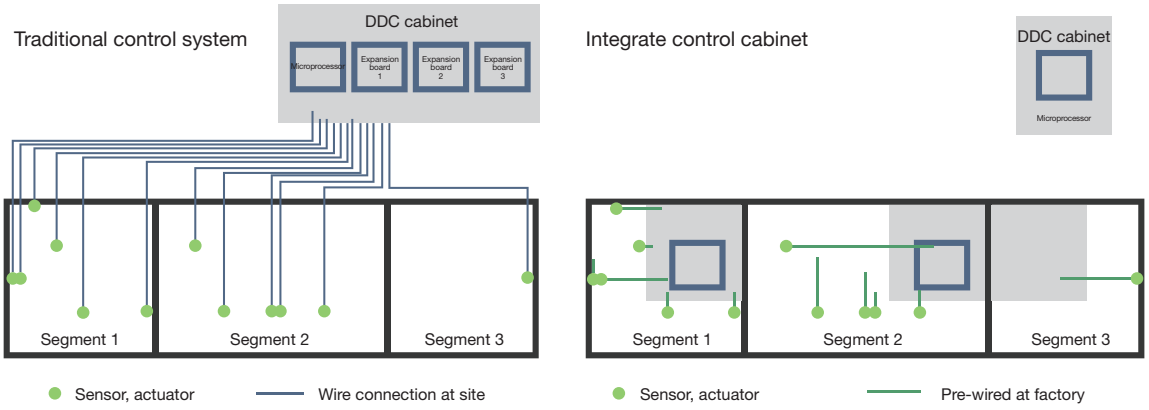


Integrated Cabinet of Power Supply and Control System (Semi-embedded type)

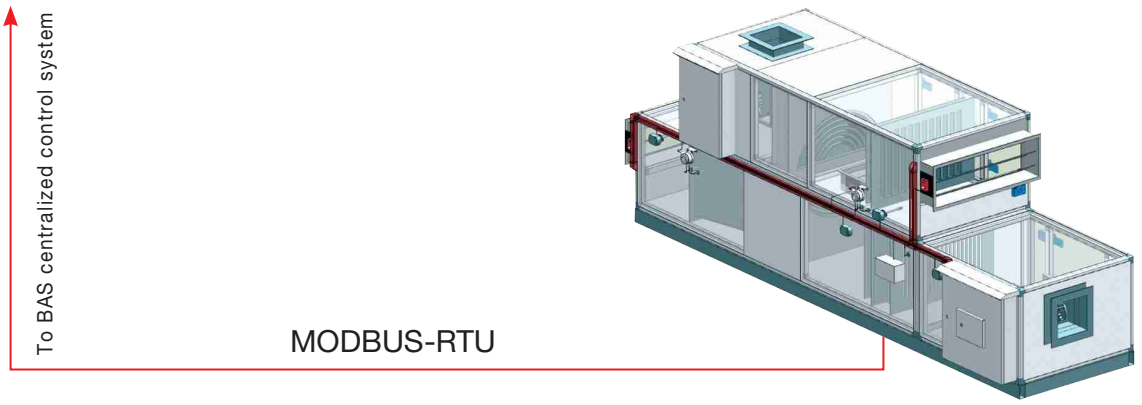
The CLIMAVENETA integrated cabinet (semi-embedded) has comprised the power supply and control components as well as an innovative integrated smart control system. The integrated cabinet is built-in air handling unit which will be delivered with AHU together. It controls the unit by segments which makes the control process more accurate, instead of by entire unit. The air handling unit with the integrated cabinet can operate regularly at site after power supply connection is done. The unit to be standardized products become reality even under different application requirements.

The integrated control cabinet (semi-embedded) is completed with all the functions of the traditional control system, and will bring additional benefits to the customer:

- Normally the contractor is under a heavy workload of massive sensors wiring connections at site. But for this integrated cabinet, all sensor wires are already pre-connected by the factory before delivery which saves certain time and labor work. Sensors are installed in the factory to ensure the best installation position for the stable and effective control of AHU.
- Ensure the perfect coordination between the AHU and the control system, to fulfill the best efficiency of AHU.
- Even AHU is delivered by segments. No connections to the control system are needed.
- The installation time will be shortened obviously at site.
- Flexible input/output (I/O) configuration.
- Test and commission of the unit and control system will be done in the factory, no need for T&C on-site.

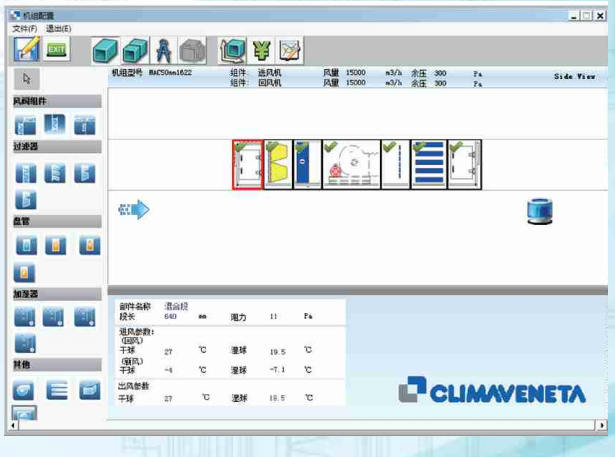


Connection to BMS/BAS



Selection Software

The "Perfection" series air conditioning unit adopts full computer calculation selection to achieve optimal configuration of unit performance and segment.



CLIMAVENETA AHU Optimizer

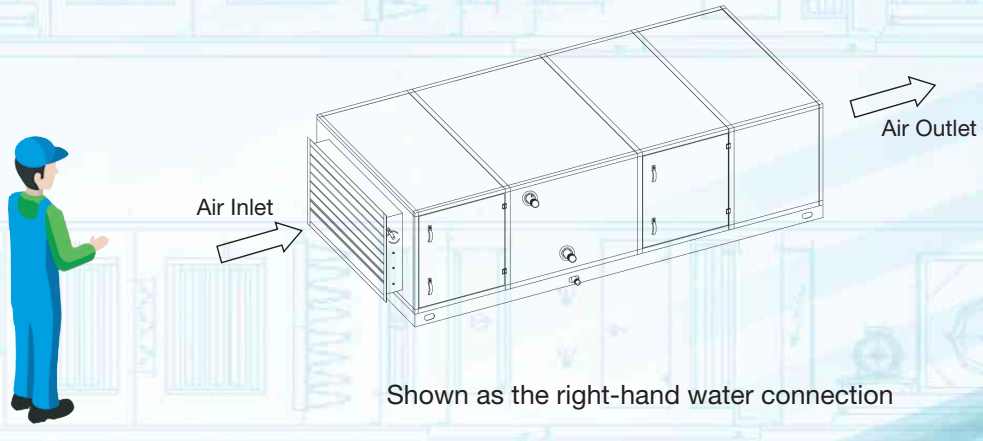
NOMENCLATURE

MAC	5	P	1013
1	2	3	4

1 - MAC: air handling unit
2 - Air flow(*1000 m^3/h)
3 - "Perfection" Series the thickness of casing : 50mm
4 - Unit modulus (height & width)

Connection type

The right-hand water connection is the water pipes coming from the right side while standing in front of the air inlet (as below diagram) . The left-hand water connection is water from the left side while standing in front of air inlet.



Shown as the right-hand water connection

Quick Selection

Model	Air Flow (m^3/h)	Modulus	Dimension		Air Flow(m^3/h)				
					Face Velocity(m/s)				
		H*W	Height H(mm)	Width W(mm)	2.00	2.25	2.50	2.75	3.00
MAC2	2000	0710	620	860	1509	1697	1886	2075	2263
MAC2.5	2500	0712	620	1020	1948	2191	2435	2678	2922
MAC3	3000	0812	700	1020	2272	2556	2840	3124	3408
MAC3.5	3500	0813	700	1100	2528	2844	3160	3476	3792
MAC4	4000	0913	780	1100	2890	3251	3612	3973	4334
MAC5	5000	1013	860	1100	3612	4063	4515	4966	5418
MAC6	6000	1015	860	1260	4343	4886	5429	5972	6515
MAC7	7000	1017	860	1420	4983	5606	6229	6852	7475
MAC8	8000	1217	1020	1420	5925	6666	7407	8147	8888
MAC10	10000	1417	1180	1420	7407	8332	9258	10184	11110
MAC12.5	12500	1420	1180	1660	9053	10184	11316	12447	13579
MAC15	15000	1622	1340	1820	11503	12941	14379	15817	17255
MAC18	18000	1822	1500	1820	13533	15225	16916	18608	20300
MAC20	20000	1824	1500	1980	14996	16871	18745	20620	22494
MAC23	23000	2024	1660	1980	16496	18558	20620	22682	24744
MAC25	25000	2026	1660	2140	18105	20368	22631	24895	27158
MAC28	28000	2226	1820	2140	20574	23146	25718	28289	30861
MAC30	30000	2228	1820	2300	22403	25203	28004	30804	33604
MAC33	33000	2230	1820	2460	24242	27273	30303	33333	36364
MAC35	35000	2430	1980	2460	26170	29441	32713	35984	39255
MAC38	38000	2432	1980	2620	28152	31671	35190	38709	42228
MAC41	41000	2632	2140	2620	30230	34009	37788	41566	45345
MAC45	45000	2634	2140	2780	32400	36450	40500	44550	48600
MAC48	48000	2636	2140	2940	34473	38782	43091	47400	51709
MAC52	52000	2836	2300	2940	38039	42794	47549	52304	57059
MAC55	55000	2838	2300	3100	40380	45427	50475	55522	60570
MAC59	59000	3038	2460	3100	42904	48267	53630	58993	64355
MAC62	62000	3040	2460	3260	45360	51030	56700	62370	68040
MAC66	66000	3338	2700	3100	47952	53946	59940	65934	71928
MAC70	70000	3340	2700	3260	50731	57072	63414	69755	76096
MAC74	74000	3342	2700	3420	53532	60224	66915	73607	80298
MAC77	77000	3640	2940	3260	56071	63080	70089	77098	84107
MAC81	81000	3642	2940	3420	59184	66582	73980	81378	88776
MAC85	85000	3644	2940	3580	61920	69660	77400	85140	92880
MAC90	90000	3649	2940	3980	66440	74745	83050	91355	99660
MAC95	95000	3849	3100	3980	69602	78303	87003	95703	104404
MAC100	100000	3852	3100	4220	74432	83736	93040	102344	111648
MAC120	120000	4355	3500	4460	88926	100041	111157	122273	133388
MAC140	140000	4758	3820	4700	103853	116834	129816	142798	155779
MAC160	160000	4766	3820	5340	120198	135222	150247	165272	180296
MAC180	180000	5166	4140	5340	131125	147515	163906	180297	196687
MAC200	200000	5570	4460	5660	150967	169838	188709	207580	226451

Remarks:
The height in this table does not include the height of the unit base. Base height 100mm for model below MAC90; Base height 150mm for model MAC90 (included) and above;
Height H= height modulus * 80 + 60 mm + base height;
Width W= width modulus * 80 + 60mm.

Performance Data (Cooling, Return Air)

Model	Modulus	Air Flow (m^3/h)	4-row				6-row				8-row			
			Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit	Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit	Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit
MAC2	0710	2000	9.1	0.44	3.1	HF	12.8	0.61	8.1	HF	15.2	0.73	14.5	HF
MAC2.5	0712	2500	12.5	0.60	6.4	HF	16.9	0.81	16.0	HF	19.8	0.95	27.7	HF
MAC3	0812	3000	14.8	0.71	6.8	HF	20.1	0.96	16.9	HF	23.7	1.13	28.6	HF
MAC3.5	0813	3500	17.4	0.83	9.8	HF	23.6	1.13	24.1	HF	27.7	1.32	40.8	HF
MAC4	0913	4000	19.9	0.95	10.0	HF	27.0	1.29	23.6	HF	31.8	1.52	41.2	HF
MAC5	1013	5000	24.9	1.19	10.5	HF	33.8	1.61	24.1	HF	39.7	1.90	41.9	HF
MAC6	1015	6000	30.8	1.47	17.1	HF	41.3	1.97	38.8	HF	48.2	2.30	66.8	HF
MAC7	1017	7000	37.1	1.77	24.0	HF	49.2	2.35	58.0	HF	53.1	2.54	14.0	FL
MAC8	1217	8000	43.1	2.06	26.0	HF	56.9	2.72	56.7	HF	61.3	2.93	15.4	FL
MAC10	1417	10000	54.9	2.62	22.1	HF	71.9	3.43	40.9	HF	77.8	3.72	13.4	FL
MAC12.5	1420	12500	69.3	3.31	45.2	HF	83.0	3.97	17.3	FL	98.2	4.69	26.7	FL
MAC15	1622	15000	86.4	4.13	59.7	HF	103.3	4.94	23.2	FL	121.1	5.78	35.6	FL
MAC18	1822	18000	103.0	4.92	56.0	HF	123.3	5.89	21.2	FL	144.7	6.91	32.7	FL
MAC20	1824	20000	115.9	5.54	74.9	HF	139.1	6.65	25.9	FL	162.5	7.76	43.4	FL
MAC23	2024	23000	131.1	6.27	79.5	HF	157.9	7.54	28.2	FL	185.0	8.84	47.2	FL
MAC25	2026	25000	129.8	6.20	15.5	FL	174.5	8.34	36.0	FL	203.4	9.72	59.9	FL
MAC28	2226	28000	146.2	6.98	16.1	FL	196.2	9.37	36.8	FL	228.7	10.93	60.8	FL
MAC30	2228	30000	160.3	7.66	20.0	FL	213.6	10.21	45.5	FL	247.5	11.83	74.7	FL
MAC33	2230	33000	179.8	8.59	20.8	FL	235.0	11.23	47.8	FL	272.3	13.01	79.2	FL
MAC35	2430	35000	189.7	9.06	21.3	FL	251.4	12.01	49.9	FL	290.5	13.88	83.3	FL
MAC38	2432	38000	210.1	10.04	24.8	FL	272.9	13.04	56.9	FL	315.4	15.07	89.1	FL
MAC41	2632	41000	226.7	10.83	28.1	FL	294.5	14.07	64.4	FL	336.9	16.10	17.2	DB
MAC45	2634	45000	248.8	11.89	32.4	FL	323.2	15.44	74.2	FL	366.1	17.49	19.6	DB
MAC48	2636	48000	265.4	12.68	36.2	FL	344.8	16.47	83.1	FL	386.6	18.47	21.8	DB
MAC52	2836	52000	287.5	13.74	41.2	FL	373.5	17.85	29.2	DB	414.6	19.81	24.5	DB
MAC55	2838	55000	308.9	14.76	46.1	FL	383.1	18.30	36.1	DB	435.2	20.79	27.0	DB
MAC59	3038	59000	331.4	15.83	49.4	FL	411.0	19.64	38.7	DB	466.9	22.31	30.4	DB
MAC62	3040	62000	348.2	16.64	51.9	FL	431.9	20.63	40.7	DB	490.6	23.44	33.6	DB
MAC66	3338	66000	370.7	17.71	55.3	FL	459.7	21.96	43.3	DB	522.2	24.95	37.5	DB
MAC70	3340	70000	394.6	18.85	57.6	FL	487.6	23.30	46.0	DB	553.9	26.46	41.8	DB
MAC74	3342	74000	417.1	19.93	60.9	FL	515.4	24.63	51.0	DB	585.5	27.98	46.4	DB
MAC77	3640	77000	434.1	20.74	63.4	FL	536.3	25.63	55.7	DB	609.3	29.11	50.7	DB
MAC81	3642	81000	456.6	21.82	66.7	FL	564.2	26.96	61.6	DB	640.9	30.62	56.0	DB
MAC85	3644	85000	479.2	22.89	69.9	FL	592.1	28.29	67.8	DB	672.6	32.13	61.7	DB
MAC90	3649	90000	507.3	24.24	86.4	HF	623.2	29.78	30.2	FL	728.4	34.80	50.7	FL
MAC95	3849	95000	535.5	25.59	89.5	HF	657.8	31.43	33.2	FL	768.9	36.74	56.1	FL
MAC100	3852	100000	543.6	25.97	15.8	FL	701.0	33.49	35.6	FL	816.4	39.01	60.8	FL
MAC120	4355	120000	638.0	30.48	20.0	FL	851.2	40.67	42.0	FL	988.0	47.20	70.0	FL
MAC140	4758	140000	747.6	35.72	21.3	FL	995.4	47.56	49.6	FL	1153.8	55.13	82.7	FL
MAC160	4766	160000	886.8	42.37	31.5	FL	1099.2	52.52	25.8	DB	1249.2	59.68	22.5	DB
MAC180	5166	180000	986.5	47.13	33.1	FL	1225.3	58.54	27.6	DB	1395.1	66.66	24.4	DB
MAC200	5570	200000	1116.70	53.35	38.9	FL	1387.8	66.31	32.6	DB	1576.3	75.31	29.1	DB

Remarks:
1. Return air condition: air inlet 27 °C DB/19.5°C WB, chilled water inlet/outlet temp.7°C/12°C;
2. The coil is copper tube aluminum fin type of 10FPI, 8~14FPI is optional;
3. HF: half-loop; FL: full-loop; DB: double-loop

Performance Data (Cooling,Fresh Air)

Model	Modulus	Air Flow (m^3/h)	4-row				6-row				8-row			
			Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit	Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit	Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit
MAC2	0710	2000	23.0	1.10	17.0	HF	29.9	1.43	38.8	HF	34.0	1.63	63.3	HF
MAC2.5	0712	2500	30.5	1.46	33.0	HF	38.7	1.85	72,4	HF	41.3	1.97	18.9	FL
MAC3	0812	3000	36.2	1.73	34.8	HF	46.1	2.20	76.7	HF	49.3	2.36	18.3	FL
MAC3.5	0813	3500	42.2	2.01	49.2	HF	49.7	2.38	18.5	FL	57.6	2.75	25.9	FL
MAC4	0913	4000	48.2	2.30	50.5	HF	56.9	2.72	16.5	FL	65.9	3.15	26.7	FL
MAC5	1013	5000	60.3	2.88	53.3	HF	71.1	3.40	18.1	FL	82.4	3.94	27.5	FL
MAC6	1015	6000	65.2	3.12	13.0	FL	87.0	4.15	28.6	FL	100.1	4.78	40.1	FL
MAC7	1017	7000	78.9	3.77	16.6	FL	103.6	4.95	37.3	FL	118.4	5.66	60.2	FL
MAC8	1217	8000	91.5	4.37	17.5	FL	119.7	5.72	40.2	FL	136.1	6.50	58.9	FL
MAC10	1417	10000	114.1	5.45	19.2	FL	149.7	7.15	42.4	FL	170.6	8.15	63.5	FL
MAC12.5	1420	12500	147.2	7.03	42.1	FL	190.1	9.08	62.0	FL	202.2	9.66	19.6	DB
MAC15	1622	15000	181.9	8.69	32.6	FL	233.4	11.15	80.2	FL	264.9	12.65	21.3	DB
MAC18	1822	18000	218.8	10.46	41.2	FL	266.7	12.74	34.9	DB	297.5	14.22	31.1	DB
MAC20	1824	20000	246.5	11.78	54.4	FL	299.8	14.32	45.5	DB	333.9	15.96	40.3	DB
MAC23	2024	23000	278.9	13.33	59.8	FL	340.6	16.27	51.7	DB	380.5	18.18	47.0	DB
MAC25	2026	25000	307.9	14.71	75.7	FL	375.1	17.92	64.7	DB	418.2	19.98	58.3	DB
MAC28	2226	28000	346.8	16.57	79.2	FL	421.7	20.15	72.4	DB	468.4	22.38	65.8	DB
MAC30	2228	30000	377.5	18.04	83.4	FL	457.8	21.87	84.7	DB	451.7	21.58	72.5	DB
MAC33	2230	33000	415.3	19.84	87.2	FL	503.5	24.06	88.5	DB	496.8	23.74	75.8	DB
MAC35	2430	35000	444.2	21.23	79.5	FL	534.0	25.52	76.4	DB	526.9	25.18	62.8	DB
MAC38	2432	38000	482.3	23.04	86.3	FL	579.8	27.70	82.9	DB	572.1	27.33	68.2	DB
MAC41	2632	41000	520.4	24.86	93.1	FL	625.6	29.89	89.5	DB	617.3	29.49	73.6	DB
MAC45	2634	45000	528.1*	18.02	74.1	FL	648.3*	22.12	57.0	DB	739.7*	29.45	64.9	DB
MAC48	2636	48000	563.3*	19.22	79.1	FL	691.5*	23.60	60.8	DB	789.1*	31.42	69.3	DB
MAC52	2836	52000	610.2*	20.82	79.7	FL	749.1*	25.56	61.3	DB	854.7*	34.03	69.9	DB
MAC55	2838	55000	645.5*	20.56	83.3	FL	792.4*	25.24	64.1	DB	904.1*	36.00	61.7	DB
MAC59	3038	59000	692.4*	22.05	84.9	FL	850.1*	27.08	66.0	DB	969.8*	33.10	55.6	DB
MAC62	3040	62000	727.6*	23.18	84.7	FL	893.2*	28.45	66.6	DB	1019.1*	34.78	57.2	DB
MAC66	3338	66000	774.6*	24.67	85.7	FL	950.8*	30.29	68.1	DB	1084.9*	36.99	59.7	DB
MAC70	3340	70000	806.8*	24.09	87.4	FL	993.2*	29.66	71.6	DB	1120.5*	33.46	61.3	DB
MAC74	3342	74000	852.9*	25.47	89.6	FL	1049.9*	31.35	73.4	DB	1184.5*	35.37	62.8	DB
MAC77	3640	77000	887.4*	26.50	90.4	FL	1092.5*	32.61	74.0	DB	1232.5*	36.80	63.4	DB
MAC81	3642	81000	933.5*	27.88	92.3	FL	1149.2*	34.32	75.6	DB	1296.5*	38.72	64.7	DB
MAC85	3644	85000	979.6*	29.25	93.9	FL	1206.1*	36.02	77.0	DB	1360.6*	40.63	65.8	DB
MAC90	3649	90000	1114.6	53.23	63.6	FL	1355.8	64.77	54.0	DB	1510.0	72.15	48.4	DB
MAC95	3849	95000	1176.5	56.19	67.1	FL	1431.1	68.37	57.0	DB	1593.9	76.15	51.1	DB
MAC100	3852	100000	1238.4	59.15	77.0	FL	1506.4	71.97	65.6	DB	1677.8	80.16	58.9	DB
MAC120	4355	120000	1504.0	71.86	87.1	FL	1825.0	72.66	71.8	DB	2030.0	96.99	62.6	DB
MAC140	4758	140000	1681.8*	66.96	66.7	FL	2132.4	101.88	80.9	DB	2371.2	113.29	68.8	DB
MAC160	4766	160000	1898.1*	64.78	67.8	FL	2407.5*	95.86	77.8	DB	2683.6	106.85	66.4	DB
MAC180	5166	180000	2111.0*	72.04	71.4	FL	2686.5*	106.96	83.4	DB	3000.3*	119.46	72.1	DB
MAC200	5570	200000	2396.0*	81.77	83.6	FL	2928.0*	99.92	69.4	DB	3374.0*	134.34	85.8	DB

Remarks:

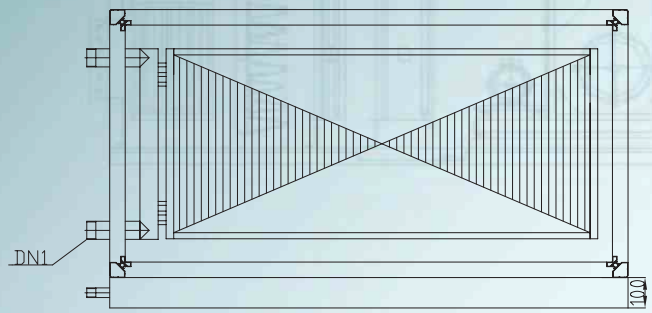
1. Fresh air condition: air inlet 35 °C DB/28°C WB; chilled water inlet/outlet temp.7°C/12°C;
2. The coil is copper tube aluminum fin type of 10FPI. 8~14FPI is optional;
3. * In order to control water pressure drop, the water temp. difference will be higher than 5°C;
4. HF: half-loop; FL: full-loop; DB: double-loop

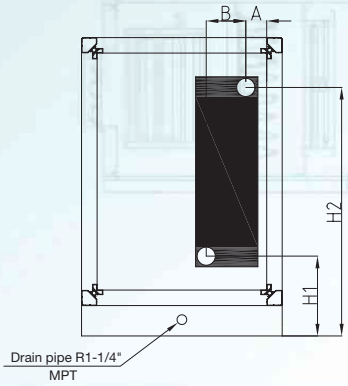
Performance Data (Heating)

Model	Modulus	Air Flow (m^3/h)	2-row (return air)				2-row (fresh air)			
			Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit	Total Cooling Capacity kW	Water Flow l/s	Water Pressure Drop kPa	Water Circuit
MAC2	0710	2000	12.2	0.29	0.8	HF	15.4	0.37	1.2	HF
MAC2.5	0712	2500	16.3	0.39	1.5	HF	20.3	0.49	2.2	HF
MAC3	0812	3000	19.3	0.46	1.6	HF	24.1	0.58	2.4	HF
MAC3.5	0813	3500	22.5	0.54	2.2	HF	28.1	0.67	3.3	HF
MAC4	0913	4000	25.7	0.61	2.3	HF	32.1	0.77	3.5	HF
MAC5	1013	5000	32.2	0.77	3.5	HF	40.1	0.96	3.8	HF
MAC6	1015	6000	39.2	0.94	3.9	HF	48.7	1.16	5.9	HF
MAC7	1017	7000	46.7	1.12	5.9	HF	57.8	1.38	8.8	HF
MAC8	1217	8000	54.1	1.29	6.0	HF	67.0	1.60	8.9	HF
MAC10	1417	10000	67.6	1.61	6.8	HF	83.8	2.00	10.2	HF
MAC12.5	1420	12500	85.6	2.05	11.6	HF	105.8	2.53	17.2	HF
MAC15	1622	15000	105.9	2.53	15.6	HF	130.7	3.12	23.1	HF
MAC18	1822	18000	126.2	3.01	18.1	HF	155.7	3.72	26.8	HF
MAC20	1824	20000	141.3	3.38	23.3	HF	174.1	4.16	34.5	HF
MAC23	2024	23000	160.0	3.82	26.7	HF	197.1	4.71	39.6	HF
MAC25	2026	25000	175.7	4.20	33.0	HF	216.3	5.17	48.9	HF
MAC28	2226	28000	197.8	4.73	36.5	HF	243.5	5.82	54.2	HF
MAC30	2228	30000	214.4	5.12	43.9	HF	263.7	6.30	65.0	HF
MAC33	2230	33000	231.1	5.52	48.3	HF	284.3	6.79	71.5	HF
MAC35	2430	35000	239.5	5.72	12.1	FL	301.5	7.20	18.2	FL
MAC38	2432	38000	260.0	6.21	13.7	FL	327.3	7.82	20.7	FL
MAC41	2632	41000	280.6	6.70	15.6	FL	353.2	8.44	23.5	FL
MAC45	2634	45000	307.9	7.36	17.9	FL	387.6	9.26	27.1	FL
MAC48	2636	48000	328.5	7.85	20.1	FL	413.5	9.88	30.3	FL
MAC52	2836	52000	355.8	8.50	22.8	FL	447.9	10.70	34.5	FL
MAC55	2838	55000	384.2	9.18	27.0	FL	473.4	11.31	40.5	FL
MAC59	3038	59000	412.1	9.85	29.0	FL	507.8	12.13	43.4	FL
MAC62	3040	62000	433.1	10.35	30.5	FL	533.7	12.75	45.7	FL
MAC66	3338	66000	461.0	11.01	32.4	FL	568.1	13.57	48.6	FL
MAC70	3340	70000	489.0	11.68	34.4	FL	602.4	14.39	51.5	FL
MAC74	3342	74000	506.6	12.10	36.4	FL	624.1	14.91	54.5	FL
MAC77	3640	77000	516.6	12.34	37.9	FL	636.4	15.20	56.7	FL
MAC81	3642	81000	532.6	12.72	39.8	FL	656.1	15.67	59.6	FL
MAC85	3644	85000	547.7	13.08	41.8	FL	674.7	16.12	62.6	FL
MAC90	3649	90000	608.0	14.52	28.7	HF	748.7	17.89	42.7	HF
MAC95	3849	95000	641.8	15.33	30.3	HF	790.3	18.88	45.1	HF
MAC100	3852	100000	706.00	16.87	33.5	HF	869.2	20.76	49.5	HF
MAC120	4355	120000	852.6	20.37	22.5	HF	1047.0	25.01	32.8	HF
MAC140	4758	140000	1001.0	23.91	40.0	HF	1227.0	29.31	58.9	HF
MAC160	4766	160000	1157.7	27.66	56.5	FL	1371.9	32.77	33.0	FL
MAC180	5166	180000	1230.0	29.38	24.6	FL	1524.0	36.41	37.0	FL
MAC200	5570	200000	1347.1	32.18	30.5	FL	1666.7	39.82	45.9	FL

Remarks:
1. Heating: Return air condition: air inlet 15°C DB; Fresh air condition: air inlet 7°C DB; Water inlet/outlet temp.60°C/50°C
2. The coil is copper tube aluminum fin type of 10FPI. 8~14FPI is optional;
3. HF: half-loop; FL: full-loop

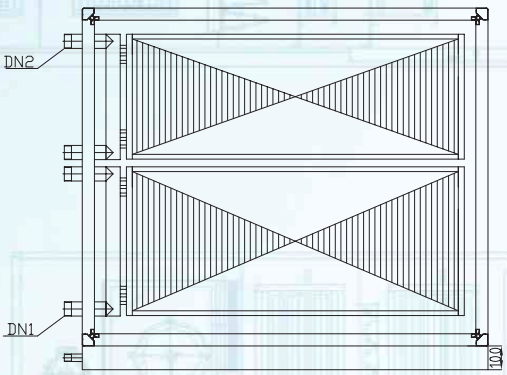
Single Coil Dimension

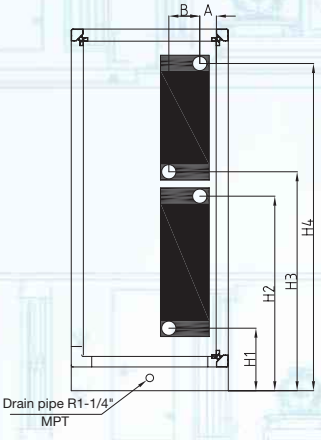




Model	Row	A	B	DN1	H1	H2	Model	Row	A	B	DN1	H1	H2
MAC2 MAC2.5	01	95	65	φ48	255	619.5	MAC3 MAC3.5	01	95	65	φ48	255	620
	02	95	65					02	95	65			
	04	112	82.5					04	112	82.5			
	06	97	137.5					06	97	137.5			
	08	97	192.5					08	97	192.5			
MAC4	01	95	65	φ48	255	683	MAC5 MAC6 MAC7	01	95	65	φ48	255	810
	02	95	65					02	95	65			
	04	112	82.5	φ60	261	677		04	112	82.5	φ60	261	804
	06	97	137.5					06	97	137.5			
	08	97	192.5					08	97	192.5			
MAC8	01	95	65	φ48	255	937	MAC10 MAC12.5	01	95	65	φ48	255	1128
	02	95	65					02	95	65			
	04	112	82.5	φ76	269	923		04	112	82.5	φ76	269	1114
	06	97	137.5					06	97	137.5			
	08	97	192.5					08	97	192.5			
MAC15	01	95	65	φ48	255	1255	MAC18 MAC20	01	95	65	φ48	255	1445
	02	95	65					02	95	65			
	04	112	82.5	φ89	275.5	1234		04	112	82.5	φ89	275.5	1425
	06	97	137.5					06	97	137.5			
	08	97	192.5					08	97	192.5			
MAC23 MAC25	01	95	65	φ48	255	1572	MAC28 MAC30 MAC33	01	95	65	φ48	255	1763
	02	95	65					02	95	65			
	04	112	82.5	φ89	275.5	1552		04	112	82.5	φ89	275.5	1742
	06	97	137.5					06	97	137.5			
	08	97	192.5					08	97	192.5			

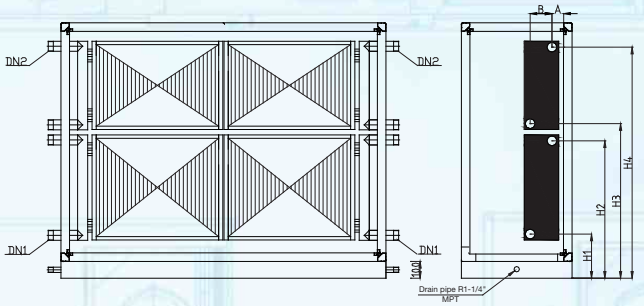
Double Coil Dimension





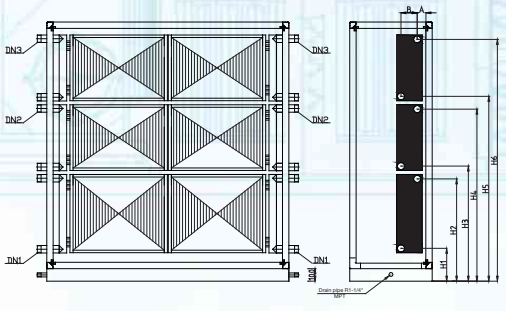
Model	Row	A	B	DN1	DN2	H1	H2	H3	H4	Model	Row	A	B	DN1	DN2	H1	H2	H3	H4
MAC66 MAC70 MAC74	01	95	65	Φ48	Φ48	255	1127.5	1247.5	1929.5	MAC41	01	95	65	Φ48	Φ48	255	175	295	215
	02	95	65								02	95	65						
	04	112	82.5	Φ89	Φ89	275.5	1107	1268	1909	MAC45 MAC48	04	112	82.5	Φ89	Φ89	275.5	1107	1268	2036
	06	97	137.5								06	97	137.5						
	08	97	192.5								08	97	192.5						
MAC50 MAC55	01	95	65	Φ48	Φ48	255	1254.5	1374.5	2247	MAC60 MAC63	01	95	65	Φ48	Φ48	255	1254.5	1374.5	2374
	02	95	65								02	95	65						
	04	112	82.5	Φ89	Φ89	275.5	1234	1395	2226.5		04	112	82.5	Φ89	Φ89	275.5	1234	1395	2354
	06	97	137.5								06	97	137.5						
	08	97	192.5								08	97	192.5						
MAC70	01	95	65	Φ60	Φ60	261	1375.5	1507.5	2622	MAC77 MAC81 MAC85	01	95	65	Φ60	Φ60	261	1502.5	1634.5	2876
	02	95	65								02	95	65						
	04	112	82.5	Φ89	Φ89	275.5	1361	1522	2607.5		04	112	82.5	Φ89	Φ89	275.5	1488	1649	2862
	06	97	137.5								06	97	137.5						
	08	97	192.5								08	97	192.5						

Quadra Coil Dimension



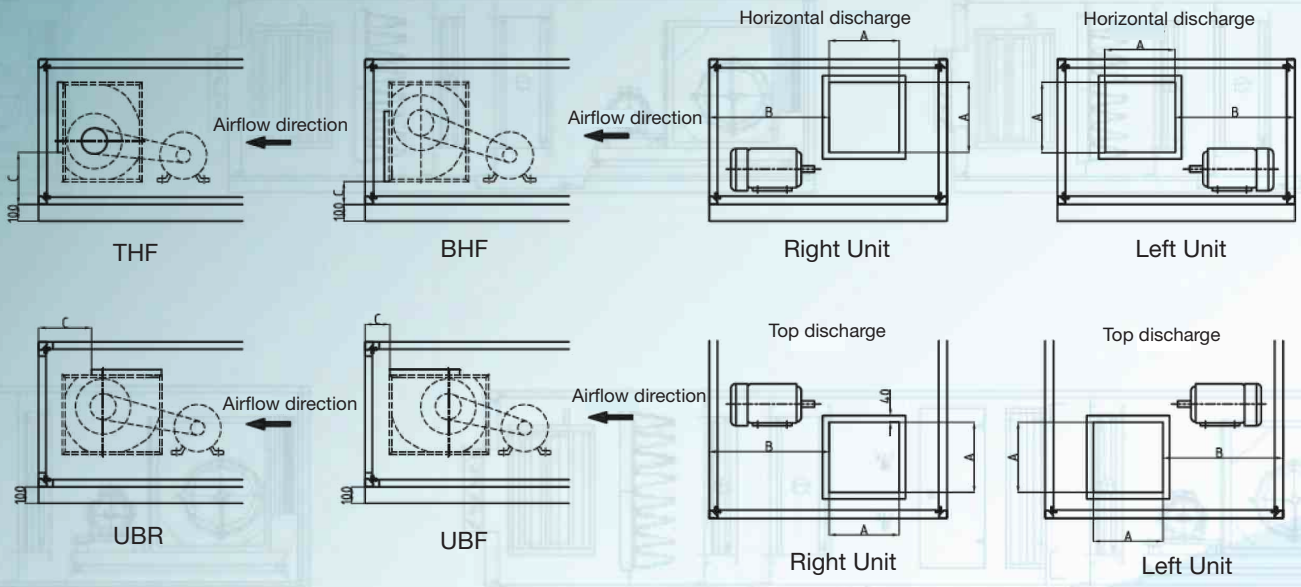
Model	Row	A	B	DN1	DN2	H1	H2	H3	H4
MAC 090	01	95	65	Φ48	Φ48	305	1558.5	1678.5	2932
	02	95	65						
	04	112	82.5	Φ89	Φ89	326	1538.5	1699.5	2912
	06	97	137.5						
	08	97	192.5						
MAC95 MAC100	01	95	65	Φ48	Φ48	305	1622	1742	3059
	02	95	65						
	04	112	82.5	Φ89	Φ89	326	1602	1763	3039
	06	97	137.5						
	08	97	192.5						

Hexa Coil Dimension



Model	Row	A	B	DN1	DN2	DN3	H1	H2	H3	H4	H5	H6
MAC 120	01	95	65	Φ48	Φ48	Φ48	305	1431.5	1551.5	2678	2798	3480
	02	95	65									
	04	112	82.5	Φ89	Φ89	Φ89	326	1411.5	1572.5	2658	2819	3460
	06	97	137.5									
	08	97	192.5									
MAC 140 MAC 160	01	95	65	Φ48	Φ48	Φ48	305	1431.5	1551.5	2678	2798	3797.5
	02	95	65									
	04	112	82.5	Φ89	Φ89	Φ89	326	1411.5	1572.5	2658	2819	3778
	06	97	137.5									
	08	97	192.5									
MAC 180	01	95	65	Φ48	Φ48	Φ48	305	1495	1615	2805	2925	4115
	02	95	65									
	04	112	82.5	Φ89	Φ89	Φ89	326	1475	1636	2785	2946	4095
	06	97	137.5									
	08	97	192.5									
MAC 200	01	95	65	Φ48	Φ48	Φ48	305	1622	1742	3059	3179	4432.5
	02	95	65									
	04	112	82.5	Φ89	Φ89	Φ89	326	1602	1763	3039	3200	4413
	06	97	137.5									
	08	97	192.5									

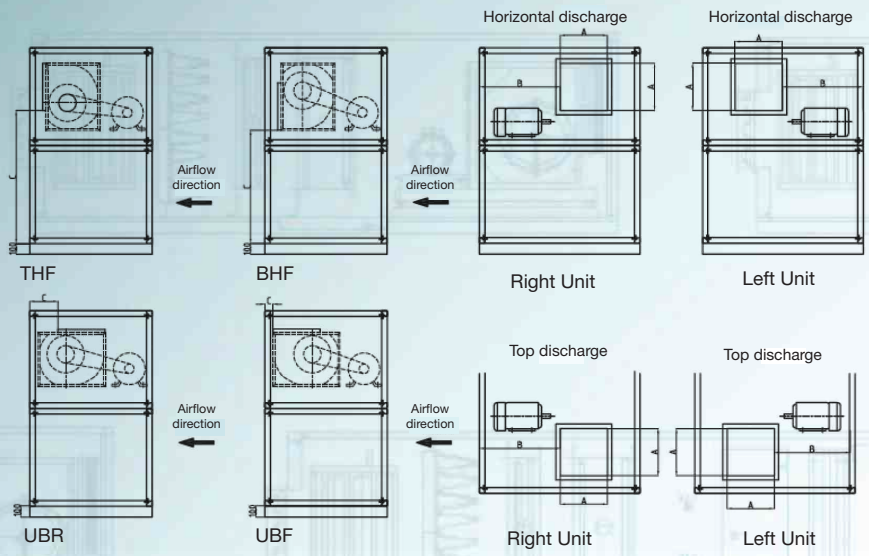
Horizontal Unit Air Outlet Dimension



Model	Modulus	Fan Model	A	B	C			
					THF	BHF	UBF	UBR
MAC2	0710	160	206	483	272	185	141	259
	0710	180	230	459	266	166	141	226
MAC2.5	0712	180	230	529	266	166	141	226
	0712	200	257	502	273	166	141	261
MAC3	0812	180	230	449	266	166	141	226
	0812	200	257	502	273	166	141	261
MAC3.5	0813	200	257	602	283	176	141	261
	0813	225	289	582	295	176	141	236
MAC4	0913	225	289	582	295	176	141	236
	0913	250	323	548	308	176	111	253
MAC5	1013	250	323	548	308	176	111	253
	1013	280	362	509	323	177	111	242
MAC6	1015	280	362	669	308	176	111	253
	1015	315	405	626	323	177	111	242
MAC7	1017	280	362	789	323	177	111	242
	1017	315	405	746	345	177	111	247
MAC8	1217	315	405	696	345	177	111	247
	1217	355	454	647	375	189	111	300
MAC10	1417	355	454	647	375	189	111	300
	1417	400	508	633	400	189	111	265
MAC12.5	1420	400	508	813	400	189	111	265
	1420	450	570	751	437	189	111	344
MAC15	1622	450	570	866	437	189	111	344
	1622	500	639	831	456	189	121	312
MAC18	1822	450	570	866	437	189	111	344
	1822	500	639	831	456	189	121	312
MAC20	1824	500	639	991	456	189	121	312
	1824	560	716	873	546	249	121	465
MAC23	2024	500	639	991	456	189	121	312
	2024	560	716	873	546	249	121	465

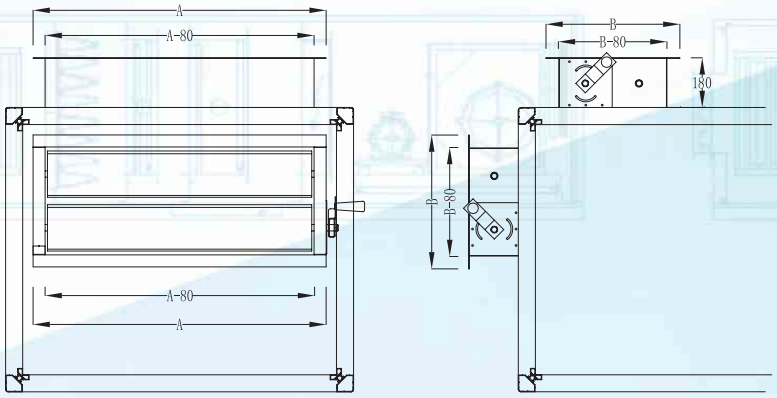
Model	Modulus	Fan Model	A	B	C			
					THF	BHF	UBF	UBR
MAC25	2026	560	716	1033	546	249	121	465
	2026	630	802	910	591	252	121	465
MAC28	2226	560	716	1033	546	249	121	465
	2226	630	802	910	591	252	121	465
MAC30	2228	630	802	1070	591	252	121	465
	2228	710	899	941	638	251	121	509
MAC33	2230	630	802	1069	591	252	121	465
	2230	710	899	1021	638	251	121	509
MAC35	2430	630	802	1069	591	252	121	465
	2430	710	899	1021	638	251	121	509
MAC38	2432	630	802	1198	638	251	121	509
	2432	710	899	941	638	251	121	599
MAC41	2632	710	899	1101	638	251	121	509
	2632	800	1008	1047	710	264	121	599
MAC45	2634	710	899	1341	638	251	121	509
	2634	800	1008	1152	638	251	121	599
MAC48	2636	710	899	1261	638	251	121	509
	2636	800	1008	1286	710	264	121	599
MAC52	2836	800	1008	1286	710	264	121	599
	2836	900	1131	1145	762	264	121	650
MAC55	2838	800	1008	1446	710	264	121	599
	2838	900	1131	1305	762	264	121	650
MAC59	3038	900	1131	1305	762	264	121	650
	3038	1000	1268	1156	780	265	121	651
MAC62	3040	900	1131	1465	762	264	121	650
	3040	1000	1268	1316	780	265	121	651
MAC66	3338	900	1131	1293	780	265	121	651
	3338	1000	1268	1234	931	338	121	763
MAC70	3340	900	1131	1465	762	264	121	650
	3340	1000	1268	1316	780	265	121	651
MAC74	3342	900	1131	1613	780	265	121	651
	3342	1000	1268	1554	931	338	121	763
MAC77	3640	1000	1268	1316	780	265	121	651
	3640	1120	1423	1239	931	338	121	763
MAC81	3642	1000	1268	1316	780	265	121	651
	3642	1120	1423	1079	931	338	121	763
MAC85	3842	1000	1268	1234	931	338	121	763
	3842	1120	1423	1050	1119	376	121	896
MAC90	3649	1000	1268	1876	780	265	121	651
	3649	1120	1423	1639	931	338	121	763
MAC95	3849	1000	1268	1794	931	338	121	763
	3849	1120	1423	1610	1119	376	121	896
MAC100	3852	1120	1423	1879	931	338	121	763
	3852	1250	1525	1748	1119	376	121	896
MAC120	4355	1120	1423	1979	931	338	121	763
	4355	1250	1525	1948	1119	376	121	896
MAC140	4758	900*2	1131	669	761.5	263.5	121	650
	4758	1000*2	1268	572	780	265	121	651
MAC160	4766	1000*2	1268	752	780	265	121	651
	4766	1120*2	1423	657	931	338	121	763
MAC180	5166	1000*2	1268	752	780	265	121	651
	5166	1120*2	1423	657	931	338	121	763
MAC200	5570	1120*2	1423	757	931	338	121	763

Vertical Unit Air Outlet Dimension



Model	Fan Model	A	B	C			
				THF	BHF	UBF	UBR
MAC2	160	206	483	892	805	141	259
	180	230	459	886	786	141	226
MAC2.5	180	230	529	886	786	141	226
	200	257	502	893	786	141	261
MAC3	180	230	449	966	866	141	226
	200	257	502	973	866	141	261
MAC3.5	200	257	602	983	876	141	261
	225	289	582	995	876	141	236
MAC4	225	289	582	1075	956	141	236
	250	323	548	1088	956	111	253
MAC5	250	323	548	1168	1036	111	253
	280	362	509	1183	1037	111	242
MAC6	280	362	789	1183	1037	111	242
	315	405	746	1205	1037	111	247
MAC7	280	405	696	1205	1037	111	247
	315	454	647	1235	1049	111	300
MAC8	315	405	696	1365	1197	111	247
	355	454	647	1395	1209	111	300
MAC10	355	454	647	1555	1369	111	300
	400	508	633	1580	1369	111	265
MAC12.5	400	508	813	1580	1369	111	265
	450	570	751	1617	1369	111	344
MAC15	450	570	866	1777	1529	111	344
	500	639	831	1796	1529	121	312
MAC18	450	570	866	1937	1689	111	344
	500	639	831	1956	1689	121	312
MAC20	500	639	991	1956	1689	121	312
	560	716	873	2046	1749	121	465
MAC23	500	639	991	2116	1849	121	312
	560	716	873	2206	1909	121	465
MAC25	560	716	1033	2206	1909	121	465
	630	802	910	2251	1912	121	465

Air Damper Dimension



Model	Modulus	Air damper				
		Damper Length(A)	Mixing Section		Combined Mixing Section	
			Damper width(B)	Section length(M)	Damper width(B)	Section length(M)
MAC2	0710	758	438	6	358	12
MAC2.5	0712	918	438	6	358	12
MAC3	0812	918	438	6	358	12
MAC3.5	0813	998	438	6	358	12
MAC4	0913	998	438	6	358	12
MAC5	1013	998	438	6	358	12
MAC6	1015	1158	438	6	358	12
MAC7	1017	1318	438	6	358	12
MAC8	1217	1318	438	6	358	12
MAC10	1417	1318	518	7	358	12
MAC12.5	1420	1558	518	7	358	12
MAC15	1622	1718	598	8	518	16
MAC18	1822	1718	598	8	518	16
MAC20	1824	1878	598	8	518	16
MAC23	2024	1878	598	8	518	16
MAC25	2026	2038	598	8	518	16
MAC28	2226	2038	758	10	518	16
MAC30	2228	2198	758	10	518	16
MAC33	2230	2358	758	10	518	16
MAC35	2430	2358	758	10	518	16
MAC38	2432	2518	758	10	518	16
MAC41	2632	2518	758	10	518	16
MAC45	2634	2678	758	10	518	16
MAC48	2636	2838	758	10	518	16
MAC52	2836	2838	838	11	598	18
MAC55	2838	2998	918	12	678	20
MAC59	3038	2998	918	12	678	20
MAC62	3040	3158	918	12	678	20
MAC66	3338	2998	998	13	678	20
MAC70	3340	3158	998	13	678	20
MAC74	3342	3318	998	13	678	20
MAC77	3640	3158	1078	14	838	24
MAC81	3642	3318	1078	14	838	24
MAC85	3644	3478	1078	14	838	24
MAC90	3649	3878	1078	14	838	24
MAC95	3849	3878	1078	14	838	24
MAC100	3852	4118	1078	14	838	24
MAC120	4355	4358	1238	16	918	26
MAC140	4758	4598	1318	17	998	28
MAC160	4766	5238	1318	17	998	28
MAC180	5166	5238	1478	19	1078	30
MAC200	5570	5558	1558	20	1158	32

Length for Each Section

Model	Modulus	Mixing Box	External Plat Filter	Combined (Plate+Bag) Filter	Cooling coil	Heating Coil	Steam Coil	Electric Heater	Air Outlet	Combined Mixing Box	Diffuser	Access	Dry Steam Humidifier	High-pressure Mist Humidifier	Attenuater
MAC2	0710	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC2.5	0712	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC3	0812	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC3.5	0813	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC4	0913	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC5	1013	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC6	1015	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC7	1017	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC8	1217	6M	0M	4M/7M	6M/7M/8M	4M	4M	4M	6M	12M	7M	6M/8M	8M	8M	8M/12M/16M
MAC10	1417	7M	0M	4M/7M	6M/7M/8M	4M	4M	4M	7M	12M	8M	6M/8M	8M	8M	8M/12M/16M
MAC12.5	1420	7M	0M	4M/7M	6M/7M/8M	4M	4M	4M	7M	12M	8M	6M/8M	8M	8M	8M/12M/16M
MAC15	1622	8M	0M	4M/7M	6M/7M/8M	4M	4M	4M	8M	16M	8M	6M/8M	8M	8M	8M/12M/16M
MAC18	1822	8M	0M	4M/7M	6M/7M/8M	4M	4M	4M	8M	16M	8M	6M/8M	8M	8M	8M/12M/16M
MAC20	1824	8M	0M	4M/7M	6M/7M/8M	4M	4M	4M	8M	16M	8M	6M/8M	8M	8M	8M/12M/16M
MAC23	2024	8M	0M	4M/7M	6M/7M/8M	4M	4M	4M	8M	16M	8M	6M/8M	8M	8M	8M/12M/16M
MAC25	2026	8M	0M	4M/7M	6M/7M/8M	4M	4M	4M	8M	16M	8M	6M/8M	8M	8M	8M/12M/16M
MAC28	2226	10M	0M	4M/7M	6M/7M/8M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC30	2228	10M	0M	4M/7M	6M/7M/8M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC33	2230	10M	0M	4M/7M	6M/7M/8M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC35	2430	10M	0M	4M/7M	7M/8M/9M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC38	2432	10M	0M	4M/7M	7M/8M/9M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC41	2632	10M	0M	4M/7M	7M/8M/9M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC45	2634	10M	0M	4M/7M	7M/8M/9M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC48	2636	10M	0M	4M/7M	7M/8M/9M	4M	4M	4M	10M	16M	10M	6M/8M	8M	8M	8M/12M/16M
MAC52	2836	11M	0M	4M/7M	7M/8M/9M	4M	4M	4M	11M	18M	11M	6M/8M	8M	8M	8M/12M/16M
MAC55	2838	12M	0M	4M/7M	7M/8M/9M	4M	4M	4M	12M	20M	12M	6M/8M	8M	8M	8M/12M/16M
MAC59	3038	12M	0M	4M/7M	7M/8M/9M	4M	4M	4M	12M	20M	12M	6M/8M	8M	8M	8M/12M/16M
MAC62	3040	12M	0M	4M/7M	7M/8M/9M	4M	4M	4M	12M	20M	12M	6M/8M	8M	8M	8M/12M/16M
MAC66	3338	13M	0M	4M/7M	7M/8M/9M	4M	4M	4M	13M	20M	13M	6M/8M	8M	8M	8M/12M/16M
MAC70	3340	13M	0M	4M/7M	7M/8M/9M	4M	4M	4M	13M	20M	13M	6M/8M	8M	8M	8M/12M/16M
MAC74	3342	13M	0M	4M/7M	7M/8M/9M	4M	4M	4M	13M	20M	13M	6M/8M	8M	8M	8M/12M/16M
MAC77	3640	14M	0M	4M/7M	7M/8M/9M	4M	4M	4M	14M	24M	14M	6M/8M	8M	8M	8M/12M/16M
MAC81	3642	14M	0M	4M/7M	7M/8M/9M	4M	4M	4M	14M	24M	14M	6M/8M	8M	8M	8M/12M/16M
MAC85	3644	14M	0M	4M/7M	7M/8M/9M	4M	4M	4M	14M	24M	14M	6M/8M	8M	8M	8M/12M/16M
MAC90	3649	14M	0M	4M/7M	7M/8M/9M	4M	4M	4M	14M	24M	14M	6M/8M	8M	8M	8M/12M/16M
MAC95	3849	14M	0M	4M/7M	7M/8M/9M	4M	4M	4M	14M	24M	14M	6M/8M	8M	8M	8M/12M/16M
MAC100	3852	14M	0M	4M/7M	7M/8M/9M	4M	4M	4M	14M	24M	14M	6M/8M	8M	8M	8M/12M/16M
MAC120	4355	16M	0M	4M/7M	8M/9M/10M	4M	4M	4M	16M	26M	14M	6M/8M	9M	9M	8M/12M/16M
MAC140	4758	17M	0M	4M/7M	8M/9M/10M	4M	4M	4M	17M	28M	15M	6M/8M	9M	9M	8M/12M/16M
MAC160	4766	17M	0M	4M/7M	8M/9M/10M	4M	4M	4M	17M	28M	15M	6M/8M	9M	9M	8M/12M/16M
MAC180	5166	19M	0M	4M/7M	8M/9M/10M	4M	4M	4M	19M	30M	17M	6M/8M	9M	9M	8M/12M/16M
MAC200	5570	20M	0M	4M/7M	8M/9M/10M	4M	4M	4M	20M	32M	18M	6M/8M	9M	9M	8M/12M/16M

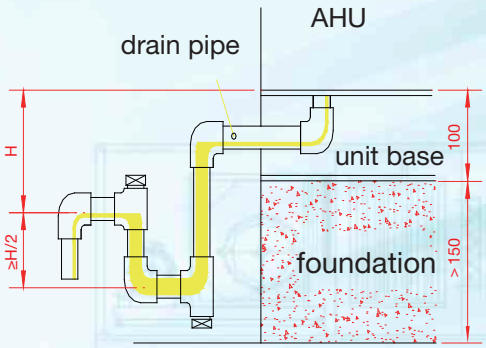
Installation, Operation and Maintenance

Lifting and handling

- The unit shall be supplied with lifting lugs or fittings for forking and lifting. And protection pad should be set up between the unit and the strap preventing damage during the lifting. All straps shall keep away from all the water and air duct connectors.
- Do not use the cudgel or other identical tools to rig the unit to avoid unit deformation.

Installation and pipe work

- The units shall be installed on the horizontal ground or mounting foundation.
- To facilitate the unit installation, operation, usual inspection and service. Adequate space should be reserved around the unit, especially for the piping and wiring, connection as well as service door (no less than 1 meter).
- Ducts shall be connected by following the direction which pasted on the unit's cover and shall be installed with balance strength preventing damage of copper tubes or drain pipes.
- Thermal insulation treatment shall be designed for the cooling coils and the condensate drain pipes.
- The unit can't afford the weight of air ducts or water pipes. And flexible connectors shall be fixed between air ducts and water pipes to isolate the vibration.
- The U-type pipe shall be equipped at the section of the drain pipe outlet for the removal of condensate (shown in the following picture).



Remark: H=max negative pressure (mm)+50mm

Wiring and start-up procedure

- The electrical installation shall comply with the national code and standard, and follow the attached unit technical manual.
- Units should be grounding connected. And motors shall be connected to the power supply with overload protection.
- It is recommended to clean all varies inside the fan casing, and inspect the following items before the set-up procedure. All valves shall be checked and guaranteed in the normal condition. Fan wheels shall be inspected without abnormal noise by manually rotating the fan. And all connection sections shall be examined ensuring without shedding off.
- It's recommended to check the electric wiring connection and fan rotating direction before the set-up procedure.

Operation and maintenance

- Before the operation of units, an inspection process is required, such as valve conditions and so on.
- Filters shall be cleaned or replaced according to the clogged condition as well as the air pressures difference.
- The water inside coils shall be discharged during the winter and the period units stop working. In winter, coils should be protected from the damage of freeze also.
- Unit coils shall be chemically cleaned every 1-2 years to eliminate rust inside copper tubes. And the aluminum fin shall be cleaned with compressed air or water too.
- The bear lubrication and belt tension condition of unit fans shall be inspected regularly.

For more details about units' installation, operation and maintenance, please refer to unit attached "Product Manual".

Global Headquarter

Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A.
36061 BASSANO DEL GRAPPA (VICENZA) ITALIA - VIA SARSON 57/C
TEL: +39 / 0424 509 500 (r.a.) FAX: +39 / 0424 509 509
https://www.melcohit.com

Asia Pacific Headquarter

Climaveneta Chat Union Refrigeration Equipment (Shanghai) CO., LTD
NO. 88 BAIYUN ROAD XINGHUO DEVELOPING ZONE, SHANGHAI, CHINA
TEL: +86-21-57505566 FAX: +86-21-57505797
http://www.climaveneta.com.cn

Hongkong Branch

ROOM 2003, CCT TELECOM BUILDING, 11 WO SHING STREET, FOTAN,
SHATIN, N.T., HONGKONG
TEL: +852-26871755 FAX: +85-2-26873078
http://www.climaveneta.com

Vietnam Branch

2TH FLOOR, ROOM 2.7A, ETOWN 1, 364 CONG HOA STREET, WARD 13,
TAN BINH DISTRICT, HOCHIMINH CITY
TEL: +848 6262 9966 FAX: +848 6262 9977
http://www.climaveneta.com

Malaysia Branch

A-4-3, GARDEN SHOPPE ONE CITY, JALAN USJ 25/1, 47650 SUBANG
JAYA. SELANGOR DARUL EHSAN
TEL: +603 8081 8558 FAX: +603 8081 9558
http://www.climaveneta.com

Myanmar Branch

ROOM 501, 5TH FLOOR, SALOMON BUSINESS CENTER, NO 244/A, U
WISARA ROAD, BAHAN TOWNSHIP, YANGON
TEL: +951535098 Ext: 501
http://www.climaveneta.com

B734 CCU/28-09-2023EN-SH