



# PRODUCT BROCHURE

## Double Skin Air Handling Unit



**1000-60000 m<sup>3</sup>/h**

**Ceiling type, Vertical type, Horizontal type**

**3PH, 380V~400V, 50Hz**

**Double Skin Structure**

## **Features**

Double Skin Structure  
Unlimited Modular  
Air Flow Rate:1000-60000 m<sup>3</sup>/h  
Patented Structural  
Aesthetic Outlook and Fission Design  
Site Installation Easy and Fast Handling  
Super Silent, Quiet Operation

## **Technology advantage**

### **Aluminum Alloy / Steel Frame**

### **Sheet Material : Galvanized Steel / Aluminum**

### **Panel Thickness : 25mm or 50mm**

Air handling compartment applied patent design structure with the 0.19% super low air leakage ratio. The unit uses panel's direct fixing structure and the internal of the panel comprise of high density of injected rigid polyurethane foam that ensure the strength of the panel. Patented structural combination type air handling unit applies standard module design. Every module is 310mm length. unit assembly's height and width can be adjusted accordingly with a module ratio to suit the design condition requirement.

### **Flat internal, clean room application**

Again patented structure provides our AHU product with a good smooth surface of the unit which makes dust collection hard and not easy to be polluted. Thus it is suitable for clean room application.

### **Aesthetic Outlook and Fission Design**

Unit panel uses high strength pre-painted steel as its external skin. The pre-painted steel has an antirust properties and is covered with a protection plastic layer to prevent any scratcher during assemble and transportation. After the panel is constructed, the corner becomes an arc structure thus providing an aesthetic outlook.

### **Site Installation Easy and Fast Handling**

The entire panel of the unit is constructed using bolt and nut fastening, it permits the equipment to be easily assembled or dismantle on the job site. Frequent assemble and dismantle will not affect the effectiveness of air tight and structural integrity of the unit. The equipment can be delivered according to customer requirement

### **Super Silent, Quiet Operation**

### **Fan : Backward / Plug Fan**

Utilization of latest technology forward & backward centrifugal fan , resulted in a consistent reliable operation performance with low vibration and noise.

The unit utilizes low speed fan and high grade motor to prove an effective air dynamic performance for noise isolation.

Heat Recovery : Plate / Thermal Wheel / Heat Pipe / Run Around Heat Recovery

Humidification : Sterile Steam / Air Washer

## Specifications

### Ceiling Type Air Handling Unit Performance (Return Air)

Product Type	Rated Air Volume	Rated Cooling Capacity			Rated Heating Capacity			External Static Pressure			Motor Power	Water Flow			Water Resistance			Noise	Weight			water Pipe	drain pipe	Dimension
		4R	6R	8R	4R	6R	8R	4R	6R	8R		4R	6R	8R	4R	6R	8R		4R	6R	8R			
	m <sup>3</sup> /h	Kw			Kw			Pa			Kw	L/s			kPa			dB(A)	kg			mm	mm	mm
AHU10D	1000	5.61	8.35	9.65	10.64	13.44	18.3	200	160	120	0.18	0.2	0.3	0.3	0.5	1	1.4	56	50	55	60	32	25	620×700×500
AHU15D	1500	8.58	11.91	14.76	15.68	19.88	26.97	200	160	120	0.18	0.3	0.4	0.5	1.2	2.4	3.3	56	70	75	80	32	25	740×700×500
AHU20D	2000	11.88	15.33	20.43	21	26.6	36.12	250	210	170	0.32	0.4	0.6	0.7	2.8	5.2	6.7	57	80	85	90	32	25	920×700×500
AHU25D	2500	14.79	19.26	24.79	24.92	31.92	42.86	220	180	140	0.32	0.6	0.8	0.9	4.5	8.2	10.7	58	90	95	100	32	25	1040×700×500
AHU30D	3000	18.59	24.83	31.97	30.94	39.2	53.22	280	240	200	0.45	0.7	0.9	1	7	12.6	16.2	58	100	110	115	32	25	1190×700×500
AHU40D	4000	25.65	34.49	41.28	39.8	53.2	72.24	250	210	170	0.32×2	1	1.3	1.4	13.3	23.6	30.3	58	115	120	125	40	25	1440×700×500
AHU50D	5000	32.15	40.54	49.76	49.84	62.44	85.72	220	180	140	0.32×2	1.3	1.6	1.7	22.9	13.7	9.8	58	135	140	150	40	25	1740×700×500
AHU60D	6000	38.78	51.31	64.14	61.88	78.4	106.4	280	240	200	0.45×2	1.5	1.9	2.1	35.8	21.3	15.2	58	170	185	190	40	25	2040×700×500
AHU70D	7000	44.36	57.06	71.52	70.56	90.16	121.4	280	240	200	0.55×2	1.8	2.2	2.5	37.6	22.7	16.3	59	205	215	220	50	25	2120×700×560
AHU80D	8000	50.44	65.21	81.73	80.64	101.9	138.7	180	150	120	0.45×2	2.1	2.6	2.8	37.5	23.2	16.6	60	235	245	250	50	25	2120×800×610
AHU100D	10000	63.69	76.73	100.7	93.24	117.2	160.4	340	300	260	1.1×2	2.6	3.2	3.5	48.6	30.6	21.7	61	270	290	310	50	25	2180×800×710
AHU120D	12000	73.59	98.33	116.6	122.6	154.1	210.9	320	280	240	1.1×2	3.1	3.9	4.2	47.5	30.6	21.8	62	310	335	355	50	25	2330×900×760
AHU140D	14000	86.78	123.7	137.6	153.5	173.6	264	350	310	270	1.5×2	3.7	4.5	5	56.8	36.9	26.2	63	350	370	395	50	25	2400×900×810
AHU160D	16000	99.53	133.7	156.7	160	192.6	275.2	330	290	250	1.8×2	4.2	5.2	5.7	65	42.5	30.2	64	380	445	470	50	25	2630×900×860

Performance values refer to the following conditions:

\*Cooling capacity is measured under the condition : Ambient temperature DB 27°C /WB 19.5°C , water inlet/outlet temperature 7°C / 12°C

\*Heating capacity is measured under the condition : Ambient temperature DB 21°C , water inlet temperature 60°C

### Ceiling Type Air Handling Unit Performance (Fresh Air)

Product Type	Rated Air Volume	Rated Cooling Capacity			Rated Heating Capacity			External Static Pressure			Motor Power	Water Flow			Water Resistance			Noise	Weight			water Pipe	drain pipe	Dimension
		4R	6R	8R	4R	6R	8R	4R	6R	8R		4R	6R	8R	4R	6R	8R		4R	6R	8R	DN	dn	LxWxH
	m <sup>3</sup> /h	Kw			Kw			Pa			Kw	L/s			kPa			dB(A)	kg			mm	mm	mm
AHU10D	1000	11.44	16.13	18.5	19.46	26.55	35.09	200	160	120	0.32	0.5	0.7	0.8	2.5	5.5	8.9	56	50	55	60	32	25	620×700×500
AHU15D	1500	20.16	25.6	28.82	29.21	40.31	52.67	200	160	120	0.32	0.8	1.1	1.2	6.1	12.7	20.1	56	70	75	80	32	25	740×700×500
AHU20D	2000	28.31	35.52	39.2	38.43	52.79	69.3	250	210	170	0.55	1.2	1.5	1.7	12.8	25.7	39.6	57	80	85	90	32	25	920×700×500
AHU25D	2500	32.56	43.58	47.83	45.87	63.35	82.71	220	180	140	0.55	1.5	1.8	2	20.3	13.9	10.1	58	90	95	100	32	25	1040×700×500
AHU30D	3000	40.91	52.17	61.34	56.63	86.54	102.08	280	240	200	1.1	1.8	2.2	2.5	30.9	21.2	15.3	58	100	110	115	32	25	1190×700×500
AHU40D	4000	55.19	71.65	83.38	77.78	98.81	140.26	250	210	170	0.32×2	2.5	3	3.3	57.3	39.1	28.2	58	115	120	125	40	25	1440×700×500
AHU50D	5000	67.54	83.94	96.03	91.74	119.93	165.44	220	180	140	1.5	3	3.8	4.2	16.3	45.7	47.5	58	135	140	150	40	25	1740×700×500
AHU60D	6000	82.28	104.1	123.8	113.9	148.76	205.43	280	240	200	0.55×2	3.7	4.7	5.2	25	51.2	32.8	58	170	185	190	40	25	2040×700×500
AHU70D	7000	90.66	120	137.2	129.1	175.62	232.83	280	240	200	1.5	4.3	5.5	6	27.1	48.4	37.8	59	205	215	220	50	25	2120×700×560
AHU80D	8000	110.1	136.5	157.8	148.5	202.89	267.72	180	150	120	0.55×2	4.9	6.2	6.9	27.5	50.5	39.5	60	235	245	250	50	25	2120×800×610
AHU100D	10000	135.3	175.9	183	161.7	245.54	291.57	340	300	260	1.5	6.2	7.8	8.6	36	34.6	44	61	270	290	310	50	25	2180×800×710
AHU120D	12000	166	198.8	212.2	190.5	332.56	359.72	320	280	240	1.1×2	7.5	9.4	10	36	44.6	44	62	310	335	355	50	25	2330×900×760
AHU140D	14000	185.8	245.6	275.1	292.7	374.98	527.77	350	310	270	2.2	8.8	11	12	43.2	53.6	54.7	63	350	370	395	50	25	2400×900×810
AHU160D	16000	211.9	276.2	318.9	310.7	398.98	560.34	330	290	250	1.1×2	10.1	13	14	49.7	59.5	53.3	64	380	445	470	50	25	2630×900×860

Performance values refer to the following conditions:

\*Cooling capacity is measured under the condition : Air inlet temperature DB 35°C/WB 28°C ,water inlet temperature 7°C,water temperature difference 5°C;

\*Heating capacity is measured under the condition : Air inlet temperature DB 5°C ,water inlet temperature 60°C

### Horizontal and Vertical Type Air Handling Unit Performance (Return Air)

Product Type	Rated Air Volume	Rated Cooling Capacity			Rated Heating Capacity			External Static Pressure			Motor Power	Water Flow			Water Resistance			Noise	Weight			water Pipe	drain pipe	horizontal type Dimension	vertical type Dimension
		4R	6R	8R	4R	6R	8R	4R	6R	8R		4R	6R	8R	4R	6R	8R		4R	6R	8R	DN	dn	L×W×H	L×W×H
	m <sup>3</sup> /h	Kw			Kw			Pa			Kw	L/s			kPa			dB(A)	kg			mm	mm	mm	mm
AHU20W(L)	2000	11.28	14.99	17.09	16.32	20.27	27.75	250	210	170	0.32	0.5	0.7	0.8	14	31	7.4	56	145	158	170	32	25	830×900×540	830×600×1100
AHU30W(L)	3000	17.42	22.89	25.94	26.58	29.05	45.18	240	200	160	0.55	0.8	1.1	1.2	21	46	11	57	183	203	210	32	25	930×950×640	930×600×1180
AHU40W(L)	4000	23.62	28.63	33.01	33.79	41.42	57.45	310	270	230	0.75	1.1	1.4	1.6	26	8.8	14	59	203	215	230	40	25	1000×1000×740	1000×600×1360
AHU50W(L)	5000	30.01	36.46	41.82	44.11	48.27	74.99	340	300	260	1.1	1.4	1.7	2	32	11	17	60	225	235	250	40	25	1060×1100×840	1060×650×1530
AHU60W(L)	6000	36.31	44.13	50.49	54.71	59.59	93.01	300	260	220	1.5	1.7	2.1	2.4	36	12	19	61	235	248	260	40	25	1100×1100×940	1100×720×1630
AHU70W(L)	7000	42.66	51.98	59.29	57.54	71.12	97.82	350	310	270	1.5	2	2.5	2.8	49	17	26	62	253	270	288	40	25	1210×1300×940	1210×800×1730
AHU80W(L)	8000	49.65	60.22	68.56	67.6	82.84	114.9	330	290	250	1.8	2.4	2.9	3.3	10	23	36	63	278	293	313	50	25	1340×1300×940	1340×800×1730
AHU100W(L)	10000	57.89	76.02	86.26	86.88	105.7	147.7	470	430	390	2.2	2.8	3.6	4.1	17	37	58	65	350	370	388	50	25	1560×1300×940	1560×850×1800
AHU120W(L)	12000	71.24	89.7	99.08	107.7	130.1	183.1	430	390	350	3	3.4	4.3	4.8	26	19	14	66	375	390	410	50	25	1810×1400×940	1810×940×1800
AHU150W(L)	15000	90.22	113.5	126.2	136.8	164.4	232.6	540	500	460	5.5	4.3	5.4	6	34	25	18	67	440	465	485	50	25	1980×1500×1040	1980×940×1950
AHU180W(L)	18000	110.5	138.7	153.9	169.5	183.6	288.2	470	430	390	2.2x2	5.3	6.6	7.4	53	39	28	65	490	515	543	50	32	2320×1300×1040	2320×850×1900
AHU200W(L)	20000	116.5	151.5	175.9	186.8	203.1	317.6	470	430	390	2.2x2	5.6	7.3	8.4	21	49	44	65	550	575	603	65(50)	32	2550×1300×1050	2550×850×1900
AHU220W(L)	22000	127.9	165.9	193	205.4	223.4	349.2	440	400	360	3.0x2	6.1	7.9	9.2	21	50	46	66	685	710	738	65(50)	32	2550×1300×1130	2550×940×2000
AHU250W(L)	25000	148.7	191.3	221.8	221.8	255	377.1	510	470	430	4.0x2	7.1	9.2	11	26	50	53	67	728	763	800	65(50)	32	2750×1500×1210	2750×940×2100
AHU270W(L)	27000	162	208.4	241.2	263.7	279.4	448.3	570	530	490	5.5x2	7.8	10	12	33	65	59	68	778	803	843	65(50)	32	2950×1500×1210	2950×940×2100
AHU300W(L)	30000	182	224.5	250.7	288	315.4	489.5	540	500	460	5.5x2	8.7	11	12	32	23	17	70	825	852	898	65(50)x2	32	2950×1500×1425	2950×940×2320
AHU350W(L)	35000	214.8	264.7	296.9	321	375.8	545.6	500	460	420	6x2	10	13	14	48	34	25	71	990	1073	1090	65(50)x2	32	3330×1650×1425	3330×1070×2360
AHU400W(L)	40000	244.1	301.1	338.3	363	437.2	617	740	700	660	7.5x2	12	14	16	49	35	26	72	1070	1115	1170	65(50)x2	32	3330×1650×1574	3330×1070×2530
AHU450W(L)	45000	275.7	339.8	381.6	406.9	490.4	691.8	770	730	690	11x2	13	16	18	51	36	27	72	1108	1155	1205	65(50)x2	32	3380×1650×1726	3380×1070×2730
AHU500W(L)	50000	307.7	378.9	425.6	454.1	546.5	772	710	670	630	11x2	15	18	20	53	38	28	73	1183	1250	1328	80(65)x2	32	3430×1750×1878	3430×1170×2910
AHU600W(L)	60000	370.9	456.6	514.4	549.2	660.2	933.7	960	920	880	15x2	18	22	25	68	48	36	74	1238	1315	1380	80(65)x2	32	3690×1850×2030	3690×1170×3170

Performance values refer to the following conditions:

\*Cooling capacity is measured under the condition : Ambient temperature DB 27°C /WB 19.5°C , water inlet/outlet temperature 7°C / 12°C

\*Heating capacity is measured under the condition : Ambient temperature DB 21°C , water inlet temperature 60°C

### Horizontal and Vertical Type Air Handling Unit Performance (Fresh Air)

Product Type	Rated Air Volume	Rated Cooling Capacity			Rated Heating Capacity			External Static Pressure			Motor Power	Water Flow			Water Resistance			Noise	Weight			water Pipe	drain pipe	horizontal type Dimension	vertical type Dimension
		4R	6R	8R	4R	6R	8R	4R	6R	8R		4R	6R	8R	4R	6R	8R		4R	6R	8R	DN	dn	L×W×H	L×W×H
	m <sup>3</sup> /h	Kw			Kw			Pa			Kw	L/s			kPa			dB(A)	kg			mm	mm	mm	mm
AHU20W(L)	2000	23.72	30.39	34.66	29.55	40.14	50.22	250	210	170	0.32	1.1	1.5	1.7	9.1	18	29	56	145	158	170	32	25	830×900×540	830×600×1100
AHU30W(L)	3000	36.77	46.53	52.73	48.45	55.92	73.6	240	200	160	0.55	1.8	2.2	2.5	14	28	43	57	183	203	210	32	25	930×950×640	930×600×1180
AHU40W(L)	4000	49.95	62.82	70.91	63.44	79.72	107.9	310	270	230	0.75	2.4	3	3.4	18	35	54	59	203	215	230	40	25	1000×1000×740	1000×600×1360
AHU50W(L)	5000	63.6	79.53	89.45	85.7	92.91	145.7	340	300	260	1.1	3	3.8	4.3	21	41	63	60	225	235	250	40	25	1060×1100×840	1060×650×1530
AHU60W(L)	6000	76.97	95.97	107.8	92.34	112	175.8	300	260	220	1.5	3.7	4.6	5.2	24	46	71	61	235	248	260	40	25	1100×1100×940	1100×720×1630
AHU70W(L)	7000	90.25	112.4	126.1	108.8	136.9	184.9	350	310	270	1.5	4.3	5.4	6	33	64	78	62	253	270	288	40	25	1210×1300×940	1210×800×1730
AHU80W(L)	8000	104.8	126.3	139.5	118	159.5	226.8	330	290	250	1.8	5	6	6.7	44	30	22	63	278	293	313	50	25	1340×1300×940	1340×800×1730
AHU100W(L)	10000	132.3	159.3	175.9	172.5	203.5	292.5	470	430	390	2.2	6.3	7.6	8.4	52	49	35	65	350	370	388	50	25	1560×1300×940	1560×850×1800
AHU120W(L)	12000	161.3	193.8	213.7	210.4	250.4	357.7	430	390	350	3	7.7	9.3	10	59	74	53	66	375	390	410	50	25	1810×1400×940	1810×940×1800
AHU150W(L)	15000	191.6	243.4	269	271.6	316.4	461.6	540	500	460	5.5	9.2	12	13	24	44	68	67	440	465	485	50	25	1980×1500×1040	1980×940×1950
AHU180W(L)	18000	234.3	296.4	326	334.7	353.6	568.9	470	430	390	2.2x2	11	14	16	36	56	74	65	490	515	543	50	32	2320×1300×1040	2320×850×1900
AHU200W(L)	20000	278.7	333.1	372	368.8	389.8	626.9	470	430	390	2.2x2	13	16	18	43	63	46	65	550	575	603	65(50)	32	2550×1300×1050	2550×850×1900
AHU220W(L)	22000	305.1	365.1	408.2	403	430	685.2	440	400	360	3.0x2	15	18	20	45	64	47	66	685	710	738	65(50)	32	2550×1300×1130	2550×940×2000
AHU250W(L)	25000	334.3	403.1	454.7	435.5	490.8	740.3	510	470	430	4.0x2	16	19	22	45	72	54	67	728	763	800	65(50)	32	2750×1500×1210	2750×940×2100
AHU270W(L)	27000	362.9	438.7	495	504.9	579.6	858.4	570	530	490	5.5x2	17	21	24	61	40	58	68	778	803	843	65(50)	32	2950×1500×1210	2950×940×2100
AHU300W(L)	30000	387	471.6	536	552.7	607.2	939.6	540	500	460	5.5x2	19	23	26	56	41	52	70	825	852	898	65(50)x2	32	2950×1500×1425	2950×940×2320
AHU350W(L)	35000	454.6	551.9	631.4	634.7	723.4	1079	500	460	420	6x2	22	26	30	55	51	53	71	990	1073	1090	65(50)x2	32	3330×1650×1425	3330×1070×2360
AHU400W(L)	40000	516.8	630.1	719.6	716.5	841.7	1218	740	700	660	7.5x2	25	30	34	58	55	55	72	1070	1115	1170	65(50)x2	32	3330×1650×1574	3330×1070×2530
AHU450W(L)	45000	580.8	710.5	811.3	790.4	943.1	1344	770	730	690	11x2	28	34	39	65	60	59	72	1108	1155	1205	65(50)x2	32	3380×1650×1726	3380×1070×2730
AHU500W(L)	50000	647.7	791.9	903.8	882.2	1052	1500	710	670	630	11x2	31	38	43	72	65	63	73	1183	1250	1328	80(65)x2	32	3430×1750×1878	3430×1170×2910
AHU600W(L)	60000	778.6	952.1	1089	1084	1269	1843	960	920	880	15x2	37	46	52	76	72	72	74	1238	1315	1380	80(65)x2	32	3690×1850×2030	3690×1170×3170

Performance values refer to the following conditions:

\*Cooling capacity is measured under the condition : Air inlet temperature DB 35°C/WB 28°C ,water inlet temperature 7°C ,water temperature difference 5°C ;

\*Heating capacity is measured under the condition : Air inlet temperature DB 5°C ,water inlet temperature 60°C