Make Air Treatment Healthier and More Energy-Efficient

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STANDARD AIR HANDLING UNIT

MAKE AIR TREATMENT HEALTHIER AND MORE ENERGY-EFFICIENT HOLTOP

MAKE AIR TREATMENT HEALTHIER AND MORE ENERGY-EFFICIENT

Everyone needs to breathe 25,000 times per day, fresh and clean air is essential.

The ultimate pursuit of details, strict requirements for quality.

Pragmatism, Responsibility, Collaboration, Innovation.

Holtop keeps working on providing you with fresh air, clean, intelligent control, comfortable, convenience - integrated clean air solutions. Holtop delivers fresh and clean air, just for you healthy breath!

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ABOUT HOLTOP

2002

HOLTOP WAS FOUND

Well-known domestic manufacturer of healthy, comfortable and energy-saving air handling unit.

Annual output of 200,000 units of fresh air, air conditioning and environmental protection equipment.

Won the title of “Zhongguancun and National High-tech Enterprises” and “Specialized, Special, New and Small Giant Enterprises” Accredited for participating in the compilation of many China national standards, with nearly 100 patent.

Obtained ISO9001, ISO14001, ISO45001 management system certification.

Set up sales and service agencies in major cities across the China, and won the five-star service certification.

Holtop products are available in over 100 countries and regions, delivering high-quality user experience to hundreds of millions of customers worldwide.

ISO Certifications

Dozens of National Patents Owner

National Standards Participated

World Leading Manufacturer

Zhongguancun & National High-tech Enterprise

Equipment Supplier for Beijing Olympics and The Shanghai World Expo

MAKE AIR TREATMENT HEALTHIER AND MORE ENERGY-EFFICIENT HOLTOP

MAKE AIR TREATMENT HEALTHIER AND MORE ENERGY-EFFICIENT

To make the air fresh and the sky blue, to ensure every breath is safer, to utilize energy more sustainably and to make air treatment healthier and more energy-efficient, this is the mission to which we have been dedicated.

DEVELOPMENT HISTORY

2002
- On 27th May, Holtop was founded, and Holtop brand products were put into the market.

2003
- During SARS period, Holtop overcame difficulties and won the "Outstanding Contribution Award for Combating SARS" issued by Beijing Municipal Government.

2004
- Holtop new 30,000 square metre factory in Haidian District, Beijing, was put into operation;
- Holtop was certified by ISO14001.
- Holtop 5-metre diameter heat recovery wheel put into engineering application.

2005
- Holtop Invited to participate in the compilation of the national standard "Air to Air Energy Recovery Device".

2006
- Holtop self-developed heat recovery air handling unit launched and received a good market response.

2007
- Holtop was designated supplier of air heat recovery devices for Shanghai World Expo, and supported heat recovery fresh air devices for Shandong National Games venues.

2008
- During the Beijing Olympic Games, 24-hour guarding of the venues Holtop fresh air system, obtained title of "Olympic excellent protection enterprise".

2009
- Holtop heat recovery device certified by European Eurovent, laying the foundation for the development of overseas markets.

2010
- Holtop overseas sales and service agencies quantity reached 18, sales network covering the whole country; Obtained the "National Industrial Products Production Licence".

2011
- Holtop Successfully signed a contract with Beijing Benz automobile plant project, realising a major breakthrough of air-conditioning products in the automobile industry.

2012
- Holtop participated in compiling the national standard for "Air-to-air heat exchanger unit for unitary ventilation and air conditioning".

2013
- Holtop whole series of fresh air ventilators obtained the "Energy-saving Certification for Architectural Engineering".

2014
- Holtop acknowledged as "Zhongguancun High-tech Enterprise"; Holtop signed the first overseas large-scale project "Geely Belarus Plant".

2015
- Holtop Badaling's production base in Yanqing Park of Zhongguancun, Yanqing District was put into operation.

2016
- Holtop Environmental Protection Company was recognised as "National High-tech Enterprise";
- "Holtop Science and Technology Park" was put into use.

2017
- Holtop acknowledged as "National High-tech Enterprise";
- Holtop Forest Oxygen Bar home air conditioning products were released.

2018
- Holtop acted against the epidemic by donating fresh air equipment together with Zhong Nanshan Foundation; provided fresh air system for Wuhan Square Cabin Hospital. .....

2019
- Holtop Self-developed DX heat recovery purification AHU went on sale.

2020
- Holtop fresh air ventilators and air handling units provide 24-hour service to the Olympic Winter Games.

2021
- Holtop Company and Holtop Environmental Protection Company were both recognized as "Specialized and New Enterprise" and "Small Giant Enterprise".

2022
.....

CRAFTSMANSHIP

ANNUAL OUTPUT OF 200,000 SETS OF AIR HANDLING UNIT

Holtop Badaling manufacturing base is located in Yanqing Park, Zhongguancun.

Has international advanced production lines and modern intelligent manufacturing equipment.

Details determine quality, Holtop strive for perfection in every detail, and produce excellent products that meet the quality of Holtop.

Sheet metal workshop

Assembly line for standard ventilation unit

Assembly line of ceiling type air handling unit

Assembly area of combined air handling unit

Air conditioning Outdoor unit production line

National certified enthalpy laboratory

Manufacturing base assembly workshop

Standard Air Handling Unit

Holtop standard type air handling unit adopts advanced technology and manufacturing process. It has the feature of high mechanical strength, better air sealing performance, compact structure, and flexible installation. It's suitable for comfortable and clean air conditioning environment of shopping malls, office buildings, railway stations, hospitals, factories, etc. where demand to have comfortable and clean indoor air quality.

Holtop standard air handling units offer ceiling-mounted, horizontal and vertical types, and air volume range covers from 1000 to 60000m3/h, which meets various different residual pressure requirements, and the unit can be flexibly equipped with section of filters, humidifiers and heaters and other sections as well. The unit, can realize quick selection, quick delivery, quick installation, it's widely used in commercial or industrial of central air-conditioning systems.

Model Number Nomenclature

HJK	-	010	D	C	0	A	C	K	1	Y	-	N	N	N
①		②	③	④	⑤	⑥	⑦	⑧	⑨	⑩		⑪	⑫	⑬

① Holtop HJK Series Air Handling Unit

② Rated air volume: specification number * 100m/h

③ Unit type: D-ceiling, W-horizontal, L-vertical, S-jet

④ Cooling coil specifications: C, D, E, F

⑤ Heating coil specifications: A, B, N-none (standard type)

⑥ Filter specifications: A-nylon mesh filter (standard type)
B-Primary plate filter, C-Medium plate filter, D-Metal mesh filter

⑦ Filter pulling direction: C-side pumping, X-down pumping

⑧ Air conditions Type: K-return air, F-fresh air

⑨ Design version: 1, 2, 3....

⑩ Left or Right type: Y-Right, Z-Left

⑪ Wet film humidifier: N-none (standard type)
A-50mm，B-100mm，C-150mm，D-200mm

⑫ Electric heater: N-no (standard type), Y-yes (customization)

⑬ Drain pan material: N-no material requirement
(standard type), A-stainless steel (optional)

Vertical
Air Handling Unit

- HJK- *** L

Horizontal
Air Handling Unit

- HJK- *** W

Ceiling
Air Handling Unit

- HJK- *** D

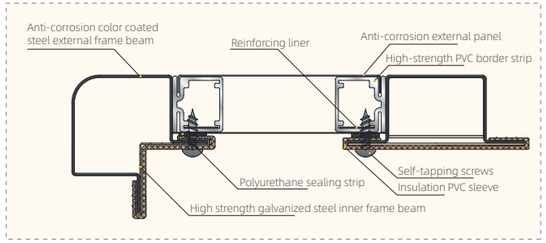
Jet Type
Air Handling Unit

- HJK- *** S

AHU Features

High-strength frame work structure

The frame work is formed by one-piece rolling of color coated stee, and the internal adopt high strength and insulated PVC sleeves to form a unique cold-break bridge structure, which enhance the mechanical strength, and isolating the wet and cold air to protect the condensation on the surface of the unit.



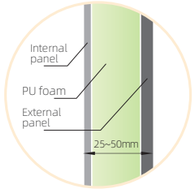
Better Sealing Performance

The panel of the unit adopts an embedded assembly structure, and a new macromolecular material is used for sealing between the panel and the frame, which is easy to assemble or disassemble and maintenance, and ensures a low air leakage rate and a good airtightness performance.

Embedded panel assemble and sealing

Superior Thermal Insulation Performance panel

The unit adopts the standard type "sandwich" structure panel, the external surface panel is color coated steel, the internal panel is galvanized steel sheet, and injected with high density PU foam with best thermal insulation performance.



Panel and PU details

Select High-quality Fans, stable operation

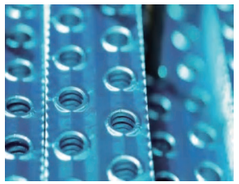
Select a high-quality brand fan according to the air volume and static pressure. The fan impeller and belt have undergone static and dynamic balance correction and vibration correction. The base is equipped with a shock absorber. The air outlet is designed according to aerodynamic performance and has a soft canvas connection between the AHU case and to effectively reduce vibration transmission, and create a stable and reliable operation.

High Efficiency of Heat Exchange Coil

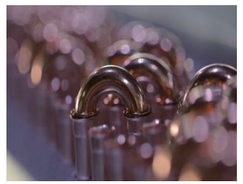
The cooling coil and heating coils of HJK series units adopt the structure of copper pipes with aluminum fins, by the expanding technology for complete jointing, which greatly improves the heat exchange efficiency of the coils.

The surface of the aluminum fins is treated with acrylic resin, which has good hydrophilicity.Under wet conditions, the condensed water on the surface of the coil quickly forms a uniform water film, which ensures the comprehensive heat exchange efficiency of the coil.

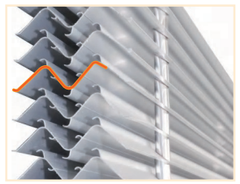
The heat exchanger is designed with professional selection software to ensure the consistency of selection parameters and physical performance, and can meet the requirements of customers in various working conditions. The coil is made of RoHS-certified high-quality copper pipes and aluminum fins that are integrated through advanced mechanical tube expansion technology, and 100% air-tightness test before leaving the factory to ensure no leakage.



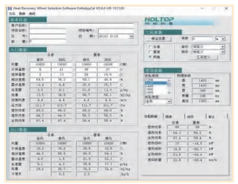
Hydrophilic membrane aluminum foil fins



U-shaped copper pipe



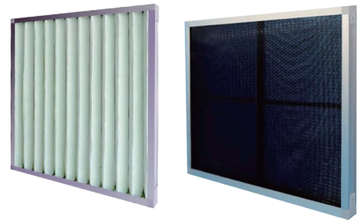
PVC/aluminum alloy water eliminator



Selection software

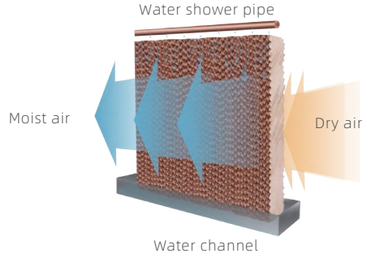
AHU Features

Optional Filter Class

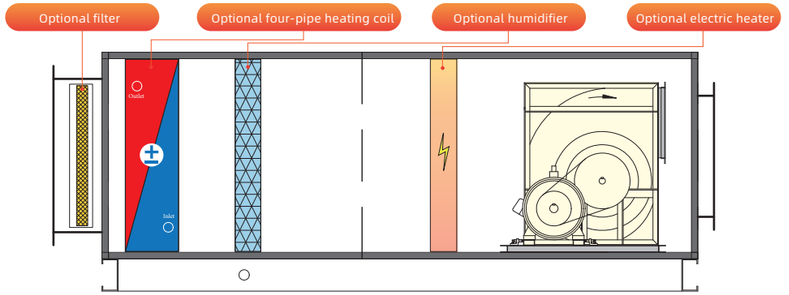


The standard unit equipped with nylon mesh filter, it's feature of low resistance, anti-mildew and can be wash for times. Filters of primary plate type and secondary plate type can be optionally to set according to project needs.

High Efficiency of Wet Film Humidifier



When the dry air passes the wet film material, the water molecules fully absorb the heat of the air to vaporize and evaporate, thus increasing the humidity capacity of the air. Wet film humidifier has the feature of self-regulating humidification capacity while without over-saturation or condensation, low operation cost and long service life.



Electric Heating Function (Non-Standard)

Auxiliary electric heater is an ideal heat source equipment. It adopts electricity to heat the air, which improves the heating efficiency and heating performance of the air, and is suitable for preheating the fresh air during winter time. Electric heater adopts multiple protection measures to eliminate potential safety hazards caused by overheating

Quick Selection, Easy Installation and Maintenance

According to different project locations, it's flexible to select AHU type of ceiling, horizontal, vertical. And for the application of where the installation of air ducts is not allowed or difficult to install in the internal space, Jet type units offer a forced jet flow for long distance air supply.

Parameters(Return air condition)

Model HJK	Airflow m^3/h	Type C					Type D					E.S.P	Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN			
010	1000	3.6	7.5	0.18	16.42	32	5.1	9.9	0.24	7.74	32	80	25	External rotor fan
015	1500	6.3	11.2	0.29	28.29	32	8.3	15	0.4	13.81	32	80	25	
020	2000	8.7	15.6	0.41	54.19	32	11.7	20.6	0.56	26.98	32	80	25	
025	2500	11.1	18.6	0.53	41.08	32	13.9	26.8	0.66	25.05	32	120	25	
030	3000	14.2	24	0.68	55.31	32	17.6	30.8	0.84	33.39	32	160	25	
040	4000	16.6	31.5	0.79	27.89	40	24	44.5	1.14	39.73	40	200	25	
050	5000	22.2	41.7	1.06	53.67	40	28	52.4	1.34	37.23	40	200	25	
060	6000	27.5	46	1.31	33.32	40	35.7	60.4	1.71	43.7	40	200	25	
070	7000	29.2	47.8	1.39	48.17	40	41.1	71.5	1.96	30.37	40	240	25	
080	8000	32.4	61.1	1.54	19.85	40	48	81.4	2.29	35.64	40	240	25	
090	9000	37.9	64.1	1.81	21.26	40	50.7	94.3	2.42	42.15	40	280	25	
105	10500	43.6	82.8	2.08	22.82	50	57.6	105.9	2.75	45.11	50	280	25	
120	12000	52.5	97.5	2.51	28.55	50	68.6	127.5	3.28	56.09	50	280	25	
135	13500	57.5	113.9	2.66	32.45	50	73.8	148.6	3.53	57.34	50	320	25	
150	15000	63.3	117.5	2.98	28.1	50	83.52	167.7	3.89	54.85	50	320	25	
180	18000	77.8	122	3.71	39.29	50	106.7	204.6	3.91	24.9	50	370	32	
210	21000	88.5	143.6	4.22	7.59	65	127.5	245.6	5.07	34.56	65	370	32	
240	24000	106.9	168.1	5.1	12.44	65	147.9	293.4	5.88	47.52	65	370	32	
270	27000	126.9	199.7	6.05	12.21	65	161.2	322.2	6.99	46.77	65	420	32	Belt Driven Fan
300	30000	128.3	201.8	6.12	12.45	65	192.3	352.3	7.06	47.54	65	420	32	
330	33000	157.4	244	7.31	15.17	80	213.3	399.5	7.48	56.4	80	420	32	
350	35000	163.7	263.7	7.78	17.58	80	217.4	412.7	7.98	10.47	80	470	32	
400	40000	168.9	266.2	7.98	17.63	80	236.2	447.3	8.05	10.63	80	470	32	
450	45000	202.7	319	9.32	17.62	80	242.6	500.0	9.64	10.61	80	470	32	
500	50000	219.4	344.9	10.25	17.61	80	284.2	540.4	10.43	10.58	80	520	32	
600	60000	270.2	425.3	12.59	17.62	80	350.4	666.6	12.86	10.61	80	520	32	

Remark:
1.Cooing capacity: Air inlet temperature (DB/WB): 27°C/19.5°C; Chilled water inlet/outlet temperature: 7°C/12°C. 2.Heating capacity: Air inlet temperature (DB): 15°C; Hot water inlet/outlet temperature: 60°C/50°C.
3.The water flow in the sheet is the chilled water flow, the hot water flow is slightly smaller than the chilled water flow. Water pump selection refers to the chilled water flow;
4.Due to continuous upgrading, the AHU parameters may change without prior notice, and the specific parameters are subject to the nameplate. 5.Power supply: 380V/3~/50Hz

Parameters(Return air condition)

Model HJK	Airflow m^3/h	Type E					Type F					E.S.P	Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN			
010	1000	6.3	10.2	0.3	5.88	32	7.4	12.9	0.35	3.8	32	80	25	External rotor fan
015	1500	9.7	16.1	0.47	11.01	32	11.1	18.9	0.53	7.87	32	80	25	
020	2000	13.7	22	0.65	21.33	32	14.3	25.6	0.68	15.35	32	80	25	
025	2500	16	28.7	0.77	19.45	32	17.7	29.9	0.85	9.18	32	120	25	
030	3000	18.6	32.8	0.89	26.31	32	22.5	37.4	1.07	12.49	32	160	25	
040	4000	26.2	44.8	1.25	54.86	40	29.4	47.3	1.4	26.72	40	200	25	
050	5000	33.3	57.1	1.59	34.26	40	35.9	61.7	1.71	51.83	40	200	25	
060	6000	38	65.9	1.81	37.21	40	44.7	77.1	2.13	42.19	40	200	25	
070	7000	44.8	77.3	2.13	56.17	50	51.8	81.4	2.47	35.9	50	240	25	
080	8000	50.7	88	2.42	30.63	50	60.0	94.7	2.86	39.47	50	240	25	
090	9000	59.9	102.8	2.86	34.05	50	64.1	110.0	3.06	44.28	50	280	25	
105	10500	67.9	125.3	3.23	36.34	50	72.9	134	3.48	47.47	50	280	25	
120	12000	78.9	148.2	3.77	40.57	50	86.8	160.2	4.14	28.95	50	280	25	
135	13500	92.6	161	4.42	45.67	65	101.7	173.9	4.85	31.79	65	320	25	
150	15000	95.3	169.6	4.55	39.6	65	104.8	196.2	4.99	28.23	65	320	25	
180	18000	120.7	215.2	5.1	55.93	50	140.7	240.0	5.6	39.14	50	370	32	
210	21000	137.8	275.3	6.2	24.2	65	151.7	283.5	7.24	50.92	65	370	32	
240	24000	157.3	318.8	7.29	34.01	65	184.8	320.2	8.02	24.29	65	370	32	
270	27000	184.7	354.7	8.64	33.31	65	196.2	378.5	9.36	23.16	65	420	32	Belt Driven Fan
300	30000	196.2	376.9	8.75	34.04	65	221.9	416.6	9.63	24.32	65	420	32	
330	33000	221.7	438.6	10.58	40.84	80	243.7	462.5	11.63	30.97	80	420	32	
350	35000	241.6	466.3	11.41	51.28	80	261.8	495.6	12.49	36.32	80	470	32	
400	40000	278.2	476.5	11.54	52.32	80	293.0	545.0	12.71	37.43	80	470	32	
450	45000	286.8	556.7	13.82	49.14	80	350.6	602.2	15.21	35.09	80	470	32	
500	50000	328.9	591.5	14.94	48.95	80	378.6	704.8	16.42	34.9	80	520	32	
600	60000	394	711.3	18.43	49.14	80	467.5	736.0	20.28	35.09	80	520	32	

Remark:
1.Cooing capacity: Air inlet temperature (DB/WB): 27°C/19.5°C; Chilled water inlet/outlet temperature: 7°C/12°C. 2.Heating capacity: Air inlet temperature (DB): 15°C; Hot water inlet/outlet temperature: 60°C/50°C.
3.The water flow in the sheet is the chilled water flow, the hot water flow is slightly smaller than the chilled water flow. Water pump selection refers to the chilled water flow;
4.Due to continuous upgrading, the AHU parameters may change without prior notice, and the specific parameters are subject to the nameplate. 5.Power supply: 380V/3~/50Hz

Parameters(Fresh air condition)

Model HJK	Airflow m^3/h	Type C					Type D					E.S.P	Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN			
010	1000	10.3	9.8	0.49	37.96	32	13.9	12.9	0.66	38.61	32	80	25	External rotor fan
015	1500	16.4	15.7	0.78	37.77	32	19.9	18.9	0.95	27.35	32	80	25	
020	2000	21.6	20.8	1.03	31.39	32	26	26.8	1.34	22.76	32	80	25	
025	2500	26.6	25.5	1.27	28.51	32	32.3	30.9	1.54	40.76	32	120	25	
030	3000	30.9	32.4	1.62	41.71	40	39.6	37.6	1.89	26.82	40	160	25	
040	4000	40.7	38.8	1.94	27.77	40	50.5	52.1	2.41	57.39	40	200	25	
050	5000	48.9	52	2.33	54.96	50	63.5	65.9	3.03	35.45	50	200	25	
060	6000	62.4	59.6	2.98	59.9	50	72.9	76.8	3.47	38.67	50	200	25	
070	7000	72.9	76.8	3.48	14.35	50	86.8	90.9	4.14	55.11	50	240	25	
080	8000	87.1	82.8	4.16	17.22	50	101.9	96.1	4.86	71.32	50	240	25	
090	9000	100	95.5	4.77	18.55	65	106.9	111.7	5.1	77.58	65	280	25	
105	10500	112.9	107.9	5.27	19.16	65	134.9	125.7	6.44	82.81	65	280	25	
120	12000	131.8	132.7	6.29	19.36	65	146.1	157.7	6.97	15.96	65	280	25	Belt Driven Fan
135	13500	144.3	156	6.89	24.78	65	160.4	174.4	7.66	18.02	65	320	25	
150	15000	161.2	174.8	7.11	21.52	65	178.6	195.6	7.92	15.57	65	320	25	
180	18000	193.1	215.1	7.37	28.35	50	230.1	258.3	8.19	20.62	50	370	32	
210	21000	228.9	245.2	9.58	35.93	65	275.8	302.9	10.61	25.99	65	370	32	
240	24000	260.7	290.2	11.2	54.05	65	320.3	349.1	12.32	38.6	65	370	32	
270	27000	292.9	313.2	13.31	53.11	65	359.2	389.6	14.65	37.96	65	420	32	
300	30000	324.2	346	13.45	54.09	65	384.5	421.9	14.8	38.63	65	420	32	
330	33000	367.5	390.9	16.24	63.98	80	447.2	482.9	17.78	45.33	80	420	32	
350	35000	374.6	412.2	17.52	74.89	80	452.5	492.1	19.1	58.33	80	470	32	
400	40000	407.8	432.4	17.69	76.16	80	476.8	526.7	19.28	59.26	80	470	32	
450	45000	457.5	498.7	21.19	69.6	80	537.4	596.3	23.1	53.37	80	470	32	
500	50000	514	551.8	22.92	75.71	80	607.4	663.2	24.98	53.21	80	520	32	
600	60000	675.2	670.1	28.26	75.95	80	819.8	829.6	30.8	53.37	80	520	32	

Remark:
1.Cooing capacity: Air inlet temperature (DB/WB): 27℃/19.5℃; Chilled water inlet/outlet temperature: 7℃/12℃. 2.Heating capacity: Air inlet temperature (DB): 15℃; Hot water inlet/outlet temperature: 60℃/50℃.
3.The water flow in the sheet is the chilled water flow, the hot water flow is slightly smaller than the chilled water flow. Water pump selection refers to the chilled water flow;
4.Due to continuous upgrading, the AHU parameters may change without prior notice, and the specific parameters are subject to the nameplate. 5.Power supply: 380V/3~/50Hz

Parameters(Fresh air condition)

Model HJK	Airflow m^3/h	Type E					Type F					E.S.P	Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN			
010	1000	14.6	14.5	0.7	30	32	16.3	15.3	0.78	20.85	32	80	25	External rotor fan
015	1500	21.9	20.7	1.05	30.63	32	25.4	22.5	1.21	40.72	32	80	25	
020	2000	29.3	27.7	1.4	34.88	40	30.8	30.2	1.47	49.42	40	80	25	
025	2500	36.8	33.3	1.75	32.9	40	39.2	39.1	1.87	47.78	40	120	25	
030	3000	42.1	41.4	2.01	43.15	40	44.7	44.4	2.13	45.73	40	160	25	
040	4000	56.6	54.1	2.7	42.36	50	66.6	54.5	3.18	50.61	50	200	25	
050	5000	71.9	67.9	3.43	26.65	50	77.2	70.3	3.68	40.52	50	200	25	
060	6000	82.3	79.1	3.92	28.91	50	96.1	88.3	4.59	46.73	50	200	25	
070	7000	96.4	91.5	4.6	55.11	65	108.6	100.9	5.18	27.01	65	240	25	
080	8000	113.1	106.2	5.4	51.76	65	116.1	108.9	5.54	30.63	65	240	25	
090	9000	118.7	119.1	5.66	56.37	65	135.1	124.6	6.45	33.21	65	280	25	
105	10500	149.6	133.9	7.14	59.99	65	153.5	152	7.33	35.47	65	280	25	
120	12000	173.2	159.8	8.27	65.59	65	192.5	172.1	9.18	47.71	65	280	25	Belt Driven Fan
135	13500	185.9	187.2	9.67	73.22	80	225.9	201.5	10.78	53.44	80	320	25	
150	15000	209.3	210.7	9.99	64.13	80	253.8	227	12.11	46.62	80	320	25	
180	18000	268.3	290.2	11.13	89.15	50	294.3	295.1	12.43	65.34	50	370	32	
210	21000	308.6	316.1	14.29	111.66	65	332.9	335.2	16.04	82.58	65	370	32	
240	24000	335.9	365.7	16.52	151.84	65	364.3	382	18.69	122.91	65	370	32	
270	27000	377.5	397.7	19.58	160.28	65	408.1	428.8	22.13	120.05	65	420	32	
300	30000	440.6	449.6	19.83	164	65	456.2	474	22.44	123.03	65	420	32	
330	33000	479	497.6	23.8	193.37	80	504.8	522.2	27.06	146.3	80	420	32	
350	35000	481	546.8	25.5	225.02	80	555.3	578.1	29.11	171.52	80	470	32	
400	40000	551.9	559	25.81	229.87	80	587.4	621.5	29.5	175.52	80	470	32	
450	45000	609.1	663.8	30.91	213.25	80	644.2	678.6	35.33	162.79	80	470	32	
500	50000	686.3	723.2	33.41	212.38	80	728.1	771.6	38.17	174.09	80	520	32	
600	60000	872.6	855.5	41.22	229.07	80	987.2	880.9	47.1	174.86	80	520	32	

Remark:
1.Cooing capacity: Air inlet temperature (DB/WB): 27℃/19.5℃; Chilled water inlet/outlet temperature: 7℃/12℃. 2.Heating capacity: Air inlet temperature (DB): 15℃; Hot water inlet/outlet temperature: 60℃/50℃.
3.The water flow in the sheet is the chilled water flow, the hot water flow is slightly smaller than the chilled water flow. Water pump selection refers to the chilled water flow;
4.Due to continuous upgrading, the AHU parameters may change without prior notice, and the specific parameters are subject to the nameplate. 5.Power supply: 380V/3~/50Hz

Parameters(Return air condition, 4-pipe heating coil)

Model HJK	Airflow m³/h	Type A				Type B				E.S.P	Condensing water pipe diameter
		Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN		
010	1000	3.0	0.079	5.49	32	6.3	0.15	11.64	32	80	32
015	1500	4.3	0.1	8.99	32	10.2	0.2	20.21	32	80	32
020	2000	7.2	0.14	17.06	32	13.1	0.28	39.05	32	80	32
025	2500	8.4	0.17	26.09	32	16.2	0.32	16.88	32	120	32
030	3000	11.2	0.19	34.44	32	20.2	0.37	22.71	40	160	32
040	4000	15.5	0.25	14.02	32	28.2	0.52	45.2	40	200	32
050	5000	19.2	0.33	25.28	32	36.1	0.67	32.88	50	200	32
060	6000	23.1	0.4	45.33	32	43.5	0.8	46.43	50	200	32
070	7000	29.1	0.43	9.68	32	49.6	0.91	24.17	50	240	32
080	8000	33.0	0.56	36.6	32	57.3	1.14	39.1	50	240	32
090	9000	38.0	0.57	37.09	32	67.5	1.15	39.78	65	280	32
105	10500	44.1	0.59	39.67	32	79.5	1.19	42.53	65	280	32
120	12000	50.9	0.68	23.85	32	90.4	1.35	20.53	65	280	32
135	13500	55.7	0.78	21.46	32	99.5	1.59	25.04	65	320	32
150	15000	62.8	0.88	18.66	32	111.7	1.78	21.73	65	320	32
180	18000	77.4	1.09	30.2	40	137.6	2.2	28.7	50	370	40
210	21000	87.6	1.4	40.3	40	153.3	2.82	39.3	65	370	40
240	24000	106.1	1.49	8.1	40	176.8	3.02	9.2	65	370	40
270	27000	120.0	1.92	48.1	40	195.3	3.6	9.1	65	420	40
300	30000	127.4	1.79	8.1	40	212.3	3.63	9.2	65	420	40
330	33000	145.0	2.17	9.7	40	238.4	4.39	11.0	80	420	40
350	35000	147.4	2.35	12.8	40	258.1	4.75	14.5	80	470	40
400	40000	168.1	2.37	12.9	40	280.3	4.79	14.8	80	470	40
450	45000	189.7	2.84	11.6	40	311.9	5.74	13.2	80	470	40
500	50000	205.3	3.07	11.6	40	363.3	6.21	13.1	80	520	40
600	60000	253.0	3.79	11.6	40	415.9	7.66	13.2	80	520	40

Remark:
1.Cooing capacity: Air inlet temperature (DB/WB): 27℃/19.5℃; Chilled water inlet/outlet temperature: 7℃/12℃. 2.Heating capacity: Air inlet temperature (DB): 15℃; Hot water inlet/outlet temperature: 60℃/50℃.
3. The external residual pressure of the standard unit does not include the heating coil resistance. If the hot water coil unit is selected, the internal resistance needs to be increased by 20Pa/row;
4.Due to continuous upgrading, the AHU parameters may change without prior notice, and the specific parameters are subject to the nameplate. 5.Power supply: 380V/3~/50Hz

Parameters(Fresh air condition, 4-pipe heating coil)

Model HJK	Airflow m³/h	Type A				Type B			
		Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN
010	1000	4.5	0.098	8.06	32	7.6	0.18	16.37	32
015	1500	6.4	0.13	13.01	32	11.7	0.23	25.74	32
020	2000	8.8	0.18	24.4	32	17.3	0.34	54.64	32
025	2500	10.9	0.2	36.01	32	21.2	0.39	23.63	32
030	3000	13.5	0.22	10.01	32	26.4	0.45	31.83	32
040	4000	18.9	0.3	19.8	32	33.8	0.62	52.94	32
050	5000	24.7	0.39	34.91	32	43.4	0.8	45.32	32
060	6000	29.8	0.45	9.51	32	50.7	0.93	23.42	32
070	7000	33.4	0.53	13.8	32	59.9	1.1	35.25	32
080	8000	39.0	0.67	21.31	32	71.9	1.32	18.25	32
090	9000	44.9	0.67	21.6	32	78.3	1.34	18.6	32
105	10500	52.1	0.69	23.09	32	92.5	1.38	21.74	32
120	12000	61.1	0.81	32.9	32	109.2	1.63	31.01	32
135	13500	67.1	0.94	29.69	32	119.8	1.91	34.68	32
150	15000	75.7	1.07	27.4	32	135.1	2.16	30.32	32
180	18000	90.8	1.21	5.8	40	165.5	2.64	43.0	40
210	21000	111.2	1.57	8.3	40	184.9	3.16	9.5	40
240	24000	122.2	1.83	11.5	40	215.9	3.69	13.1	40
270	27000	136.5	2.18	11.3	40	238.5	4.39	12.9	40
300	30000	155.8	2.19	11.5	40	259.2	4.43	13.1	40
330	33000	177.8	2.66	15.4	40	287.7	5.3	17.1	40
350	35000	180.0	2.87	18.1	40	313.0	5.76	20.4	40
400	40000	205.5	2.89	18.4	40	340.4	5.82	20.7	40
450	45000	231.8	3.47	16.5	40	378.7	6.97	18.5	40
500	50000	250.8	3.75	16.4	40	409.5	7.54	18.4	40
600	60000	309.1	4.62	18.3	40	504.9	9.3	20.7	40

Remark:
1.Cooing capacity: Air inlet temperature (DB/WB): 27℃/19.5℃; Chilled water inlet/outlet temperature: 7℃/12℃. 2.Heating capacity: Air inlet temperature (DB): 15℃; Hot water inlet/outlet temperature: 60℃/50℃.
3. The external residual pressure of the standard unit does not include the heating coil resistance. If the hot water coil unit is selected, the internal resistance needs to be increased by 20Pa/row;
4.Due to continuous upgrading, the AHU parameters may change without prior notice, and the specific parameters are subject to the nameplate. 5.Power supply: 380V/3~/50Hz

Parameters(Return air condition, Jet Type AHU-S type)

Model HJK	Airflow m³/h	Type C					Type D					Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN		
010	1000	3.6	7.5	0.18	16.42	32	5.1	9.9	0.24	7.74	32	25	External rotor fan
020	2000	8.7	15.6	0.41	54.19	32	11.7	20.6	0.56	26.98	32	25	
030	3000	14.2	24	0.68	55.31	32	17.6	30.8	0.84	33.39	32	25	
040	4000	16.6	31.5	0.79	27.89	40	24	44.5	1.14	39.73	40	25	
050	5000	22.2	41.7	1.06	53.67	40	28	52.4	1.34	37.23	40	25	
060	6000	27.5	46	1.31	33.32	40	35.7	60.4	1.71	43.7	40	25	
070	7000	29.2	47.8	1.39	48.17	40	41.1	71.5	1.96	30.37	40	25	
080	8000	32.4	61.1	1.54	19.85	40	48	81.4	2.29	35.64	40	25	
090	9000	37.9	64.1	1.81	21.26	40	50.7	94.3	2.42	42.15	40	25	
105	10500	43.6	82.8	2.08	22.82	50	57.6	105.9	2.75	45.11	50	25	
120	12000	52.5	97.5	2.51	28.55	50	68.6	127.5	3.28	56.09	50	25	Belt Driven Fan

Model HJK	Airflow m³/h	Type E					Type F					Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN		
010	1000	6.3	10.2	0.3	5.88	32	7.4	12.9	0.35	3.8	32	25	External rotor fan
020	2000	13.7	22	0.65	21.33	32	14.3	25.6	0.68	15.35	32	25	
030	3000	18.6	32.8	0.89	26.31	32	22.5	37.4	1.07	12.49	32	25	
040	4000	26.2	44.8	1.25	54.86	40	29.4	47.3	1.4	26.72	40	25	
050	5000	33.3	57.1	1.59	34.26	40	35.9	61.7	1.71	51.83	40	25	
060	6000	38	65.9	1.81	38.58	40	44.7	77.1	2.13	42.19	40	25	
070	7000	44.8	77.3	2.13	54.5	50	51.8	81.4	2.47	35.9	50	25	
080	8000	50.7	88	2.42	32.73	50	60	94.7	2.86	39.47	50	25	
090	9000	59.9	102.8	2.86	32.73	50	64.1	110	3.06	44.28	50	25	
105	10500	67.9	125.3	3.23	34.86	50	72.9	134	3.48	47.47	50	25	
120	12000	78.9	148.2	3.77	40.57	50	86.8	160.2	4.14	28.95	50	25	Belt Driven Fan

Parameters(Return air condition, Jet Type AHU-S type)

Model HJK	Airflow m³/h	Type C					Type D					Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN		
010	1000	10.3	9.8	0.49	37.96	32	13.9	12.9	0.66	38.61	32	25	External rotor fan
020	2000	21.6	20.8	1.03	31.39	32	26	26.8	1.34	22.76	32	25	
030	3000	30.9	32.4	1.62	41.71	40	39.6	37.6	1.89	26.82	40	25	
040	4000	40.7	38.8	1.94	27.77	40	50.5	52.1	2.41	57.39	40	25	
050	5000	48.9	52	2.33	54.96	50	63.5	65.9	3.03	35.45	50	25	
060	6000	62.4	59.6	2.98	59.9	50	72.9	76.8	3.47	38.67	50	25	
070	7000	72.9	76.8	3.48	14.35	50	86.8	90.9	4.14	55.11	50	25	
080	8000	87.1	82.8	4.16	17.22	50	101.9	96.1	4.86	71.32	50	25	
090	9000	100	95.5	4.77	18.55	65	106.9	111.7	5.1	77.58	65	25	
105	10500	112.9	107.9	5.27	19.16	65	134.9	125.7	6.44	82.81	65	25	
120	12000	131.8	132.7	6.29	19.36	65	146.1	157.7	6.97	15.96	65	25	Belt Driven Fan

Model HJK	Airflow m³/h	Type E					Type F					Condensing water pipe diameter	Fan type
		Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN	Rated Cooling Capacity kW	Rated Heating Capacity kW	Water Flow L/S	Water Pressure Drop kPa	Chilled Water Pipe Diameter DN		
010	1000	14.6	14.5	0.7	30	32	16.3	15.3	0.78	20.85	32	25	External rotor fan
020	2000	29.3	27.7	1.4	34.88	40	30.8	30.2	1.47	49.42	40	25	
030	3000	42.1	41.4	2.01	43.15	40	44.7	44.4	2.13	45.73	40	25	
040	4000	56.6	54.1	2.7	42.36	50	66.6	54.5	3.18	50.61	50	25	
050	5000	71.9	67.9	3.43	26.65	50	77.2	70.3	3.68	40.52	50	25	
060	6000	82.3	79.1	3.92	28.91	50	96.1	88.3	4.59	46.73	50	25	
070	7000	96.4	91.5	4.6	55.11	65	108.6	100.9	5.18	27.01	65	25	
080	8000	113.1	106.2	5.4	51.76	65	116.1	108.9	5.54	30.63	65	25	
090	9000	118.7	119.1	5.66	56.37	65	135.1	124.6	6.45	33.21	65	25	
105	10500	149.6	133.9	7.14	59.99	65	153.5	152	7.33	35.47	65	25	
120	12000	173.2	159.8	8.27	65.59	65	192.5	172.1	9.18	47.71	65	25	Belt Driven Fan

Air Pressure & Power Comparison Sheet

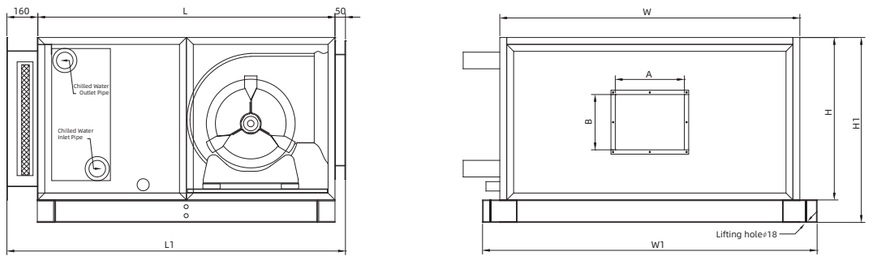
Model HJK	Airflow m³/h	Coil row type	Motor power (kW) corresponding to E.R.P (Pa)								
			80	120	160	200	240	280	320	360	400
010	1000	C Type/D Type	0.25	0.25	0.25	0.25					
		E Type/F Type	0.25	0.25	0.25	0.32					
015	1500	C Type/D Type	0.25	0.25	0.25	0.25	0.25				
		E Type/F Type	0.25	0.25	0.25	0.32	0.32				
020	2000	C Type/D Type	0.18	0.25	0.25	0.25	0.32	0.32			
		E Type/F Type	0.25	0.25	0.32	0.32	0.32	0.32			
025	2500	C Type/D Type	0.32	0.32	0.32	0.45	0.32	0.32			
		E Type/F Type	0.32	0.45	0.32	0.32	0.37	0.55			
030	3000	C Type/D Type	0.32	0.45	0.45	0.45	0.45	0.55	0.55		
		E Type/F Type	0.45	0.45	0.45	0.55	0.55	0.75	0.75		
040	4000	C Type/D Type	0.75	0.75	0.75	0.75	1.1	1.1	1.1		
		E Type/F Type	0.75	0.75	1.1	1.1	1.1	1.1	1.1		
050	5000	C Type/D Type	0.75	0.75	1.1	1.1	1.1	1.1	1.1		
		E Type/F Type	1.1	1.1	1.1	1.1	1.1	1.5	1.5		
060	6000	C Type/D Type	1.1	1.1	1.5	1.5	1.5	1.5	1.5		
		E Type/F Type	1.5	1.5	1.5	1.5	1.5	2.2	2.2		
070	7000	C Type/D Type	1.1	1.1	1.5	1.5	1.5	1.5	2.2	2.2	
		E Type/F Type	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	
080	8000	C Type/D Type	1.1	1.1	1.5	1.5	1.5	2.2	2.2	2.2	
		E Type/F Type	1.5	1.5	1.5	2.2	2.2	2.2	2.2	3.0	
090	9000	C Type/D Type	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0	
		E Type/F Type	2.2	2.2	2.2	2.2	2.2	3.0	3.0	3.0	
105	10500	C Type/D Type	2.2	2.2	2.2	2.2	3.0	3.0	3.0	3.0	
		E Type/F Type	2.2	2.2	3.0	3.0	3.0	3.0	3.0	3.0	
120	12000	C Type/D Type		2.2	3.0	3.0	3.0	3.0	3.0	3.0	4.0
		E Type/F Type		3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
135	13500	C Type/D Type				3.0	3.0	4.0	4.0	4.0	4.0
		E Type/F Type				3.0	4.0	4.0	4.0	4.0	5.5
150	15000	C Type/D Type				3.0	4.0	4.0	4.0	4.0	5.5
		E Type/F Type				4.0	4.0	4.0	4.0	5.5	5.5

Air Pressure & Power Comparison Sheet

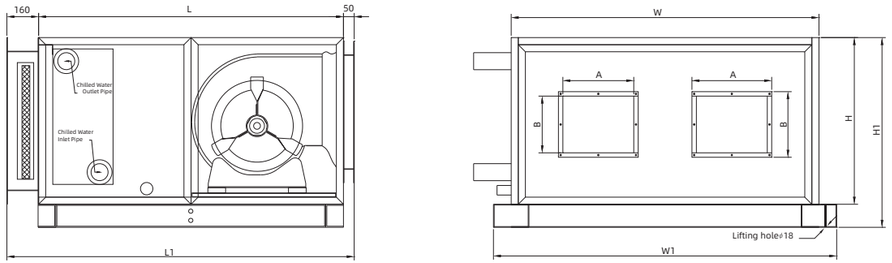
Model HJK	Airflow m³/h	Coil row type	Motor power (kW) corresponding to E.R.P (Pa)								
			320	360	400	470	520	570	620	670	720
150	15000	C Type/D Type	4.0	4.0	5.5						
		E Type/F Type	4.0	5.5	5.5						
180	18000	C Type/D Type	5.5	5.5	5.5	5.5	7.5	7.5	7.5		
		E Type/F Type	5.5	5.5	5.5	7.5	7.5	7.5	7.5		
210	21000	C Type/D Type	5.5	7.5	7.5	7.5	7.5	11	11		
		E Type/F Type	7.5	7.5	7.5	7.5	11	11	11		
240	24000	C Type/D Type	5.5	7.5	7.5	7.5	11	11	11		
		E Type/F Type	7.5	7.5	7.5	11	11	11	11		
270	27000	C Type/D Type	7.5	7.5	11	11	11	11	11	11	
		E Type/F Type	7.5	11	11	11	11	11	11	15	
300	30000	C Type/D Type		11	11	11	11	11	15	15	15
		E Type/F Type		11	11	11	11	15	15	15	15
330	33000	C Type/D Type			11	11	15	15	15		
		E Type/F Type			11	15	15	15	15		
350	35000	C Type/D Type			11	11	11	15	15		
		E Type/F Type			11	11	15	15	15		
400	40000	C Type/D Type			15	15	15	15	15		
		E Type/F Type			15	15	15	15	18.5		
450	45000	C Type/D Type				15	15	18.5	18.5	18.5	
		E Type/F Type				15	18.5	18.5	18.5	18.5	
500	50000	C Type/D Type					18.5	18.5	22	22	22
		E Type/F Type					18.5	22	22	22	
600	60000	C Type/D Type				18.5	18.5	18.5	22	22	
		E Type/F Type				18.5	18.5	22	22		

Remark:
1. The above parameters are the motor power values of various types of units under different E.R.P;
2. The E.R.P of this unit is the reference power of the standard G2 nylon mesh filter, and other configurations
(other filters class, humidifiers, 4-pipe heating coils, eliminator) are optional, and the E.R.P of the unit is detailed in the selection report sheet.

Standard Air Handling Unit Dimensions

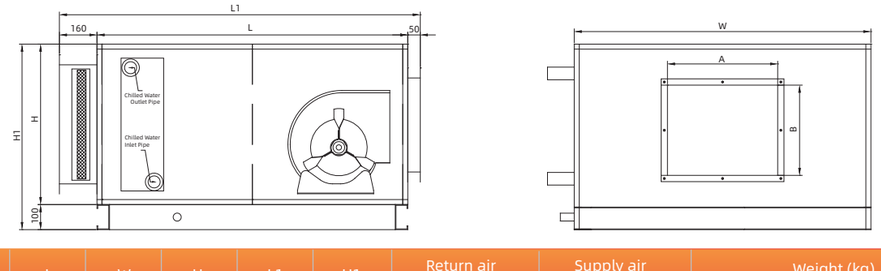


Model HJK	L (mm)	W (mm)	H (mm)	L1 (mm)	W1 (mm)	H1 (mm)	Return air flange size (mm)	Supply air flange size A×B(mm)	Weight (kg)			
									Type C	Type D	Type E	Type F
010	800	550	510	1010	650	575	470 × 430	320 × 240	58	59	63	66
015	800	590	510	1010	690	575	510 × 430	360 × 280	62	63	67	70
020	800	710	510	1010	810	575	630 × 430	360 × 280	66	68	73	77
025	800	740	560	1010	840	625	660 × 480	360 × 280	74	77	85	93
030	800	830	560	1010	930	625	750 × 480	360 × 284	78	81	90	99
040	850	1050	560	1060	1150	625	970 × 480	355 × 223	109	113	124	136
050	850	1285	560	1060	1385	625	1205 × 480	383 × 297	112	118	131	147

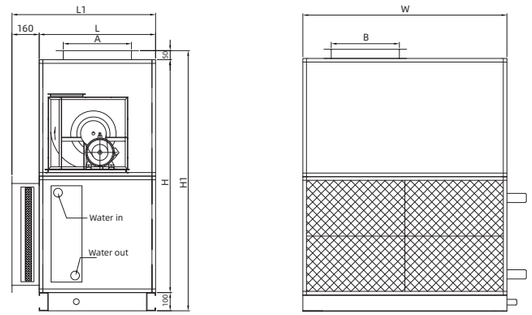


Model HJK	L (mm)	W (mm)	H (mm)	L1 (mm)	W1 (mm)	H1 (mm)	Return air flange size (mm)	Supply air flange size A×B(mm)	Weight (kg)			
									Type C	Type D	Type E	Type F
060	850	1330	660	1060	1430	725	1250 × 580	355×223×2	169	176	192	209
070	850	1520	660	1060	1620	725	1440 × 580	383×297×2	164	171	189	210
080	850	1650	710	1060	1750	775	1570 × 630	383×297×2	180	189	211	236
090	850	1650	710	1060	1750	775	1570 × 630	383×297×2	180	189	211	236
105	850	1690	710	1060	1790	775	1610 × 630	330×297×2	182	192	214	239
120	950	1930	700	1160	2030	765	1850 × 620	381×381×2	235	247	274	295
135	950	2030	765	1160	2130	830	1950 × 685	381×381×2	269	282	313	338
150	1050	1930	890	1260	2030	955	1850 × 810	381×381×2	285	300	334	363

Standard Air Handling Unit Dimensions



Model HJK	L (mm)	W (mm)	H (mm)	L1 (mm)	H1 (mm)	Return air flange size (mm)	Supply air flange size A×B(mm)	Weight (kg)			
								Type C	Type D	Type E	Type F
180	1440	2140	1040	1650	1140	1975 × 875	675 × 675	361	369	390	406
210	1440	2340	1140	1650	1240	2175 × 975	675 × 675	404	416	441	462
240	1440	2640	1140	1650	1240	2475 × 975	775 × 775	433	445	470	491
270	1440	2640	1340	1650	1440	2475 × 1175	775 × 775	529	545	581	612
300	1540	2640	1340	1750	1440	2475 × 1175	775 × 775	536	552	588	619
330	1540	2840	1440	1750	1540	2675 × 1275	975 × 975	657	676	718	754
350	1640	3040	1440	1850	1540	2875 × 1275	975 × 975	677	696	738	774
400	1740	3040	1540	1950	1640	2875 × 1375	975 × 975	726	747	792	831
450	1740	3040	1840	1950	1940	2875 × 1675	975 × 975	882	912	977	1034
500	1740	3040	1940	1950	2040	2875 × 1775	975 × 975	941	975	1049	1115
600	2640	3040	2340	2850	2440	2875 × 2175	1075 × 1075	1320	1372	1480	1580



Model HJK	L (mm)	W (mm)	H (mm)	L1 (mm)	H1 (mm)	Return air flange size (mm)	Supply air flange size A×B(mm)	Weight (kg)			
								Type C	Type D	Type E	Type F
180	1040	2140	2080	1200	2230	1975×875	675×675	494	502	523	539
210	1040	2340	2180	1200	2330	2175×975	675×675	549	561	586	607
240	1140	2640	2280	1300	2430	2475×975	775×775	617	629	654	675
270	1140	2640	2480	1300	2630	2475×1175	775×775	717	733	769	800
300	1140	2640	2480	1300	2630	2475×1175	775×775	717	733	769	800
330	1440	2840	2780	1600	2930	2675×1275	975×975	926	945	987	1023
350	1440	3040	2780	1600	2930	2875×1275	975×975	951	970	1012	1048
400	1440	3040	2880	1600	3030	2875×1375	975×975	996	1017	1062	1101
450	1640	3040	3280	1800	3430	2875×1675	975×975	1244	1274	1339	1396
500	1640	3040	3380	1800	3530	2875×1775	975×975	1307	1341	1415	1481

Jet Type Air Handling Unit

Jet Type AHU Design Selection

The calculation of thermal performance parameters for jet type air handling units with spherical nozzles as air outlet is the same as that for standard ceiling units; The design and selection are mainly based on the calculation of the air distribution. For a specific project, when the supply air distance, unit installation height, supply air temperature and air volume are confirm, it is necessary to select a suitable jet type unit, the cooling and heating air jets outlet from the AHU must follow below basic requirements:

1.Cooling and heating air is delivered to the specified position

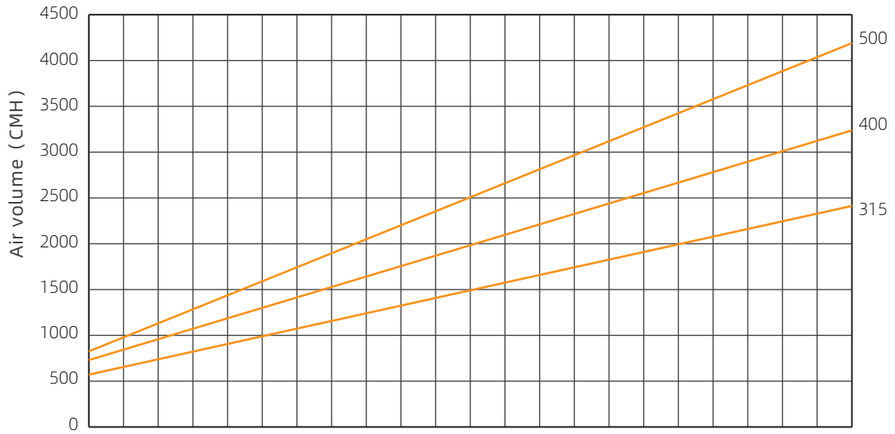
2.The cool jet air will not fall in midway and lead to un-comfortable feeling to people

3.The hot jet air can reach the required supply air distance and position

4.The terminal temperature gap meets the design requirements

The selection should consider the mutual influence and interaction between multiple units jet air outlets. The diffusion width is about 0.4 times of the air throw. The unit position arrangement should be slightly smaller than the diffusion width. If the unit is installed close to the ceiling, the impact of it should be considered. The air throw of it is about 1.4 times of the normal air flow.

Jet Nozzle Specification Selection



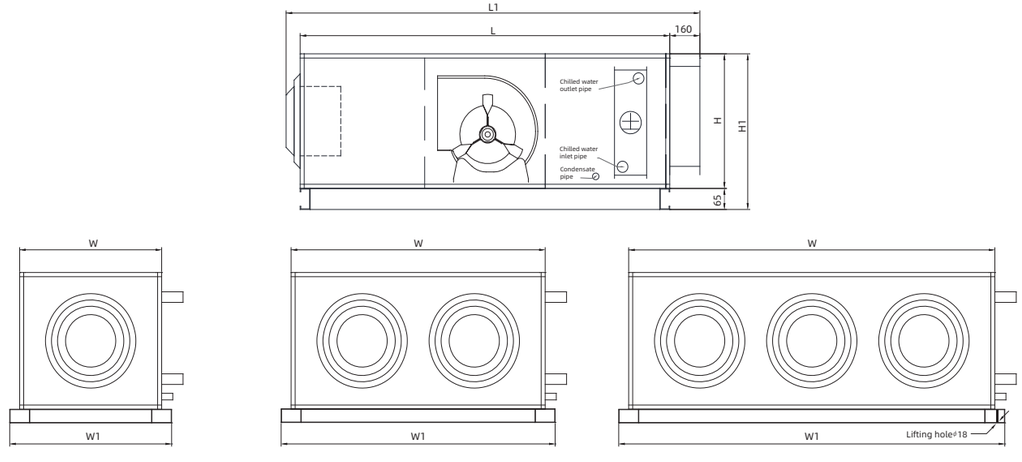
Jet Type AHU Air Throw Recommended Selection

Considering the performance of the AHU and the spherical nozzle, the following table shows the recommended selection range for horizontal supply air of various types of air handling units: Unit (m)

Model HJK	010	020	030	040	050	060	070	080	090	105	120
Air Throw	~14	~23	~25	~23	~26	~25	~29	~27	~30	~30	~32
Distance	19	29	31	29	32	31	35	33	36	36	38

Remarks:
1. The maximum coverage width of the Jet unit is about 0.4 times of the air throw, and the arrangement of the unit should consider the diffusion angle of the airflow, and the distance should not be too large;
2. The unit can be placed on one side or both sides to supply air relatively. If the air throw is not enough in a project, the induced fan can be used to further to transmit the airflow: 4-6 meters/set in the vertical direction, 6-10 meters/set in the horizontal direction;
3. Definition of the air throw: Supply air distance based on terminal air velocity of 0.5m/s; Definition of the supply air distance: Supply air distance based on terminal air velocity of 0m/s.

Standard Unit Dimensions Jet Type AHU (S Series)



Model HJK	L (mm)	W (mm)	H (mm)	L1 (mm)	W1 (mm)	H1 (mm)	Number of air outlets	Jet nozzle specifications	Outer diameter (mm)	Inner diameter (mm)	Return air flange size A×B(mm)	Weight (kg)			
												Type C	Type D	Type E	Type F
010	1400	550	510	1615	650	575	1	315	375	180	470×430	71	72	76	79
020	1400	710	510	1615	810	575	1	315	375	180	630×430	80	82	87	91
030	1400	830	560	1640	930	625	1	400	465	230	750×480	93	96	105	114
040	1450	1050	560	1665	1150	625	2	315	375	180	970×480	126	130	141	153
050	1450	1285	560	1665	1385	625	2	315	375	180	1205×480	131	137	150	166
060	1450	1330	660	1690	1430	725	2	400	465	230	1250×580	188	195	211	228
070	1450	1520	660	1690	1620	725	2	400	465	230	1440×580	184	191	209	230
080	1450	1650	710	1710	1750	775	2	500	590	280	1570×630	202	211	233	258
090	1450	1650	710	1710	1750	775	2	500	590	280	1570×630	202	211	233	258
105	1450	1690	710	1690	1790	775	3	400	465	230	1610×630	204	214	236	261
120	1550	1930	700	1790	2030	765	3	400	465	230	1850×620	259	271	298	319

Humidifier

Wet film humidifier is a way of isenthalpic humidification. The water is sprayed from the water distributor to the top of the wet film, and flows down along the wet film. On the surface of the wet film, water and air exchange heat and moisture, the water vaporizes and evaporates after absorbing heat, thereby humidifying and cooling the air. It has the feature of purified humidification, compact structure and energy saving, etc., The thickness of the wet film can be selected according to the humidity capacity. And water capacity should be three times of the humidity capacity.

Operating conditions:

- Ambient temperature and humidity: Wet film body adapts to 1~90℃; electric control box at 1~40℃, relative humidity:40~70%RH.
- Critical air velocity: below 2.8m/s.
- Supply water quality: clean tap water or equivalent.
- Supply water temperature: 5~40℃; Supply water pressure:0.05~0.4Mpa.

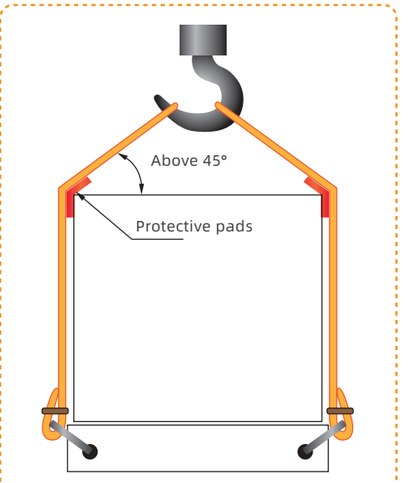
Model HJK	Air volume m/h	Fresh air humidity capacity (kg/h)				Return air humidity capacity (kg/h)				Weight (kg)			
		Thickness50 (mm)	Thickness100 (mm)	Thickness150 (mm)	Thickness200 (mm)	Thickness50 (mm)	Thickness100 (mm)	Thickness150 (mm)	Thickness200 (mm)	Thickness50 (mm)	Thickness100 (mm)	Thickness150 (mm)	Thickness200 (mm)
010	1000	4	7	9	10	3	61	7	8	1.5	3	4.5	6
015	1500	5	10	12	13	4	8	10	11	2	4	6	8
020	2000	7	13	16	18	5	11	13	14	2.5	5	7.5	10
025	2500	8	14	18	20	6	12	14	16	3.2	6	9	12
030	3000	9	18	22	24	7	14	18	19	3.5	7	10.5	14
040	4000	11	22	27	30	9	18	22	24	4	8	12	16
050	5000	13	27	33	37	11	22	27	29	5	10	15	20
060	6000	15	31	39	42	12	25	31	34	6	12	18	24
070	7000	17	34	42	46	13	28	34	37	6.5	13	19.5	26
080	8000	20	40	50	55	16	3	40	44	7	14	21	28
090	9000	22	43	54	59	17	36	43	47	8	16	24	32
105	10500	25	50	62	69	20	41	50	55	9	18	27	36
120	12000	27	54	68	75	22	45	54	60	10	20	30	40
135	13500	30	60	75	83	24	50	60	66	11	22	33	44
150	15000	35	69	87	95	28	57	69	76	12.5	25	37.5	50
180	18000	39	79	79	109	30	61	65	86	16.5	31.2	40.5	52.4
210	21000	47	94	117	129	38	77	95	103	18.5	31.9	45.4	58.8
240	24000	54	108	135	148	46	88	110	116	20.3	35.1	49.9	64.7
270	27000	60	120	150	165	48	97	119	134	21.9	38	54	70
300	30000	65	130	163	179	50	107	132	144	23.3	40.3	57.4	74.4
330	33000	73	146	183	201	58	11	146	161	25.4	44	62.7	81.3
350	35000	77	155	193	213	60	130	154	170	26.6	46.1	65.6	85.1
400	40000	86	172	215	236	69	141	173	188	27.2	47.2	67.2	87.2
450	45000	97	194	242	266	79	162	192	213	27.2	47.2	67.2	872
500	50000	108	217	271	298	86	181	217	237	27.2	47.2	67.2	87.2
600	60000	128	257	321	353	102	212	255	282	27.2	47.2	67.2	87.2

Description:
1. Humidifier for fresh air condition: DB temperature 28℃/10% RH; Face velocity less than 3.0m/s.
2. Humidifier for mixed air conditions (30% fresh air ratio); DB temperature 28℃/25% RH; Face velocity less than 3.0m/s.
3. The above weight in the table is the dry weight of the wet film without water; the operation weight of the humidifier (wet weight) is about 1.5 times of dry weight.
4. The humidity capacity in the above table is the maximum humidity capacity corresponding to different models of wet film humidifier.
5. When HJK series unit is equipped with wet film humidifier, the internal resistance of the unit should be increased accordingly: 50mm-20Pa, 100mm-30Pa, 150mm-45Pa, 200mm-60Pa.

Unit Installation:

Check the AHU appearances carefully before installation. If there are any of the following situations, please contact local distributor or us: the unit is bruised or seriously deformed, the unit panel or shell is scratched significantly affecting the appearance, the fan and motor are loose.

For safety, the unit of the ceiling must be hoisted securely, and the unit must be lifted in the way of (right figure) or loaded and moved by forklift, and the lifting point should be strong and need to have enough strength to bear the AHU weight, and ensure the level of the unit.

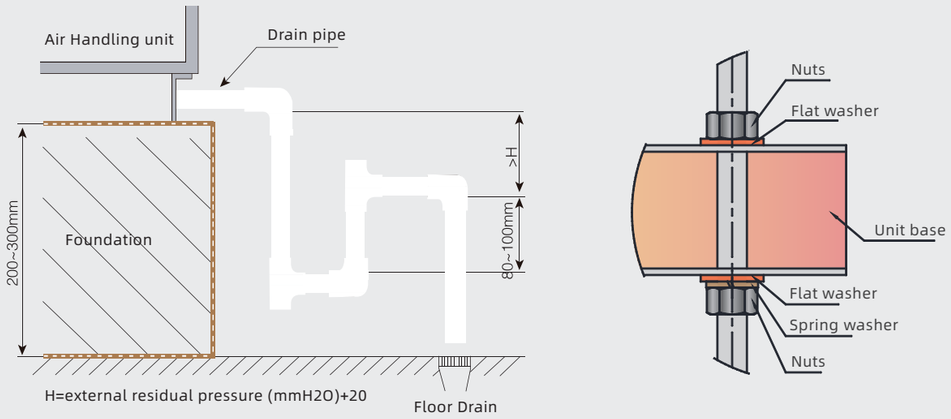


Check whether the voltage, frequency and phase sequence of power supply are consistent with the unit before wiring, and the deviation of power supply voltage should not exceed ±10% of the rated voltage. Before starting the fan, project site operator must enter into the fan box and turn the fan impeller by hand to check whether there is any metal friction sound, and if there is any abnormality, it should be excluded. Start the fan after the power is turned on, check whether the impeller rotation direction is correct, if the rotation direction is found to be wrong, just change the phase sequence of the power supply line.

It is recommended to set static pressure box at the air inlet and outlet of the unit, set volume damper on the ducting, and set fire damper according to the fire protection requirements. If the installation is motorized volume damper, the damper actuator should be opened before the fan start, and closed after the fan stop.

Before connecting the water pipe, the water pipe mush cleaned beforehand. The chilled (hot) water inlet and outlet direction should be taken over according to the unit label or name plate, and the unit inlet water pipe must be equipped with valves and filtering devices to regulate the flow. Cut off the chilled (hot) water source during maintenance, and at the same time prevent impurities from entering the heat exchanger and cause blockage. The inlet and outlet pipes must be insulated with thermal insulation pipes.

When connecting the inlet and outlet pipes, use a pipe wrench to fix the water inlet and outlet pipes, and avoid torque on the water inlet and outlet pipes during operation. It is recommended to use raw tape seal to avoid water leakage. The condensed water generated in the unit must be connected with a certain water seal height and introduce to the sewer for discharge with a drain pipe, as shown in the figure above.



The weight of ducts and water pipes connected to the AHU must not be borne by the AHU.

The unit must have reliable grounding and check whether the electrical wiring is good and meet the safety requirements for electricity.

The unit shall be installed by professionals who are familiar with the product and know the relevant local regulations, and collision, pressing and scratching are strictly prohibited during installation.

Installation Precautions

In order to avoid electric shock or fire and other possible injuries, the following rules should be kept in mind and strictly followed.

1.When the unit is not running for a long time and not running in winter, the power must be turned off.

2.Users should not try to install or modify AHU by themselves, as improper operation may cause water leakage, electric shock, or fire.

3.The grounding wire of the AHU equipment should not be connected to the gas pipe, water pipe, lightning rod, etc.

4.Use the accessories specified by the company, and ask the professional HVAC company or distributor to install and offer technical services.

5.The AHU controller data cable should be isolated from the power supply cable to prevent interference.

6.Do not damage the power cable and do not pull out or insert the power plug to switch on and off the AHU.

7.Do not flush the AHU with water directly, otherwise it will easily cause electric shock or other accidents.

8.Users should not try to repair the unit by themselves, as improper repair may lead to malfunction or burnout of the unit; if users need to repair, please contact the professional or local distributor.

9.The AHU is not allowed to operate under corrosive gas environment, such as acid, alkali and salt fog, otherwise it will cause damage to the AHU shell, pipeline or electrical components.

10.The surrounding of the unit should be kept clean and dry and well ventilated. If the air-side heat exchanger can be cleaned regularly (1~2 months), it can maintain its good heat exchange effect and save energy.

11.It is necessary to regularly check whether the wiring of the power supply and electrical system of the unit is firm, whether there is abnormal operation of the electrical components, and in case of abnormality, they should be repaired and replaced in time, and regularly check whether the grounding of the unit is reliable.

12.The drainage pipe must be installed according to the requirements of this manual to ensure smooth drainage and good insulation to prevent condensation. The drainage pipe must be checked before the operation of the unit. If blocked, foreign objects must be cleared so that the condensate can be discharged smoothly.

13.The minimum starting voltage of the unit shall be kept above 90% of the rated voltage, and the operation shall be within ±10% of the rated voltage, and the voltage difference between each phase shall be within ±2%. When the voltage is too high or too low, it will have impact on the unit. The stability of power supply should be ensured, and when the voltage is unstable, when the unit starts to run, the current will be too large, which may cause damage to the unit motor.

14.After the failure of the unit, the cause should be found out and eliminated before it can be restarted. It is not allowed to start the unit forcibly until the failure has been eliminated.

15.Do not short the circuit of the protection device of the unit, otherwise it may cause the unit failure.

16.The internal cable of the unit should be protected to prevent the insulation layer from being damaged by sharp objects.

17.Wires and cables should be kept away from heat sources, reduce movement, and not bend or twist violently.

Installation Precautions

Air filter

Regularly check the dust accumulation of the unit filter (recommended twice a month) , and for users with differential pressure detection devices, when the final resistance reaches the specified value, the filter should be cleaned or replaced in time. Holtop recommends the final resistance value as.

Filtration efficiency specification	G3 (primary)	G4 (primary)
Recommended heavy resistance (Pa)	100-200	150-250

Heat exchanger

Pay attention to ensure that the coil fins, copper pipes, etc. are not scratched and deflated. To keep the coil clean, brush the fins of the coil with a nylon brush. Vacuum cleaner must be used before scrubbing. If compressed air is available, use high-pressure air hose or nozzle to clean the coil. After the coil is cleaned, there should be no dust on the outer surface, and the heat exchange effect on the inner surface should reach its original upgraded heat exchange capacity.

Maintenance Cycle Recommendation

Inspection items			Monthly	Quarterly	Annual	Focus point
End box	Inlet air section	check whether the filter is dirty and blocked	★	★	★	The final resistance of the unit reaches the regulation (see technical manual for alarm value)
	Cooling coil section	Cooling coils	☆	☆	★	Whether the coil surface is full of dust, oil stains, sundries, etc.
		Condensate water tray and drainage pipe	☆	☆	☆	Whether there is dirty blockage, whether the drainage is smooth
		Wet film humidifier	☆	☆	☆	See technical instruction manual for each type of humidifier
	Fan section	Check the tensioning force of the belt	☆	☆	☆	Check whether there is cracking
		Bearing inspection of fans and motors	★	★	★	Under normal circumstances, the fan needs to be replaced with grease for 1500 hours of operation; the fan runs continuously for 24 hours, and the grease is replaced for 500~700 hours of operation each time.

Note:
①★ ----- Must be maintained or replaced items; *- Depending on the actual situation to decide whether to maintain the implementation of items.
②The daily and monthly inspection items are performed and recorded by the customer.
③The replacement of consumable spare parts and materials is determined according to the unit's service life or running time, For perennial use or technological use, it depends on the running time, and for normal use or comfortable use, it depends on the service life;
④It is recommended that the unit should be comprehensively maintained once one year of use or about 1000 hours of operation. For the clean units with purification requirements, the maintenance time should be shortened according to the clean requirements of users. For units with harsh environmental conditions should be maintained monthly according to the inspection situation.