





Ningbo Dekon Refrigeration Equipment Co., Ltd, a large-scale industry and trade integrated company , is one of the leading manufacture and supplier for air conditioner products and ventilation systems in China. Products focus on air cooled or water cooled chiller; air handling units; water fan coil units; VRF air conditioner; light commercial air conditioner and special function industrial air conditioner.

Designing and manufacturing a wide range of A/C and ventilation products, we can supply models for use in residential apartments, houses, commercial buildings, hotels, shopping malls and public venues. Marketing all series under our proprietary brand "DEKON" , we can also complete ODM and OEM orders as per customers' requirements.

DEKON strives for better air in your home, hotel, shopping Center and office buildings. And our aim is to supply our air conditioner product to each corner of the world !



Ceiling Type Air Handling Unit

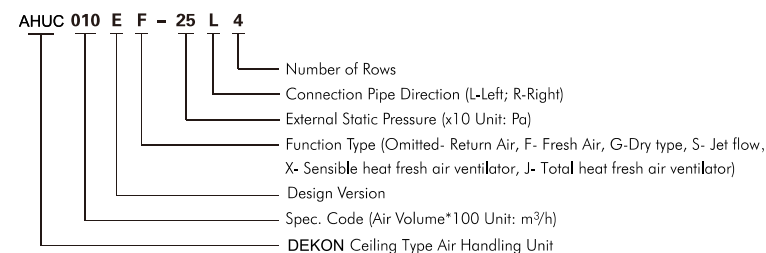
Product Introduction

DEKON patented air handling unit uses our newly developed patented structure; mainly constructed with air filter, heat exchanger, fan motor, fan blower and other main components; it can meet with different external pressure requirements; tight unit structure, light unit weight and good cooling/heating performance. Direct paneling assembly structure and the frame is made of patented alloy aluminum constructed structure, joined together as a cabinet frame system. Not only ensure the cabinet is air tight, but also eliminate thermal bridge and enhance the rigidity and strength of the unit.

The products are of small size, low noise hence it is widely applied in the comfortable air conditioning system such as the hotel, commercial building, office and underground railway application.



Nomenclature



Left/ Right Model Determination

Face the air intake opening, if the pipe connection and service panel are on the left side, the unit will be considered as left connection, and vice versa.



Product Features

- DEKON air handling unit applies colorful steel and galvanized panel as its interior and exterior panel. Inner stuff is the high density polyurethane foam, double pillar and tenon structure that ensures the strength of the unit and low air leakage.
- High efficiency and low resistance nylon filter that reduce the power consumption obviously. Easy cleaning and simple operation; at the same time, higher level panel filter is optional too.
- Coil applies pure and seamless copper tube and hydrophilic aluminum fin. Copper tube is under 12MPa water pressure expanding that can adapt to all kind of high pressure and no leakage, as well as ensure the lowest contact thermal resistance and highest heat transfer efficiency.
- All fans in the unit are selected by professional software to ensure the best condition. Minimize the air volume and air pressure loose after meeting with the customer's requirements. Also ensure the good air flow and reduce the air duct noise.
- ESP is stepless control and there are 3 standards ESP for your selection. At the same time, varies air outlet directions and coil rows are for your selection.

Cooling Capacity Performance Table-- 4R (Return Air)

Model	Air Volume	Nominal Cooling Capacity	Nominal Heating Capacity	Water flow rate	Water resistance	External static pressure			Motor power			Unit weight
						I	II	III	I	II	III	
AHUC	m³/h	kW	kW	m³/h	kPa	Pa	Pa	Pa	kW	kW	kW	kg
010	1000	5.9	9.9	1.01	12.2	120	180	250	0.37	0.37	0.37	73
015	1500	8.6	13.6	1.48	20.6	120	180	250	0.37	0.37	0.37	80
020	2000	13.3	22.1	2.29	24.9	120	180	250	0.55	0.55	0.55	95
025	2500	15.9	23.7	2.73	42.0	120	180	250	0.55	0.55	0.55	100
030	3000	16.6	28.1	2.85	52.7	120	180	250	0.55	0.55	0.55	115
040	4000	22.4	37.5	3.85	9.9	150	200	300	0.75	0.75	1.1	125
050	5000	30.0	47.9	5.16	18.3	150	200	300	1.1	1.1	1.5	155
060	6000	35.5	58.1	6.10	30.3	150	200	300	1.1	1.1	1.5	167
070	7000	42.0	67.6	7.22	34.5	180	250	350	1.5	1.5	2.2	191
080	8000	48.7	76.9	8.37	38.6	180	250	350	1.5	2.2	2.2	260
090	9000	49.3	89.4	8.48	41.9	200	300	400	1.5	2.2	2.2	295
105	10500	59.3	104	10.20	65.3	200	300	400	2.2	2.2	3	315
120	12000	69.3	122.5	11.92	78.6	200	300	400	3	3	3	325
135	13500	82.7	144.9	14.22	52.9	300	400	500	3	3	4	383
150	15000	89.7	161.7	15.43	51.6	300	400	500	3	4	4	387
180	18000	115.5	202.6	19.86	30.7	300	400	500	4	4	5.5	446

Note:

- 1) For cooling cycle, water inlet/outlet temperature is 7 /12 °C , air intake temperature is 27 °C DB/19.5 °C WB.
- 2) For heating cycle, water inlet temperature is 60 °C , air intake temperature is 21 °C .

Cooling Capacity Performance Table-- 6R (Return Air)

Model AHUC	Air Volume m³/h	Nominal Cooling Capacity kW	Nominal Heating Capacity kW	Water flow rate m³/h	Water resistance kPa	External static pressure			Motor power			Unit weight kg
						I Pa	II Pa	III Pa	I kW	II kW	III kW	
010	1000	8.2	12.4	1.41	27.3	120	180	250	0.37	0.37	0.37	80
015	1500	10.5	16.0	1.81	49.6	120	180	250	0.37	0.37	0.55	86
020	2000	15.1	23.0	2.60	57.5	120	180	250	0.55	0.55	0.55	105
025	2500	18.1	29.8	3.11	79	120	180	250	0.55	0.55	0.75	110
030	3000	21.6	34.7	3.71	15.5	120	180	250	0.55	0.55	0.75	146
040	4000	28.7	46.5	4.94	24.9	150	200	300	0.75	0.75	1.1	155
050	5000	35.9	56.6	6.17	44.6	150	200	300	1.1	1.1	1.5	185
060	6000	42.8	65.9	7.36	72.5	150	200	300	1.1	1.5	1.5	208
070	7000	49.4	77.2	8.50	82.5	180	250	350	1.5	1.5	2.2	251
080	8000	57.9	87.5	9.96	27.6	180	250	350	2.2	2.2	2.2	300
090	9000	64.6	101.7	11.11	29.9	200	300	400	2.2	2.2	3	330
105	10500	78.3	124.7	13.47	46.2	200	300	400	2.2	3	3	345
120	12000	88.5	141.1	15.22	55.3	200	300	400	3	3	4	351
135	13500	98.5	160.9	16.94	37.53	300	400	500	3	4	4	413
150	15000	107.7	176.7	18.52	36.58	300	400	500	4	4	5.5	429
180	18000	126.4	207.5	21.74	73.1	300	400	500	4	5.5	7.5	499

Note:

- 1) For cooling cycle, water inlet/outlet temperature is 7 /12 C , air intake temperature is 27 C DB/19.5 C WB.
- 2) For heating cycle, water inlet temperature is 60 C , air intake temperature is 21 C .

Cooling Capacity Performance Table-- 8R (Return Air)

Model AHUC	Air Volume m³/h	Nominal Cooling Capacity kW	Nominal Heating Capacity kW	Water flow rate m³/h	Water resistance kPa	External static pressure			Motor power			Unit weight kg
						I Pa	II Pa	III Pa	I kW	II kW	III kW	
030	3000	25.6	38.7	4.40	26.0	120	180	250	0.55	0.75	0.75	175
040	4000	33.9	51.4	5.83	41.0	150	200	300	0.75	1.1	1.1	185
050	5000	41.4	62.1	7.12	30.0	150	200	300	1.1	1.5	1.5	225
060	6000	49.4	76.3	8.50	35.9	150	200	300	1.5	1.5	2.2	237
070	7000	57.7	87.4	9.92	40.7	180	250	350	1.5	2.2	2.2	293
080	8000	65.4	101.0	11.25	45.3	180	250	350	2.2	2.2	3	335
090	9000	73.9	121.4	12.71	62.0	200	300	400	2.2	2.2	3	365
105	10500	86.6	142.2	14.89	41.4	200	300	400	2.2	3	3	375
120	12000	99	162.5	17.02	38.7	200	300	400	3	3	4	393
135	13500	112.8	183.6	19.40	61.37	300	400	500	4	4	5.5	425
150	15000	123.6	201.2	21.26	59.50	300	400	500	4	4	5.5	441
180	18000	146.1	237.5	25.12	35.9	300	400	500	4	5.5	7.5	511

Note:

- 1) For cooling cycle, water inlet/outlet temperature is 7 /12 C , air intake temperature is 27 C DB/19.5 C WB.
- 2) For heating cycle, water inlet temperature is 60 C , air intake temperature is 21 C .

Cooling Capacity Performance Table-- 4 R (Fresh Air)

Model AHUC	Air Volume m³/h	Nominal Cooling Capacity kW	Nominal Heating Capacity kW	Water flow rate m³/h	Water resistance kPa	External static pressure			Motor power			Unit weight kg
						I Pa	II Pa	III Pa	I kW	II kW	III kW	
010	1000	16.4	18.9	2.82	41.6	120	180	250	0.37	0.37	0.37	73
015	1500	21.9	26.1	3.77	66.7	120	180	250	0.37	0.37	0.37	80
020	2000	28.8	31.6	4.95	10.8	120	180	250	0.55	0.55	0.55	95
025	2500	34.9	41.5	6.00	15.1	120	180	250	0.55	0.55	0.55	100
030	3000	41	49.2	7.05	22.8	120	180	250	0.55	0.55	0.55	115
040	4000	48.9	61.5	8.41	38.7	150	200	300	0.75	0.75	1.1	125
050	5000	64.5	76.7	11.09	22.8	150	200	300	1.1	1.1	1.5	155
060	6000	76.4	92.6	13.14	27	150	200	300	1.1	1.1	1.5	167
070	7000	90.1	106.9	15.49	26.2	180	250	350	1.5	1.5	2.2	191
080	8000	104.1	121.4	17.9	37.2	180	250	350	1.5	2.2	2.2	260
090	9000	116.9	140.2	20.10	50.6	200	300	400	1.5	2.2	2.2	295
105	10500	141.7	172	24.37	36.7	200	300	400	2.2	2.2	3	315
120	12000	158.4	199.7	27.24	39	200	300	400	3	3	3	325
135	13500	175.1	225.3	30.11	22.32	300	400	500	3	3	4	383
150	15000	185.8	239.1	31.95	22.97	300	400	500	3	4	4	387
180	18000	210.8	262.3	36.25	26.2	300	400	500	4	5.5	5.5	446

Note:

1) For cooling cycle, water inlet/outlet temperature is 7 /12 C , air intake temperature is 35 C DB/28 C WB.

2) For heating cycle, water inlet temperature is 60 C , air intake temperature is 7 C

Cooling Capacity Performance Table-- 6 R (Fresh Air)

Model AHUC	Air Volume m³/h	Nominal Cooling Capacity kW	Nominal Heating Capacity kW	Water flow rate m³/h	Water resistance kPa	External static pressure			Motor power			Unit weight kg
						I Pa	II Pa	III Pa	I kW	II kW	III kW	
010	1000	19.1	22.3	3.28	9.8	120	180	250	0.37	0.37	0.37	80
015	1500	27.1	31.4	4.66	21.0	120	180	250	0.37	0.37	0.55	86
020	2000	35.7	41.6	6.14	23.4	120	180	250	0.55	0.55	0.55	105
025	2500	43.4	50.8	7.46	33.9	120	180	250	0.55	0.55	0.75	110
030	3000	50.2	58.9	8.63	51.3	120	180	250	0.55	0.55	0.75	146
040	4000	64.6	76.3	11.11	28.4	150	200	300	0.75	0.75	1.1	155
050	5000	79.9	92.0	13.74	55.9	150	200	300	1.1	1.1	1.5	185
060	6000	95.6	110.8	16.44	61.6	150	200	300	1.1	1.5	1.5	208
070	7000	110.8	129.8	19.05	59.3	180	250	350	1.5	1.5	2.2	251
080	8000	126.1	146.3	21.69	65.3	180	250	350	2.2	2.2	2.2	300
090	9000	134.8	168.5	23.18	82.3	200	300	400	2.2	2.2	3	330
105	10500	164.1	204.9	28.22	85.6	200	300	400	2.2	3	3	345
120	12000	186.3	232.8	32.04	92.7	200	300	400	3	3	4	351
135	13500	208.6	266.1	35.87	53.98	300	400	500	3	4	4	413
150	15000	225.3	287.3	38.74	56.01	300	400	500	4	4	5.5	429
180	18000	269.1	336.7	46.28	52.0	300	400	500	5.5	5.5	7.5	499

Note:

1) For cooling cycle, water inlet/outlet temperature is 7 /12 C , air intake temperature is 35 C DB/28 C WB.

2) For heating cycle, water inlet temperature is 60 C , air intake temperature is 7 C

Cooling Capacity Performance Table-- 8 R (Fresh Air)

Model AHUC	Air Volume	Nominal Cooling Capacity	Nominal Heating Capacity	Water flow rate	Water resistance	External static pressure			Motor power			Unit weight
						I	II	III	I	II	III	
						Pa	Pa	Pa	kW	kW	kW	
	m³/h	kW	kW	m³/h	kPa	Pa	Pa	Pa	kW	kW	kW	kg
030	3000	55.1	63.9	9.48	26.0	120	180	250	0.55	0.75	0.75	175
040	4000	70.5	82.6	12.12	48.7	150	200	300	0.75	1.1	1.1	185
050	5000	86.1	100.2	14.81	40.5	150	200	300	1.1	1.5	1.5	225
060	6000	107.4	127.7	18.47	45.3	180	250	350	1.5	1.5	2.2	237
070	7000	120.5	139.5	20.72	43.5	180	250	350	1.5	2.2	2.2	293
080	8000	136.7	159.3	23.51	60.9	200	300	400	2.2	2.2	3	335
090	9000	153.6	191.8	26.41	69.5	200	300	400	2.2	2.2	3	365
105	10500	180.9	226.1	31.11	80.2	200	300	400	2.2	3	3	375
120	12000	205.2	256.5	35.29	85.4	200	300	400	3	3	4	393
135	13500	236.3	301.4	40.64	35.4	300	400	500	4	4	5.5	425
150	15000	249.3	318.0	42.87	36.8	300	400	500	4	4	5.5	441
180	18000	298.4	374.0	51.32	38.5	300	400	500	5.5	5.5	7.5	511

Note:

1) For cooling cycle, water inlet/outlet temperature is 7 /12 C , air intake temperature is 35 C DB/28 C WB.

2) For heating cycle, water inlet temperature is 60 C , air intake temperature is 7 C .

Heating & Humidifying Performance Table

Model AHUC	Air Volume	Return air condition						Fresh air condition						Humidifying capacity		
		1 Row hating coil			2 Rows heating coil			1 Row hating coil			2 Rows heating coil			Humidify type: wet-membrane		
		NHC	WFR	WR	NHC	WFR	WR	NHC	WFR	WR	NHC	WFR	WR	50mm	100mm	150mm
		m³/h	kW	m³/h	kPa	kW	m³/h	kPa	kW	m³/h	kPa	kW	m³/h	kg/h	kg/h	kg/h
010	1000	4.0	0.34	0.3	6.3	0.54	0.3	5.6	0.48	1.2	8.0	0.69	0.6	2.7	5.5	6.9
015	1500	5.8	0.50	0.5	10.7	0.92	0.6	8.7	0.75	2.0	13.6	1.17	1.4	3.7	7.3	9.1
020	2000	8.7	0.75	0.8	14.6	1.26	0.9	11.6	1.00	3.2	19.4	1.67	2.3	5.5	11.1	13.8
025	2500	9.7	0.83	1	17.5	1.50	1.2	13.6	1.17	4.3	21.3	1.83	2.7	5.5	11.1	13.8
030	3000	12.7	1.09	1.8	22.5	1.93	2.9	16.7	1.44	7.1	27.4	2.36	4.9	6.5	13.0	16.3
040	4000	16.7	1.44	3.2	27.4	2.36	3.1	21.6	1.86	10.7	35.3	3.04	8	8.7	17.4	21.7
050	5000	21.6	1.86	6.3	35.3	3.04	4.7	28.4	2.44	20.6	45.1	3.88	12.7	10.6	21.3	26.6
060	6000	25.5	2.19	7.1	43.1	3.71	7.4	33.3	2.86	20.9	52.9	4.55	10.4	12.6	25.2	31.5
070	7000	29.4	2.53	8.3	51	4.39	8.7	38.2	3.28	21.5	62.7	5.39	14.9	14.7	29.5	36.8
080	8000	33.3	2.86	8.7	56.8	4.88	9.2	44.1	3.79	31.6	70.6	6.07	19.4	16.8	33.5	41.9
090	9000	38.2	3.28	14.2	65.7	5.65	16.3	50	4.30	43.9	79.4	6.83	24.7	18.8	37.6	46.9
105	10500	46.1	3.96	21.1	75.5	6.49	17.8	56.8	4.88	16.3	95.1	8.18	37.5	22.0	44.0	55.0
120	12000	51.9	4.46	22.7	86.2	7.41	18.9	65.7	5.65	52.2	107.8	9.27	42.8	25.6	51.2	64.1
135	13500	51.9	4.46	18	97.0	8.34	13.9	74.7	6.42	35	123.2	10.59	36.9	28.7	57.3	71.6
150	15000	64.0	5.50	23.7	106.7	9.17	21.5	77.6	6.67	35	128.0	11.01	28.7	31.0	62.1	77.6
180	18000	76.6	6.59	32.4	124.2	10.68	20.7	93.1	8.01	43.9	154.2	13.26	38.2	37.7	75.4	94.3

Note:

1) Heating operation: inlet/outlet water temperature 60 /50C , fresh air inlet temperature 7 C , return air inlet temperature 21C .

Cooling Capacity Performance Chart in Dry Cooling Condition 4R (Return Air)

This range of unit is different from factory standard unit in following aspects:

1. For AHU in dry cooling condition, surface temperature of cooling coil is higher than dew point temperature of the air. In temperature and humidity independent system, terminal units in dry cooling condition take the indoor main sensible heat load.
2. Cooling coil has optimal design on rows and layout of pipe thus enhancing heat exchanging efficiency.
3. No condensed water is formed in dry cooling condition so as to avoid bacterium and secondary pollution. Therefore it boasts some superiority in cleaning system of electronic and pharmaceutical factory which requires small cooling capacity and large air volume.

Model AHUC	Air Volume	Nominal Cooling Capacity	Water flow rate	Water resistance	External static pressure			Motor power			Unit weight
					I	II	III	I	II	III	
	m³/h	kW	m³/h	kPa	Pa	Pa	Pa	kW	kW	kW	kg
010	1000	2.06	0.18	4.96	120	180	250	0.55	0.55	0.55	73
015	1500	3.11	0.27	13.12	120	180	250	0.55	0.55	0.55	80
020	2000	3.97	0.34	17.02	120	180	250	0.55	0.55	0.55	95
025	2500	4.93	0.42	23.25	120	180	250	0.55	0.55	0.55	100
030	3000	5.67	0.49	29.99	120	180	250	0.55	0.55	0.55	115
040	4000	7.75	0.67	22.31	150	200	300	0.75	0.75	1.1	125
050	5000	10.12	0.87	45.24	150	200	300	1.1	1.1	1.5	155
060	6000	11.93	1.03	50.32	150	200	300	1.1	1.1	1.5	167
070	7000	14.01	1.20	48.23	180	250	350	1.5	1.5	2.2	191
080	8000	16.02	1.38	66.55	180	250	350	1.5	2.2	2.2	260
090	9000	17.10	1.47	11.99	200	300	400	1.5	2.2	2.2	295
105	10500	20.64	1.77	19.87	200	300	400	2.2	2.2	3	315

Note:

- 1) The above chart cooling capacity based on condition of: inlet/outlet water 18/21°C, intake air temperature 27°C DB, 19.5°C WB
 - 2) If real working condition is different from the standard condition, please refer to the modified coefficient on Page12 to correct.
- Correction formula: Real cooling capacity=Nominal cooling capacity * working condition modified coefficient

Cooling Capacity Performance Chart in Dry Cooling Condition 6R (Return Air)

This range of unit is different from factory standard unit in following aspects:

1. For AHU in dry cooling condition, surface temperature of cooling coil is higher than dew point temperature of the air. In temperature and humidity independent system, terminal units in dry cooling condition take the indoor main sensible heat load.
2. Cooling coil has optimal design on rows and layout of pipe thus enhancing heat exchanging efficiency.
3. No condensed water is formed in dry cooling condition so as to avoid bacterium and secondary pollution. Therefore it boasts some superiority in cleaning system of electronic and pharmaceutical factory which requires small cooling capacity and large air volume.

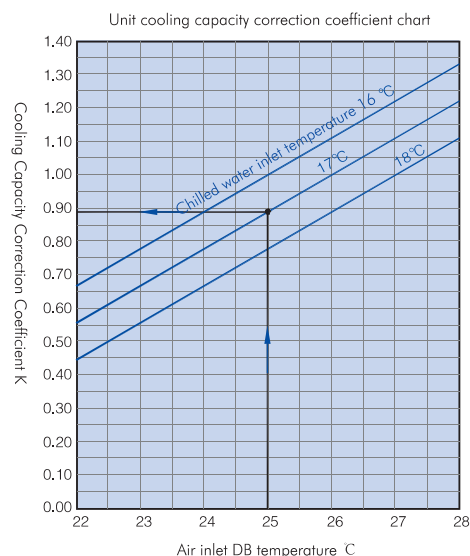
Model AHUC	Air Volume	Nominal Cooling Capacity	Water flow rate	Water resistance	External static pressure			Motor power			Unit weight
					I	II	III	I	II	III	
	m³/h	kW	m³/h	kPa	Pa	Pa	Pa	kW	kW	kW	kg
010	1000	2.39	0.21	3.53	120	180	250	0.55	0.55	0.55	80
015	1500	3.61	0.31	10.01	120	180	250	0.55	0.55	0.55	86
020	2000	4.78	0.41	10.58	120	180	250	0.55	0.55	0.55	105
025	2500	5.78	0.50	14.90	120	180	250	0.55	0.55	0.75	110
030	3000	6.91	0.59	22.13	120	180	250	0.55	0.55	0.75	146
040	4000	9.39	0.81	47.28	150	200	300	0.75	0.75	1.1	155
050	5000	11.56	0.99	12.43	150	200	300	1.1	1.1	1.5	185
060	6000	13.69	1.18	13.94	150	200	300	1.1	1.5	1.5	208
070	7000	16.05	1.38	13.39	180	250	350	1.5	1.5	2.2	251
080	8000	18.40	1.58	18.53	180	250	350	2.2	2.2	2.2	300
090	9000	20.90	1.80	25.68	200	300	400	2.2	2.2	3	330
105	10500	24.90	2.14	41.67	200	300	400	2.2	3	3	345

Note:

- 1) The above chart cooling capacity based on condition of: inlet/outlet water 18/21°C, intake air temperature 27°C DB, 19.5°C WB
 - 2) If real working condition is different from the standard condition, please refer to the modified coefficient on Page12 to correct.
- Correction formula: Real cooling capacity=Nominal cooling capacity * working condition modified coefficient

Cooling Capacity Correction in Dry Cooling Condition

Unit standard cooling capacity based on inlet air condition: 27°C DW/19.5°C WB, chilled water 18°C. For air conditioner system, designed chilled water temperature is related to indoor air dew-point temperature. When indoor parameter or chilled water inlet temperature changes, unit cooling capacity changes accordingly. The following figure shows unit cooling capacity correction of inlet chilled water at 16°C, 17°C, 18°C when air inlet DB temperature changes.



Selection Example of Unit Cooling Capacity:

E. g.: Electronic plant, total air volume-4000m³/h, indoor return air DB temperature 25°C, chilled water supply/return water temperature 17/20°C, model KDC040-4 Rows dry type AHU real cooling capacity is :

1. Unit rating capacity

According to the parameter chart on Page10, when chilled water supply/return water temperature is 18/21°C rated cooling capacity of Unit 040-4R:

$Q_0 = 7.75 \text{ KW}$

2. Correction coefficient

Find 25°C at the horizontal axis of cooling capacity correction coefficient chart and then find the 17°C curve along the arrow, go straight to the left along the arrow and get the correction coefficient.

$K = 0.885$

3. Unit real cooling capacity

$Q = Q_0 \times K = 7.75 \times 0.885 = 6.86 \text{ KW}$

Jet Flow Air Handling Unit

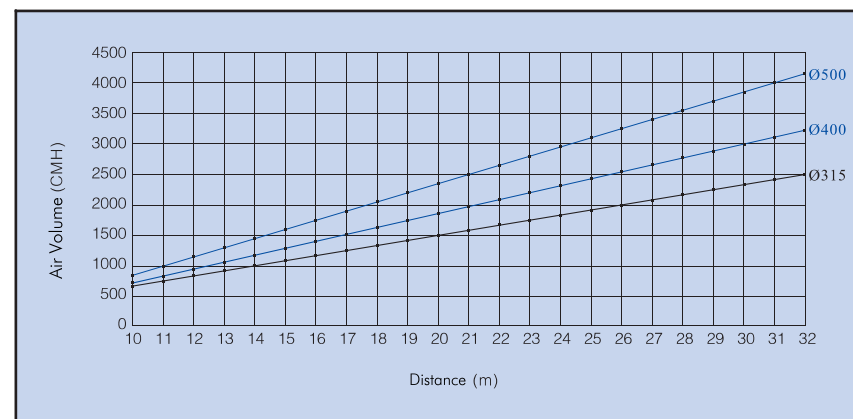
High performance ball-shaped spout is applied without need for air pipe thus saving much space, mainly for large space direct air supply system. Heating operation performance parameters are the same with AHU (See details on Pages 2-8). Jet flow unit ball-shaped spout has an adjustable inside ball with long jet distance and large coverage area, widely used in places with large space such as theater, stadium, airport, supermarket, workshop, large commercial building and exhibition hall.

Selection mainly takes air volume, cooling capacity and air-flow organization into consideration. When supply air distance installation height, supply air temperature, indoor temperature and supply air volume has been determined for the building, chose proper jet flow AHU to make outlet cold and hot jet flow meet requirements as follows:

1. Cold and hot air should go to the targeted place.
2. Cold jet flow won't go down in the middle way then lead to uncomfortable consequence.
3. Hot air can be sent to required distance and location.
4. Water temperature difference can meet the designed requirement.

Selection design need consider mutual influence and interaction among supply-air outlets. Jet flow expansion width is 40% of jet flow distance, and unit layout density is advised to be a little less than expansion width. For example, when unit clings to the ceiling, the related influence should be taken into consideration since jet distance of adherence air flow is 1.4 times of that of normal air flow.

Supply Air Outlet Opening Specification Selection



Note:

1. Air volume in above diagram refers to single outlet air volume; double outlets air volume is 50% of unit air volume.
2. Jet distance refers to the distance from the outlet at 0.5m/s axis air speed.
3. Choosing as large as possible outlet since small outlet has larger resistance thus in need for higher motor power.

Jet Flow Unit Horizontal Jet Distance Recommended Selection

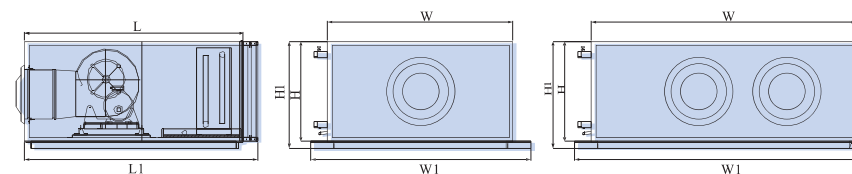
Model AHUC	010	015	020	025	030	040	050	060	070	080	090	105	120
Jet distance	~12	~16	~18	~20	~22	~24	~26	~26	~28	~30	~30	~30	~31
Applied distance	18	22	24	26	28	30	32	32	34	36	36	36	37

Jet Flow Unit Parameter

Model	Air volume CMH	Spout specification	No. of spout	Motor power kW														
				Jet distance 10m			Jet distance 15m			Jet distance 20m			Jet distance 25m			Jet distance 30m		
				4R	6R	8R	4R	6R	8R	4R	6R	8R	4R	6R	8R	4R	6R	8R
010	1000	Φ315	1	0.25	0.25	—	0.25	0.18	—	0.25	0.25	—	—	—	—	—	—	—
015	1500	Φ315	1	0.25	0.25	—	0.25	0.32	—	0.32	0.37	—	0.37	0.37	—	—	—	—
020	2000	Φ315	1	0.32	0.45	—	0.45	0.45	—	0.45	0.55	—	0.55	0.55	—	—	—	—
025	2500	Φ400	1	0.32	0.32	—	0.32	0.55	—	0.55	0.55	—	0.55	0.45	—	0.45	0.45	—
030	3000	Φ400	1	0.55	0.55	0.75	0.55	0.75	0.75	0.75	0.75	1.1	0.75	1.1	1.1	1.1	1.1	1.1
040	4000	Φ400	1	1.1	1.1	1.1	1.1	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
050	5000	Φ400	2	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	1.5	2.2	2.2	2.2
060	6000	Φ400	2	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	1.5	2.2	2.2	2.2	2.2	2.2
070	7000	Φ400	2	1.5	1.5	2.2	1.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3
080	8000	Φ400	2	2.2	2.2	2.2	2.2	2.2	3	3	3	3	3	3	3	3	3	3
090	9000	Φ500	2	1.5	2.2	2.2	1.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
105	10500	Φ500	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
120	12000	Φ500	2	3	3	3	3	3	4	3	4	4	4	4	4	4	4	4

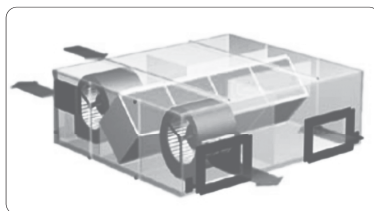
Note:
Above power is based on no external static pressure. The air pipes are needed at the inlet, please indicate in the order.
If air pipes are needed or jet distance surpass above specification, please contact engineering department of factory.

Jet Flow Unit Dimension



Model AHUC	L	W	H	L1	W1	H1	Air supply outlet specification	Air supply outlet No.	Flange Air Inlet Length * Width * No.
010	1240	710	440	1290	870	490	Φ315	1	660 × 390 × 1
015	1240	860	440	1290	1020	490	Φ315	1	810 × 390 × 1
020	1240	940	520	1290	1100	570	Φ315	1	890 × 470 × 1
025	1240	940	520	1290	1100	570	Φ400	1	890 × 470 × 1
030	1400	1060	520	1450	1220	570	Φ400	1	1010 × 470 × 1
040	1400	1210	570	1450	1370	620	Φ400	1	1160 × 520 × 1
050	1400	1420	570	1450	1580	620	Φ400	2	1370 × 520 × 1
060	1400	1640	600	1450	1800	650	Φ400	2	1590 × 550 × 1
070	1400	1700	650	1450	1860	700	Φ400	2	1650 × 570 × 1
080	1400	1760	670	1450	1920	720	Φ400	2	1710 × 620 × 1
090	1400	1800	720	1450	1960	770	Φ500	2	1750 × 670 × 1
105	1550	2060	720	1600	2220	770	Φ500	2	2010 × 670 × 1
120	1550	2200	800	1600	2360	850	Φ500	2	2150 × 750 × 1

Fresh Air Ventilator



Operating Principle:

Energy recovery fresh air ventilator is an air-to-air sensible/total heat exchanger which applied plate heat recovery unit. It discharges indoor polluted air, and takes in outdoor fresh air; meanwhile discharged air and fresh air will have heat exchange and humidity exchange (energy transfer, discharged air heats fresh air in winter and cools fresh air in summer), so that indoor air is exchanged with outdoor air while quality improved, heat recovered and energy saved. Inner installed heat recovery unit handles turbulent air flow, which helps to conduct more complete heat exchange with higher efficient.

Plate Heat Recovery Type:

Sensible Heat Recovery: Hydrophilic aluminum fin against sea water corrosion is processed by special techniques, with high heat exchange rate, long useful lifespan and easy to maintain. It can be used in area with high indoor and outdoor temperature difference and low humidity.

Total Heat Recovery: Nonporous film paper (ER paper) is applied, which has low thickness, high moisture permeability, good air tightness, ageing resistant and high heat exchange rate. It is mainly used in area with low indoor and outdoor temperature difference and high humidity.

Unit Features:

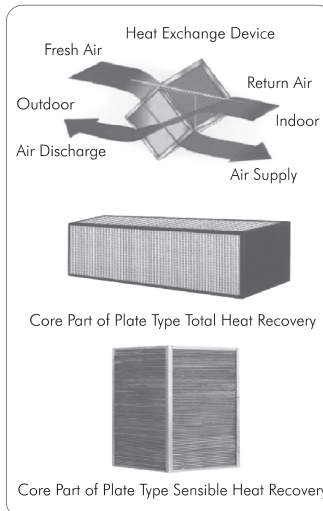
Double-way ventilation: Indoor & outdoor double-way; ventilation provides the room with 100% fresh air.

High Efficient, Energy Saving: Inner heat exchanger rate is higher than 65%, so that heating and cooling load will not be affected by fresh air volume, which saves as much as 30% energy, truly high efficient and energy saving.

Environmental Friendly: Indoor noxious air is discharged to outdoor and replaced by fresh air so as to clean indoor in an environment friendly way.

Easy Maintenance & Operation: Plate heat exchanger has no moving part thus costing little maintenance fee. With tight structure, small scale and inner heat recover device, it can be used only after connected to supply power and air duct, without need of heat/cooling source.

Low Noise: Low noise, external rotor fan is applied with inner arts gone through de-noising treatment. AHU case is insulated by high density PE foam, which keeps any disturbance out of the site.



Fresh Air Ventilator Parameters (Sensible Heat)

Model AHUC	Air flow m³/h	Temperature efficiency %		External Static Pressure		Motor power		Weight kg	Power supply PH-V-Hz
				Supply air system Pa	Discharge air system Pa	Supply Air Side kW	Discharge Air Side kW		
010DX	1000	62	67	130	130	0.25	0.25	132	3~380-50
015DX	1500	62	67	150	150	0.32	0.32	155	3~380-50
020DX	2000	60	65	200	200	0.45	0.45	201	3~380-50
025DX	2500	63	67	200	200	0.45	0.45	240	3~380-50
030DX	3000	62	67	250	250	0.8	0.8	274	3~380-50
040DX	4000	62	67	230	230	1.0	1.0	330	3~380-50
050DX	5000	62	67	250	250	1.1	1.1	427	3~380-50
060DX	6000	62	67	250	250	0.8*2	0.8*2	540	3~380-50
080DX	8000	62	67	230	230	1.0*2	1.0*2	652	3~380-50
105DX	10000	62	67	250	250	1.1*2	1.1*2	844	3~380-50

Fresh Air Ventilator Parameters (Total Heat)

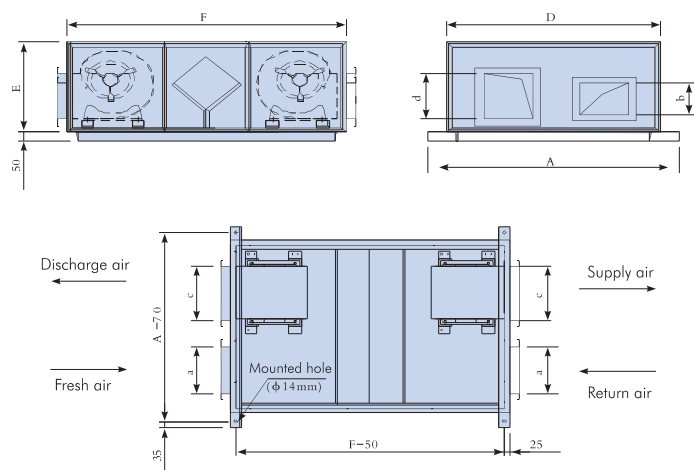
Model AHUC	Air flow m³/h	Temperature efficiency %		External Static Pressure		Motor power		Weight kg	Power supply PH-V-Hz
				Supply air system Pa	Discharge air system Pa	Supply Air Side kW	Discharge Air Side kW		
010DJ	1000	60	65	130	130	0.25	0.25	132	3~380-50
015DJ	1500	60	65	150	150	0.32	0.32	155	3~380-50
020DJ	2000	59	63	200	200	0.45	0.45	201	3~380-50
025DJ	2500	60	65	200	200	0.45	0.45	240	3~380-50
030DJ	3000	60	65	250	250	0.8	0.8	274	3~380-50
040DJ	4000	60	65	230	230	1.0	1.0	330	3~380-50
050DJ	5000	60	65	250	250	1.1	1.1	427	3~380-50
060DJ	6000	60	65	250	250	0.8*2	0.8*2	540	3~380-50
080DJ	8000	60	65	230	230	1.0*2	1.0*2	652	3~380-50
105DJ	10000	60	65	250	250	1.1*2	1.1*2	844	3~380-50

Note:

1) For cooling condition, fresh air temperature is 35 °C DB/28 °C WB; return air temperature is 27 °C DB/19.5 °C WB.

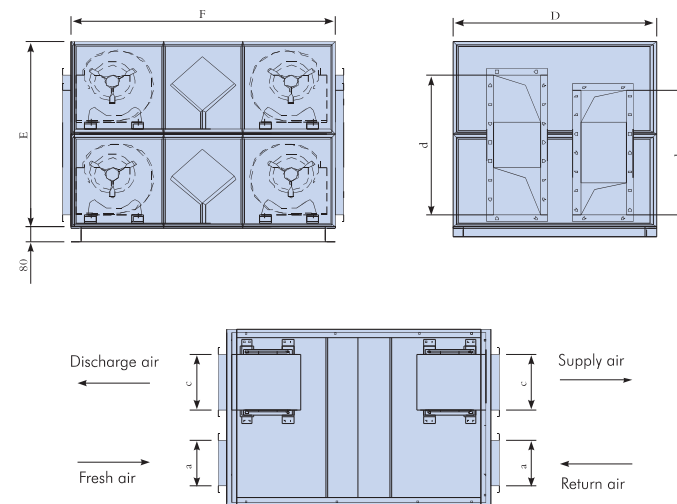
2) For heating condition, fresh air temperature is -7 °C DB; return air temperature is 21 °C DB;

Fresh Air Ventilator Dimension -- Ceiling Type



Model	Dimension (mm)					
AHUC DX (J)	A	D	E	F	a × b	c × d
010	900	740	443	1224	220 × 180	225 × 219
015	1240	1080	443	1224	340 × 180	300 × 230
020	1480	1320	443	1374	440 × 180	258 × 246
025	1480	1320	584	1562	460 × 220	300 × 272
030	1590	1430	584	1588	560 × 220	300 × 272
040	1590	1430	726	1755	560 × 280	356 × 305
050	1940	1780	726	2060	740 × 280	375 × 375

Fresh Air Ventilator Dimension -- Horizontal Type

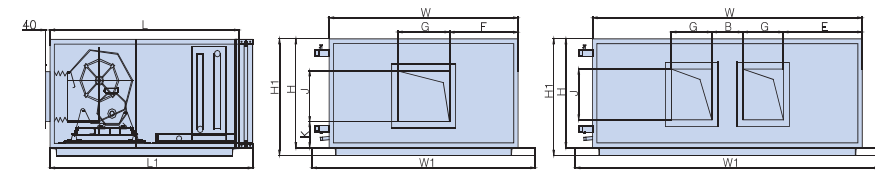


Model	Dimension (mm)				
AHUC DX (J)	D	E	F	a × b	c × d
060	1430	1168	1588	560 × 805	300 × 855
080	1430	1452	1755	560 × 1005	356 × 1030
105	1780	1452	2060	740 × 1005	375 × 1100

Standard Model Piping Dimension

Model AHUC	Return air					Fresh air					Dry return air		water pipe Condensate
	4R	6R	8R	1RHeat	2R Heat	4R	6R	8R	1RHeat	2R Heat	4R	6R	
	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	
010	40	40	—	40	40	40	40	—	40	40	32	32	25
015	40	40	—	40	40	40	40	—	40	40	32	32	25
020	40	40	—	40	40	40	40	—	40	40	32	32	25
025	40	40	—	40	40	40	40	—	40	40	32	32	25
030	40	40	40	40	40	40	40	40	40	40	32	32	25
040	40	40	40	40	40	40	40	50	40	40	32	32	25
050	40	40	40	40	40	40	50	50	40	40	32	32	25
060	40	40	40	40	40	50	50	50	40	40	32	32	25
070	40	40	40	40	40	50	50	65	40	40	32	32	25
080	40	40	50	40	40	50	65	65	40	40	32	32	25
090	40	50	50	40	40	50	65	65	40	40	32	32	25
105	50	50	50	40	40	65	65	65	40	40	32	32	25
120	50	50	50	40	40	65	65	65	40	40	—	—	25
135	50	50	65	40	40	65	80	80	40	40	—	—	32
150	50	65	65	40	40	65	80	80	40	40	—	—	32
180	50	65	65	40	40	80	80	80	40	40	—	—	32

Standard Model Outline Dimension



Model AHUC	L	W	H	L1	W1	H1	G	J	B	K	E	Air inlet flanges (L×W×No.)	Air outlet flanges (L×W×No.)
010	940	860	490	990	1020	540	259	228	—	136	177	810X440X1	259X228X1
015	940	860	490	990	1020	540	259	228	—	136	177	810X440X1	259X228X1
020	940	940	520	990	1100	570	259	228	—	136	247	890X470X1	259X228X1
025	940	940	520	990	1100	570	259	228	—	136	247	890X470X1	259X228X1
030	940	1060	520	990	1220	570	298	262	—	91	300	1010X470X1	298X262X1
040	950	1210	570	1000	1370	620	331	289	—	93	392	1160X520X1	331X289X1
050	950	1420	570	1000	1580	620	232	262	184	101	290	1370X520X1	232X262X2
060	970	1640	600	1020	1800	650	298	262	244	111	250	1590X550X1	298X262X2
070	970	1700	620	1020	1860	670	331	289	264	111	250	1650X570X1	331X289X2
080	1000	1760	670	1050	1920	720	331	289	264	111	281	1710X620X1	331X289X2
090	1000	1800	720	1050	1960	770	309	341	244	111	360	1750X670X1	309X341X2
105	1030	2060	720	1080	2220	770	309	341	244	111	600	2010X670X1	309X341X2
120	1050	2200	800	1100	2360	850	395	341	324	111	400	2150X750X1	395X341X2
135	1320	1950	970	1370	2190	1050	373	404	294	169	430	1900X920X1	373X404X2
150	1320	1950	1050	1370	2190	1130	373	404	294	169	430	1900X1000X1	373X404X2
180	1470	2250	1150	1520	2490	1230	430	478	343	173	350	2200X1100X1	430X478X2

Note: Above dimension is just for reference.