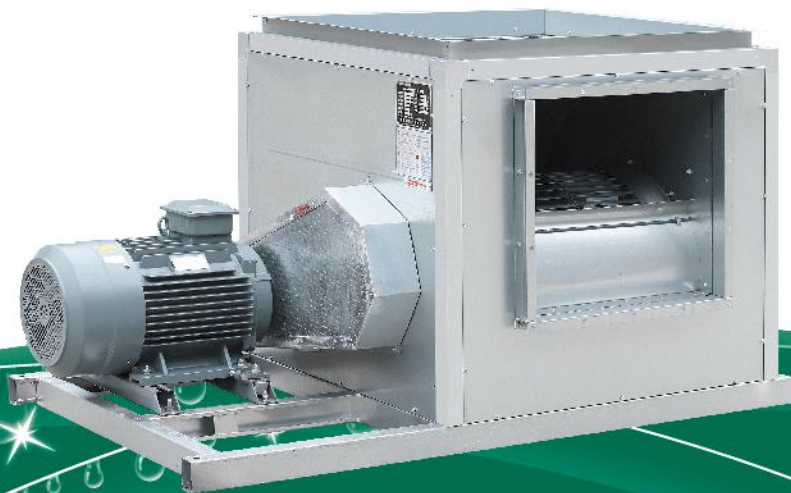


RUIDONG

HTFD TYPE VENTILATING
CENTRIFUGAL FAN BOX



RUIDONG GROUP

www.ruidonggroup.com



Ruidong Group Co., Ltd is one modern large-scale enterprise integrating design, production, sales and installation of central air-conditioning products.

Ruidong is located in Dezhou City, Shandong Province. The Beijing-Shanghai High-speed Railway and Beijing-Shanghai Expressway passing through the city, make Dezhou become a key coordinate of the national economic artery. The registered capital of the group is one hundred fifty five and a half million yuan, covering an area of 300,000 square meters and construction area of 180,000 square meters.

Main business coverage:

1. Host series:

- Water cooled series: centrifugal cold (hot) water unit, screw type cold water unit, screw type water (ground) source cooling and heating unit, scroll type water (ground) source cooling and heating unit.
- Air cooled series: screw type cold (hot) water unit, modular type cold (hot) water unit, mini type cold (hot) water unit, VRV series unit.
- Packaged Unitary unit: constant temperature and humidity unit, air (water) cooled unitary unit, dehumidification unit.

2. Direct expansion series: Rooftop packaged unit, ducted split unit.

3. Terminal series: Purification air handling unit, combined air handling unit, fresh air unit, fan coil unit series.



ENTERPRISE PROFILE

4. **Ventilation series:** Fire exhaust fan, roof fan, axial fan, diagonal fan, centrifugal fan, etc.
5. **Engine room equipment:** cyclone sand remover, water separator (separator), decontamination device, demineralized water device, plate heat exchange unit, constant pressure equipment, etc.
6. **Air conditioning accessories:** All kinds of fire valves, regulating valves, tuyere series.
7. **Other products:** Low-temperature industrial chillers, air-conditioning equipment for planting and breeding industries.

The R & D team composed of high-tech talents will continue to introduce new products, advanced production equipment and adopt the international ISO9001 quality management system as a strong guarantee for product quality. Precision testing equipment and rigorous testing methods are the fundamental insurance of quality and are timely and thoughtful. After-sales service solves the problems that may arise in use for you.

The company has established a complete sales and service system. Set up offices in 18 cities including Beijing, Tianjin, Shanghai, Xi'an, Shenyang, Chengdu and other cities to provide users with timely, efficient and high-quality pre-sales, sales and after-sales services.

Ruidong Air Conditioning wishes you: Cooling air for propitious summer, spring returns with warm air from Ruidong.

CERTIFICATIONS

Ruidong group always takes "create first-class quality, offer sincere service" as the quality concept, builds customer-oriented quality management system, focuses on teamwork and insists on continuous innovation.



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1. BRIEF INTRODUCTION

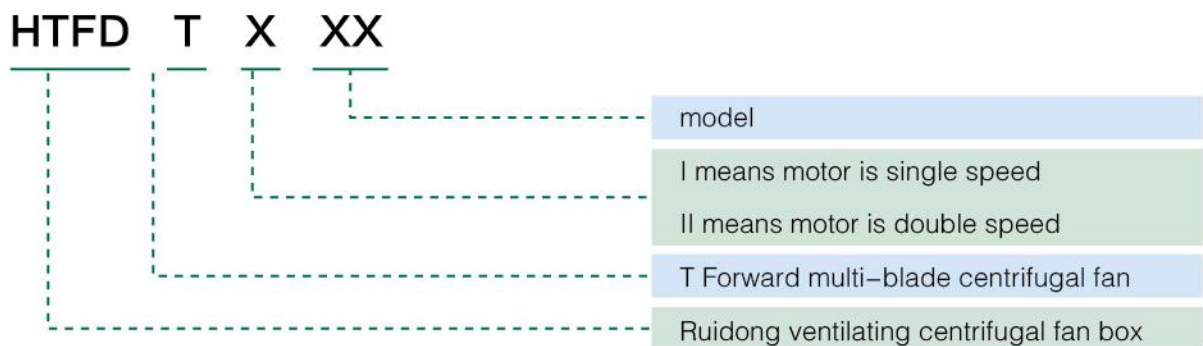
1.1 Ventilating centrifugal fan box is a high-efficiency, low-noise box-type centrifugal fan. It is assembled by a low-noise multi-wing centrifugal fan, motor, bearings, transmission parts, galvanized sheet box, etc. According to different installation positions, different angles of air inlet and outlet positions are provided to meet the needs of users in different installation environments. The motor is installed in the box. Ventilating centrifugal fan box is used in ventilation places.

1.2 The air flow of ventilating centrifugal fan box from 2660-100500m³/h, and the full pressure range is 184-1150pa. After continuous improvement and development, the fan can now be divided into two types I and II. Type I with a single-speed motor; type II with a two-speed motor, achieving two-speed speed regulation. Ventilating centrifugal fan box can meet the needs of users for performance adjustment under different working conditions.

1.3 In order to meet the noise requirements of different places, the fan can be equipped with mufflers of different lengths or add PU muffler in the box to reduce fan noise.

1.4 The air box can be equipped with primary, medium or high efficiency filters at the inlet and outlet flanges to improve the cleanliness of the air. The actual pressure loss should be considered when configuring the filter, and the length of the air box should be appropriately increased.

1.5 Model Description



Egg: HTFD-T-I-9

Means: the fan is a forward multi-blade centrifugal fan, the motor is single speed, and the model is 9 energy-saving low-noise fan.

2. WORKING CONDITIONS

Working temperature: -20-40°C (continuous operation)

Humidity: less than 90%

Power supply: 380V-3PH-50HZ

3. APPLICATION

Fans can be widely used for ventilation in hotels, restaurants, auditoriums, cinemas, basements, industrial and mining enterprises, office buildings and other places. Especially in places where low noise and large air volume are required for ventilation.



4. CONFIGURATION

4.1 Standard configuration

- Pulleys, belts
- impeller
- Belt cover
- Housing (housing, collector, bracket) · Motor
- Galvanized sheet box · Bearing
- Motor adjust rail · Spindle
- Inlet and outlet flange

4.2 Options and accessories (please indicate whether to purchase when ordering)

- Damping equipment
- Control box
- Muffler
- Mating flange
- Motor rain cover

5. PROCESSING TECHNOLOGY

5.1 The impeller and casing of the fan are made of high-quality galvanized sheet, which are all produced in moulds. Use riveting, bite connection and other means. The surface is clean and flat, and there is no welding distortion.

5.2 The galvanized sheet box body adopts the frame and box board assembly design. The frame is stretched once by an advanced metal cold bending unit. The box board adopts galvanized sheet, the surface is clean and beautiful, and the corrosion resistance is strong. Fans can be disassembled and installed on site.

6. SPECIFICATION

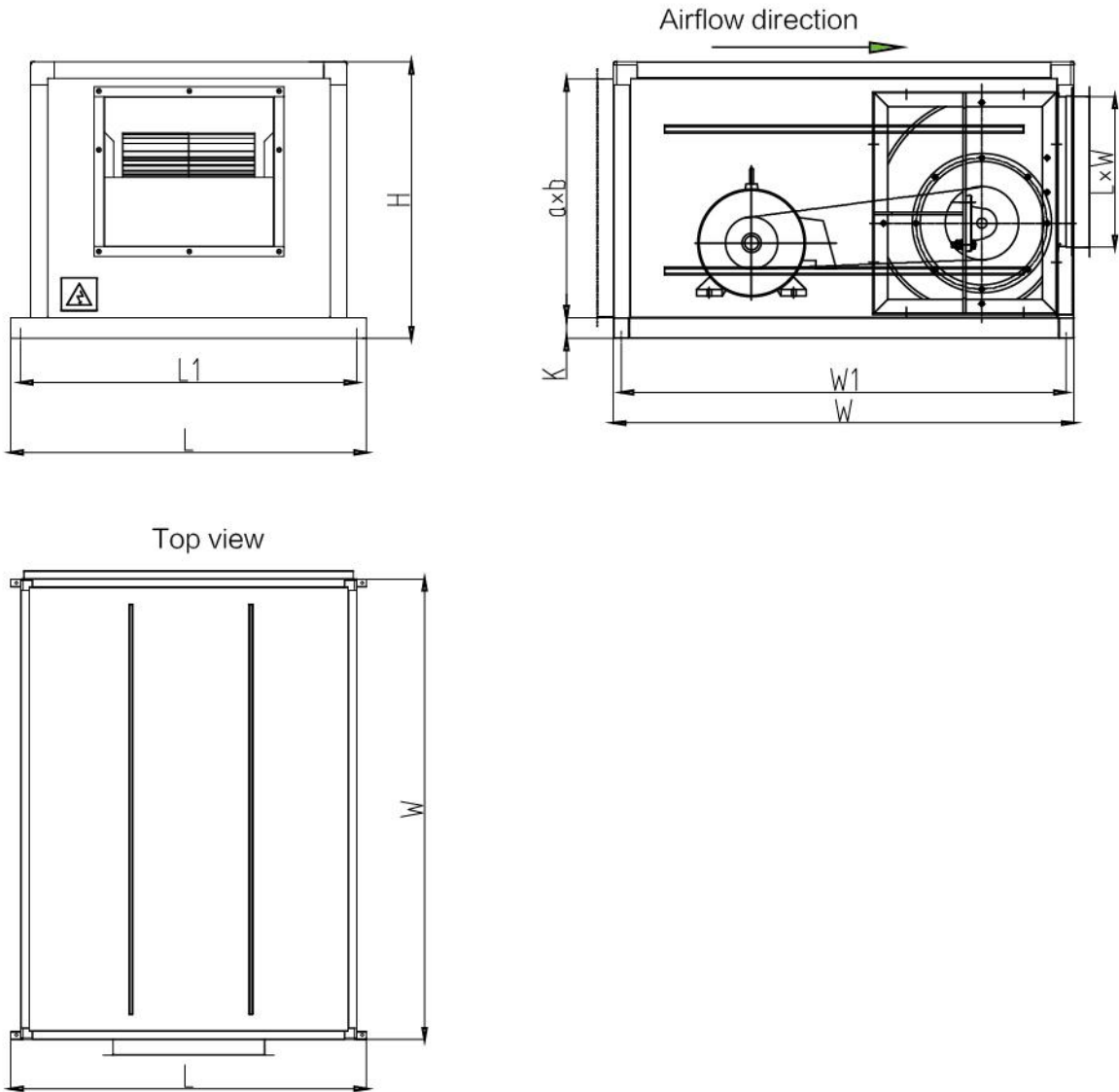
Single speed performance specification

No.	Model	Motor		Air flow (m³/h)	Air pressure (Pa)	Noise (dB)	Weight (kg)
		Model	Power(kW)				
1	HTFD-T-I-9	Y90L-4	1.5	3000 ~ 3920	430 ~ 425	71.4	79
2		Y90S-4	1.1	2785 ~ 4208	300 ~ 522	67.8	76
3		Y80M2-4	0.75	2388 ~ 3608	220 ~ 390	64.2	72
4		Y80M1-4	0.55	2047 ~ 3007	153 ~ 287	63.4	70
5	HTFD-T-I-10	Y100L2-4	3	4860 ~ 6370	708 ~ 700	74	97
6		Y100L1-4	2.2	6044 ~ 6994	472 ~ 544	73	95
7		Y90L-4	1.5	3765 ~ 5377	347 ~ 596	72	88
8		Y90S-4	1.1	3216 ~ 4550	248 ~ 446	67.8	85
9	HTFD-T-I-12	Y100L2-4	3	7520 ~ 8833	460 ~ 509	74.8	105
10		Y100L1-4	2.2	5069 ~ 7708	377 ~ 571	73.4	103
11		Y90L-4	1.5	4245 ~ 6658	281 ~ 459	71.2	96
12	HTFD-T-I-12.5	Y100L2-4	3	4869 ~ 6062	550 ~ 530	74.8	108
13		Y100L1-4	2.2	5560 ~ 6800	390 ~ 378	73.4	106
14		Y90L-4	1.5	4780 ~ 6080	344 ~ 330	68.1	99
15		Y90S-4	1.1	3048 ~ 4562	340 ~ 383	66.9	96
16		Y80M2-4	0.75	2287 ~ 3048	324 ~ 340	63.3	92
17	HTFD-T-I-14	Y132S-4	5.5	6731 ~ 8385	808 ~ 800	77.2	143
18		Y112M-4	4	8230 ~ 9900	619 ~ 600	75.1	124
19		Y100L2-4	3	8183 ~ 9904	462 ~ 455	74.3	118
20		Y100L1-4	2.2	4677 ~ 6177	400 ~ 390	72.7	116
21		Y90L-4	1.5	4230 ~ 5634	388 ~ 420	69.2	109
22	HTFD-T-I-15	Y160M-4	11	11071 ~ 14227	1163 ~ 1231	81.1	208
23		Y132M-4	7.5	10000 ~ 12850	1050 ~ 1112	80.7	166
24		Y132S-4	5.5	9692 ~ 12815	800 ~ 890	77.6	154
25		Y112M-4	4	10314 ~ 11213	670 ~ 710	74.9	135
26		Y100L2-4	3	6934 ~ 10292	540 ~ 568	73.8	129
27		Y100L1-4	2.2	6241 ~ 9346	420 ~ 462	71.5	127
28		Y90L-4	1.5	45408 ~ 6546	420 ~ 442	68	120
29	HTFD-T-I-18	Y160M-4	11	13250 ~ 17550	900 ~ 1070	81.1	246
30		Y132M-4	7.5	12040 ~ 15200	820 ~ 880	80.7	204
31		Y132S-4	5.5	10640 ~ 13860	685 ~ 725	77.6	192
32		Y112M-4	4	9650 ~ 12120	555 ~ 586	74.9	173
33		Y100L2-4	3	8520 ~ 11254	445 ~ 465	73.8	167
34		Y100L1-4	2.2	5860 ~ 8510	420 ~ 462	71.5	165
35	HTFD-T-I-20	Y180M-4	18.5	20860 ~ 2400	1390 ~ 1425	84.8	328
36		Y160L-4	15	19000 ~ 23250	1124 ~ 1150	83.6	301
37		Y160M-4	11	16340 ~ 21150	888 ~ 920	83	284
38		Y132M-4	7.5	14915 ~ 18250	720 ~ 744	78.7	242
39		Y132S-4	5.5	13270 ~ 16790	568 ~ 586	78.1	230
40		Y112M-4	4	10339 ~ 12908	480 ~ 560	72.3	211
41		Y100L2-4	3	9570 ~ 12139	420 ~ 452	71.6	205
42	HTFD-T-I-22	Y180L-4	22	27500 ~ 30300	1295 ~ 1300	86.1	380
43		Y180M-4	18.5	26875 ~ 29611	1265 ~ 1270	84.8	
44		Y160L-4	15	20270 ~ 25400	1060 ~ 1100	83.9	337
45		Y160M-4	11	17250 ~ 23130	745 ~ 912	82.5	320
46		Y132M-4	7.5	16000 ~ 20200	676 ~ 717	78.9	278

Single speed performance specification

No.	Model	Motor		Air flow (m³/h)	Air pressure (Pa)	Noise (dB)	Weight (kg)
		Model	Power(kW)				
47		Y132S-4	5.5	14636 ~ 18700	527 ~ 555	74.8	266
48		Y112M-4	4	12833 ~ 16567	418 ~ 437	74.2	247
49		Y100L2-4	3	11000 ~ 14200	370 ~ 400	70	241
50	HTFD-T-I-25	Y180L-4	22	29360 ~ 34492	1140 ~ 1155	86.1	441
51		Y180M-4	18.5	29000 ~ 33600 32077 ~ 38692	1010 ~ 1030 815 ~ 850	84.2	425
52		Y160L-4	15	31250 ~ 21600 32785 ~ 38000	876 ~ 910 630 ~ 650	84.8	398
53		Y160M-4	11	21600 ~ 28560	685 ~ 717	80.5	381
54		Y132M-4	7.5	18000 ~ 23300	588 ~ 630	76.4	339
55		Y132S-4	5.5	19790 ~ 25192	546 ~ 566	73.5	327
56		Y200L-4	30	32492 ~ 40985	1220 ~ 1290	86.3	568
57	HTFD-T-I-28	Y180L-4	22	33700 ~ 38700 41777 ~ 45000	1087 ~ 1127 810 ~ 850	85.3	513
58		Y180M-4	18.5	33400 ~ 38742 38769 ~ 41769	888 ~ 905 815 ~ 850	84.6	497
59		Y160L-4	15	28500 ~ 34500	770 ~ 805	82.4	470
60		Y160M-4	11	22400 ~ 31000	640 ~ 706	80.1	453
61		Y132M-4	7.5	18000 ~ 23300	588 ~ 630	76.4	411
62		Y160L-6	11	24446 ~ 32653	606 ~ 645	79.9	466
63		Y160M-6	7.5	22666 ~ 28850	480 ~ 508	75.8	501
64	HTFD-T-I-30	Y250M-4	55	57000 ~ 65500	1600 ~ 1632	85	789
65		Y225M-4	45	52600 ~ 60800	1417 ~ 1455	89.8	713
66		Y225S-4	37	50200 ~ 57260	1215 ~ 1240	87.8	713
67		Y200L-4	30	42788 ~ 50185 50385 ~ 55385	998 ~ 1025 890 ~ 910	87.4	636
68		Y180L-4	22	4220 ~ 47850	887 ~ 907	83.6	581
69		Y200L1-6	18.5	38300 ~ 45000	795 ~ 822	82.9	622
70		Y180L-6	15	35850 ~ 44000	627 ~ 642	82.8	569
71		Y160L-6	11	28000 ~ 38150	530 ~ 570	80.9	534
72	HTFD-T-I-36	Y250M-4	55	62070 ~ 73980	1440 ~ 1500	85	893
73		Y200L-4	30	60000 ~ 77160	874 ~ 913	84.9	740
74		Y280M-6	55	48077 ~ 54197	1160 ~ 1200	90.4	1012
75		Y280S-6	45	46615 ~ 53354	1141 ~ 1150	89.2	817
76		Y250M-6	37	59620 ~ 68500	1027 ~ 1044	88.4	871
77		Y225M-6	30	542777 ~ 65077	690 ~ 725	86.5	802
78		Y200L2-6	22	52100 ~ 58714	717 ~ 722	84.5	738
79		Y200L1-6	18.5	50500 ~ 57800	587 ~ 580	83.1	726
80		Y180L-6	15	40462 ~ 51046	425 ~ 450	81.3	673
81		Y280M-6	55	70636 ~ 83818	1243 ~ 1294	90.4	1225
82	HTFD-T-I-40	Y280S-6	45	71000 ~ 83000 77846 ~ 8769	1065 ~ 1100 750 ~ 800	87.5	1030
83		Y250M-6	37	78558 ~ 91298 64904 ~ 73692	754 ~ 763 868 ~ 920	85.6	1084
84		Y225M-6	30	61850 ~ 77200 55000 ~ 69231	730 ~ 745 826 ~ 868	84.5	1015
85		Y200L2-6	22	62538 ~ 70523	560 ~ 572	82.3	951
86		Y200L1-6	18.5	54140 ~ 63400	5700 ~ 584	81.6	939
87		Y180L-6	15	52600 ~ 67400 44308 ~ 56677	425 ~ 450 457 ~ 464	79.7	886

7. SINGLE SPEED DIAGRAM



	L(mm)	L1	W(mm)	W1	H(mm)	Box L (mm)	Box W (mm)	Box H (mm)	Outlet L (mm)	Outlet W (mm)	Inlet a (mm)	Inlet b (mm)
HTFD-T-I-9 (Side discharge)	770	710	1000	952	593	650	1000	530	290	290	546	476
HTFD-T-I-10 (Side discharge)	820	760	1100	1052	643	700	1100	580	322	322	596	526
HTFD-T-I-12 (Side discharge)	850	790	1100	1052	643	730	1100	580	382	322	626	526
HTFD-T-I-12.5 (Side discharge)	870	810	1150	1102	698	750	1150	635	360	360	646	581
HTFD-T-I-14 (Side discharge)	920	860	1256	1208	800	800	1256	737	404	404	696	683
HTFD-T-I-15 (Side discharge)	1020	960	1256	1208	800	900	1256	737	524	404	796	683
HTFD-T-I-18 (Side discharge)	1070	1010	1385	1337	833	950	1385	770	512	452	846	716
HTFD-T-I-20 (Side discharge)	1170	1110	1385	1337	915	1050	1385	852	568	506	946	798
HTFD-T-I-22 (Side discharge)	1240	1180	1480	1432	1022	1120	1480	942	638	568	1016	888
HTFD-T-I-25 (Side discharge)	1260	1200	1560	1512	1112	1200	1560	1032	714	638	1096	978
HTFD-T-I-28 (Side discharge)	1520	1460	1700	1652	1240	1400	1700	1140	800	714	1296	1086
HTFD-T-I-30 (Side discharge)	1620	1560	1820	1772	1368	1500	1820	1268	898	800	1396	1214
HTFD-T-I-36 (Side discharge)	1720	1660	2060	2012	1520	1600	2060	1420	1006	898	1496	1366
HTFD-T-I-40 (Side discharge)	1970	1910	2180	2132	1700	1850	2180	1600	1130	1006	1746	1546
HTFD-T-I-9 (Top Discharge)	770	710	1100	1052	593	650	1100	493	290	290	546	476
HTFD-T-I-10 (Top Discharge)	820	760	1200	1152	643	700	1200	580	322	322	596	526
HTFD-T-I-12 (Top Discharge)	850	790	1200	1152	643	730	1200	580	382	322	626	526
HTFD-T-I-12.5 (Top Discharge)	870	810	1250	1202	698	750	1250	635	360	360	646	581
HTFD-T-I-14 (Top Discharge)	920	860	1356	1308	800	800	1356	737	404	404	696	683
HTFD-T-I-15 (Top Discharge)	1020	960	1356	1308	800	900	1356	700	524	404	796	683
HTFD-T-I-18 (Top Discharge)	1070	1010	1385	1337	833	950	1385	770	512	452	846	716
HTFD-T-I-20 (Top Discharge)	1170	1110	1485	1437	915	1050	1485	852	568	506	946	798
HTFD-T-I-22 (Top Discharge)	1240	1180	1580	1532	1022	1120	1580	942	638	568	1016	888
HTFD-T-I-25 (Top Discharge)	1260	1200	1660	1612	1112	1200	1660	1032	714	638	1096	978
HTFD-T-I-28 (Top Discharge)	1520	1460	1800	1752	1240	1400	1800	1140	800	714	1296	1086
HTFD-T-I-30 (Top Discharge)	1620	1560	1920	1872	1368	1500	1920	1268	898	800	1396	1214
HTFD-T-I-36 (Top Discharge)	1720	1660	2160	2112	1520	1600	2160	1420	1006	898	1496	1366
HTFD-T-I-40 (Top Discharge)	1970	1910	2280	2232	1700	1850	2280	1600	1130	1006	1746	1546

8. WIRING SPECIFICATIONS OF DIFFERENT POWER FAN MOTORS

Fan motor power	Power supply	Fan motor wiring specification mm ² (National standard copper cable)	
		Direct start or variable frequency start	star-delta start
0.30KW~ 0.55KW	AC220V 50Hz	YJV 3*1.5	
0.75KW~ 1.1KW	AC220V 50Hz	YJV 3*2.5	
0.30KW~ 2.2KW	AC380V 50Hz	YJV 4*1.5	
3KW ~ 4KW	AC380V 50Hz	YJV 4*2.5	
5.5KW~ 7.5KW	AC380V 50Hz	YJV 4*4	
11KW	AC380V 50Hz	YJV 4*6	
15KW ~ 18.5KW	AC380V 50Hz	YJV 3*10+1*6	Two groups YJV 4*6
22KW	AC380V 50Hz	YJV 3*16+1*10	Two groups YJV 4*6
30KW	AC380V 50Hz	YJV 3*25+1*16	Two groups YJV 3*10+1*6
37KW	AC380V 50Hz	YJV 3*35+1*16	Two groups YJV 3*16+1*10
45KW	AC380V 50Hz	YJV 3*35+1*16	Two groups YJV 3*25+1*16
55KW	AC380V 50Hz	YJV 3*50+1*25	Two groups YJV 3*35+1*16
75KW	AC380V 50Hz	YJV 3*70+1*35	Two groups YJV 3*50+1*25

Remarks:

The wiring specifications are calculated based on the wiring length of 20m. If the distance exceeds this standard, please recalculate.

9. FAN USE AND MAINTENANCE

9. Check before installation of fan

9.1.1 Understand the fan's specifications, forms, positions of air inlets and outlets, corresponding installation dimensions, and power requirements for the equipped motors.

9.1.2 Before installation, carefully check the wind leaf and cabinet for damage or deformation due to transportation. Check whether the bolts are tight. Otherwise, it can be installed and used after repairing.

9.1.3 The smoke exhaust port and the smoke exhaust fan should be equipped with a connection device. When any smoke exhaust port is opened, the smoke exhaust fan can automatically start.

9.1.4 Before starting the fan, first check whether there are any objects in the fan and pipes that hinder the rotation; check whether the electrical wiring is intact.

9.1.5 After installation, check the components of the fan box regularly. Check whether the bearing lubrication is sufficient to ensure that the fan can start and operate normally at any time. The direction of rotation of the impeller must be consistent with the arrow mark of the fan.

9.2 Analysis of common failures of fans

9.2.1 There are many reasons for vibration, which can be checked from the following aspects. Due to the deformation of the storage and transportation impeller, it will rub the shell when rotating, and abnormal sound and violent vibration will be emitted at this time. The reason is that the fan casing or impeller parts are deformed during storage and transportation;

Because the impeller is deformed under pressure, the coupling is loosened, and the bearing is damaged, the dynamic balance of the counter-wheel is destroyed;

Motor bearing damage;

The installation tolerance of the motor shaft and the fan wheel housing does not meet the technical requirements;

The voltage is too low.

9.3 Maintenance

The fan shall be regularly overhauled at least once a year. Check the bearings and remove the dust and dirt inside the fan.

TESTING CENTER



Testing center covers an area of 6500 square meters; total investment of 50 million RMB, is the largest and most complete detection device in the north of China , the testing range is from household air conditioner to the centrifuge chillers.

Testing center adopt internationally renowned brand measuring instruments, including the United States Agilent data acquisition, Japan Yokogawa power meter, Saibi Ling platinum thermal resistance, to ensure the test accuracy.

Testing center can test multi-unit, air-cooled unit, fan coil unit, ceiling air handling unit, modular air handling unit, purifying air conditioning unit, water loop heat unit, air-cooled module chiller and air-cooled screw chiller.

MAIN PROJECTS



High school building in Brazil



Presidential palace of Kazakhstan



Shanxi Dingxiang County People's Court



Shanxi Yuncheng odd Star Technology Co., Ltd



Beijing Grand Oriental Hotel



Shanxi Linfen High Speed Rail Station



Beijing Sihui building materials city



Shanxi Tongmei Group Zhangze Power Puzhou Power Generation Branch



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The contents will be changed due to product updates without prior notice, please refer to the actual product.

This document has been proofread many times, but there may still be errors or omissions, please understand.