

YFBCDL

Backward Curved Steel Wheel Double-inlet Centrifugal Fan Type L

To provide the most reliable and user-friendly air movement & control and air conditioning service.



Due to continuing research, Shanghai Nautilus reserves the right to change specifications without notice.

SHANGHAI NAUTILUS GENERAL EQUIPMENT MANUFACTURING CO LTD

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Process Expert Series Products

- Large volume, welded steel structure, high mechanical strength, safe and reliable
- Mainly used for air supply for high-end large buildings, support for AC units and air supply (large volume) for industrial production process
- Energy Efficiency Classification up to FEG80 (AMCA Standard 205-10)
- Temperature : -40~120°C
- Volume up to 499,500 m³/h
- Static pressure up to 3,155 Pa

G4.0



Company Profile

Shanghai Nautilus General Equipment Manufacturing Co., Ltd. is a middle and high-end solution provider of air supply and gas heating and air cleaning equipment that integrates R&D, production and sales. Established in September, 2003, it is located in the Jiading District of Shanghai. The company is the member of the US Green Building Council (USGBC) and International Air Movement and Control Association (AMCA), the high and new tech enterprise of Shanghai, **INFINAIR®** won the famous trademark in Shanghai.

Vision statement: To become the most trustworthy brand of professional air movement & control and air conditioning.

Mission statement: To provide the most reliable and user-friendly air movement & control and air conditioning service.

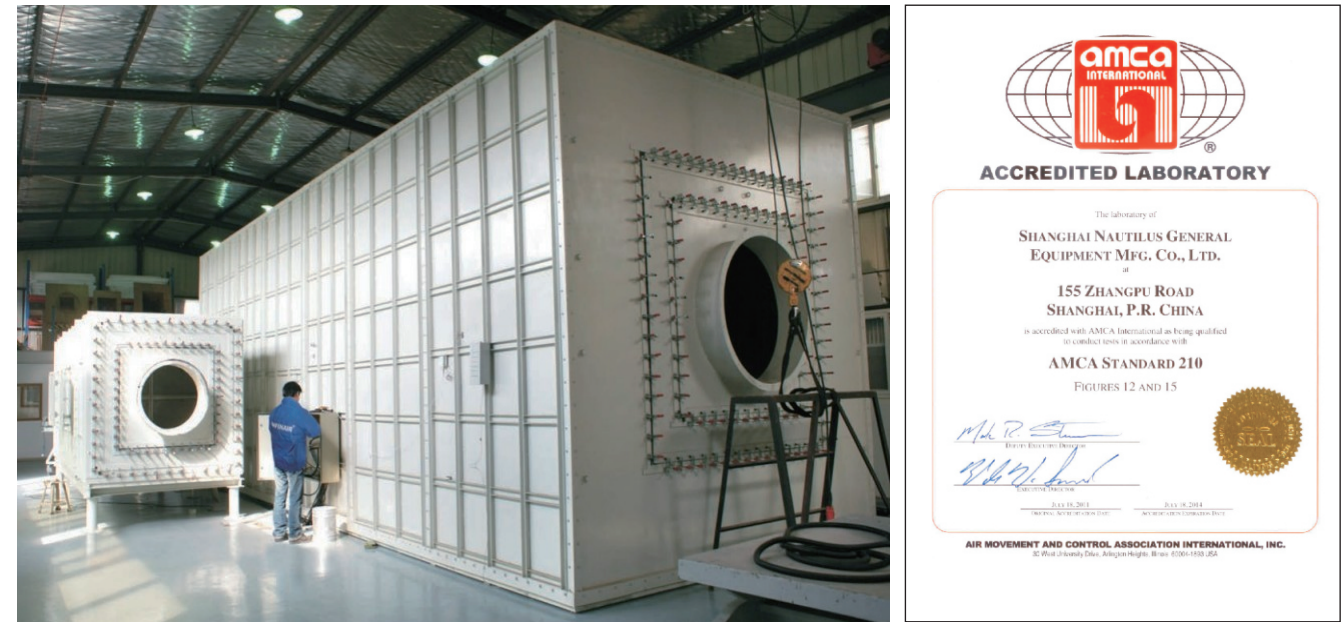


Shanghai Nautilus General Equipment Manufacturing Co Ltd certifies that the Model YFBCDL shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

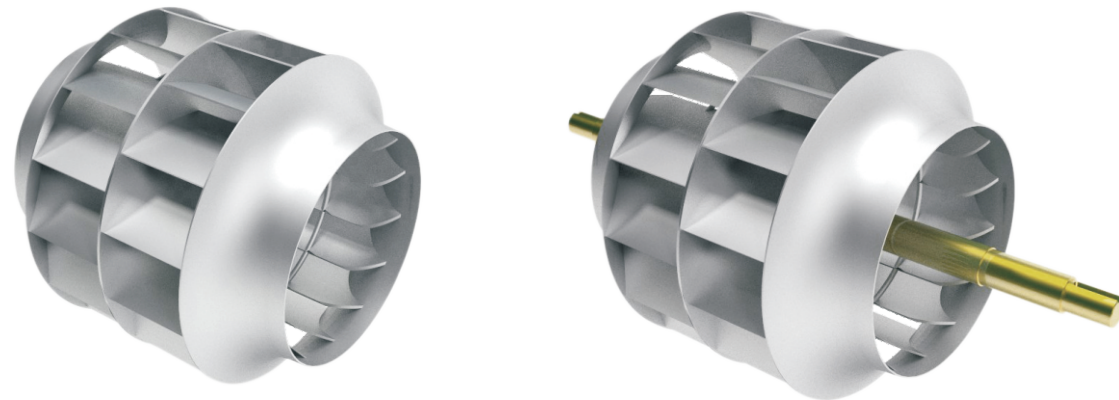


Laboratory Introduction

- Following methods are used to increase Infinair aerodynamic laboratory's test accuracy.
 - (1) Strictly following AMCA-210 standards to design and fabricate
 - (2) Traditional Pitot tube method is replaced by high precision nozzle matrix to increase accuracy.
 - (3) State of the art instruments and equipments are widely used in the lab.
 - (4) Test instruments are strictly calibrated, the calibration is repeated in time.The lab assures INFINAIR is capable to test different product design, increase the accuracy and liability of products, and become a good reason why you trust INFINAIR.



Backward Curved Steel Double-inlet Wheel



● Design of backward curved wheel

The fan adopts advanced technology. Design of backward curved centrifugal wheel is optimized by means of CFD hydro-field simulating. The design is more accordant with the aerodynamic characteristics, and has lower noise, and stable airflow.

● Steel plasma cutting, precise positioning jig and all-welded manufacture

Steel plasma cutting, precise positioning jig and all-welded technique are adopted for the blade to ensure smoothness of the margin of the blade. The welding angle is accurate, the whole blade is with strong strength, and the stress is evenly distributed during long-time high-speed operation. The operation is stable and reliable.

● High balancing level

Each wheel is subjected to dynamic balance test. We insist to the balancing level of G4.0 (G6.3 for the same type of products at home and abroad). Long-term quiet and stable running of the fan is ensured fundamentally.

● Large volume and wide high-efficiency range

Double air inlet structure is applied to the wheel, which ensures a large volume. In addition, the pneumatic performance of the wheel is smooth and flat, and has a wide high-efficiency range.

Product Features

● All-steel welded structure, ensuring better strength and safety

The FEA theoretical design structure is adopted for the main body of the fan. It is made through welding the steel plates, which ensures a stable structure and high strength of the fan, as well as better safety performance.



All steel structure

● Continuous welded scroll, ensuring excellent air-tight performance

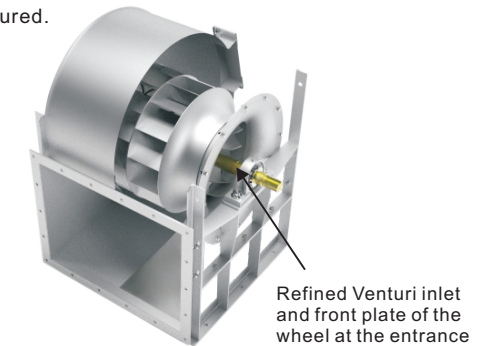
The scroll of the fan is made of steel by continuous welding, which ensures excellent strength of the scroll, and meanwhile prevents leakage of gas.

● High reliability

Fan shaft is subjected to finish turning & hardening and tempering. Maximum load surpasses 35% of limit speed;
Bearing seal can be lubricated. Service life more than L10:80000 hours;
The fan is supported by stable channel steel base, so that stable running of the fan is ensured.

● High Energy Efficiency Classification

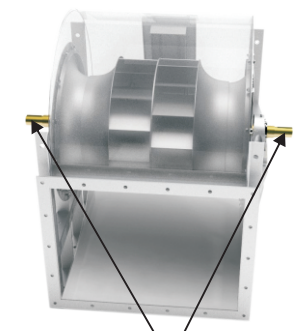
The fan adopts backward curved wheel with high balancing level and high efficiency. In combination with housing designed by CFD flow field simulation and inlet Venturi pipe, fan Energy Efficiency Classification up to FEG80 (AMCA Standard 205-10), and high-efficiency and energy-saving operating of the fan is ensured.



Refined Venturi inlet and front plate of the wheel at the entrance

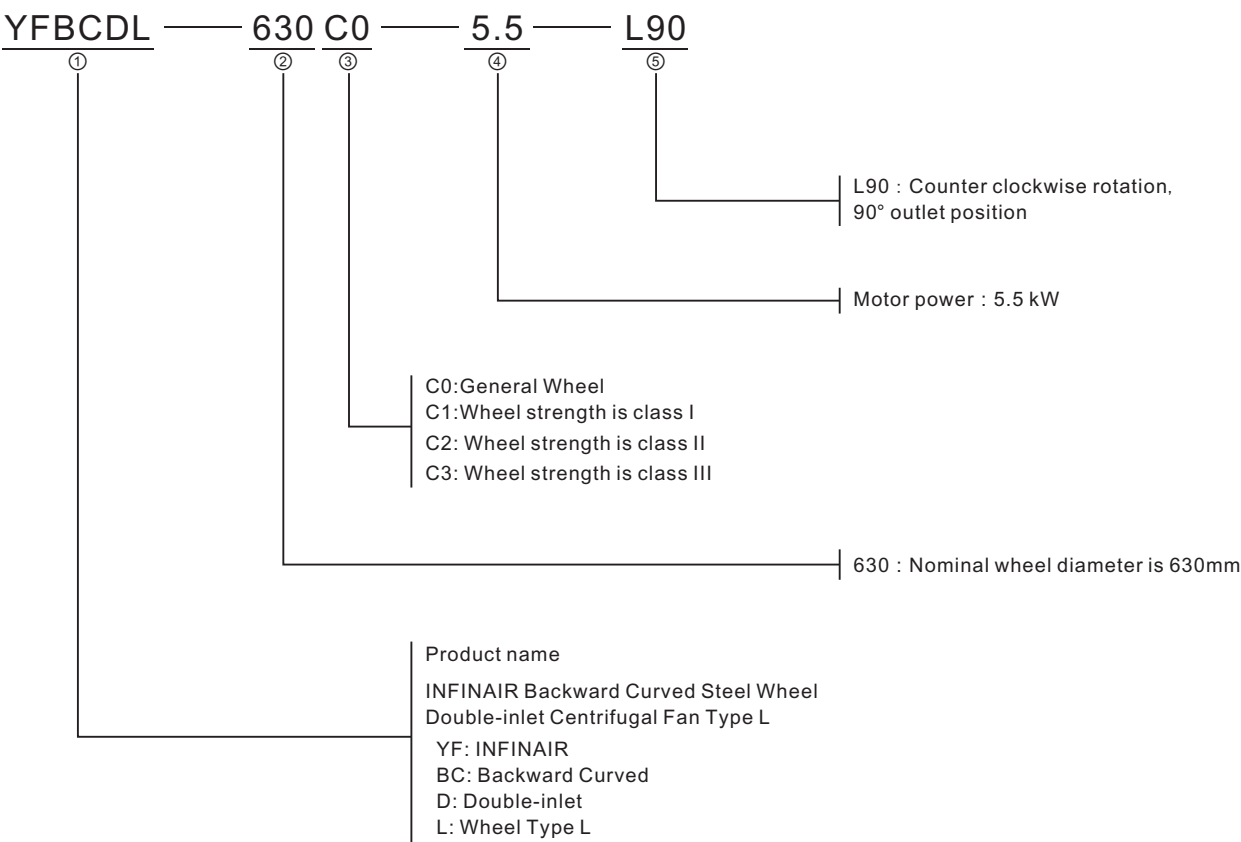
● Convenient mating device

Design of the fan (A6 drive arrangements) ensures that the driving mechanism could be installed on both ends of the shaft. Driving mechanism of right-handed rotation or left-handed rotation could be adopted as the mating device according to actual needs.

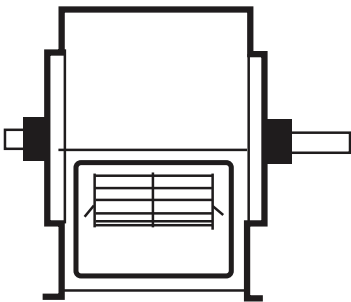


Driving mechanisms could be installed on both ends of the shaft

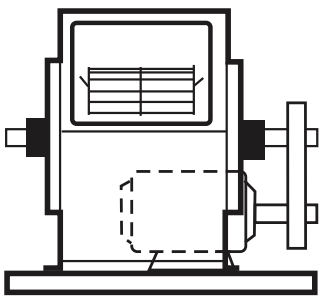
Naming Convention



Drive arrangements for centrifugal fans

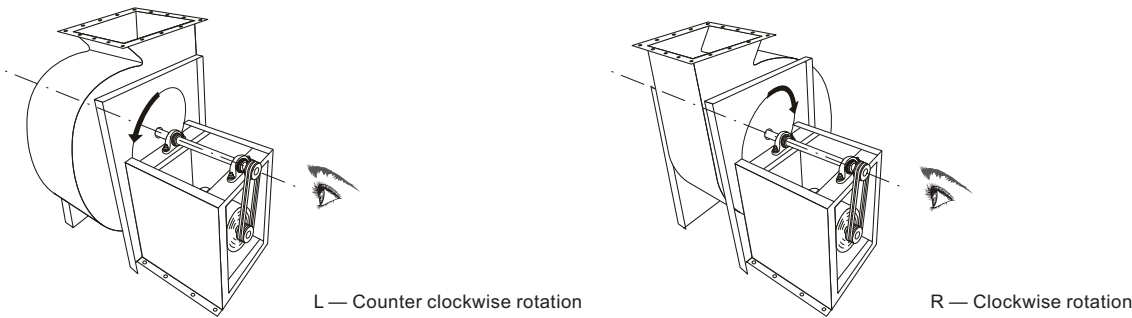


Drive Arrangement 6 (China National Standard: Type E)



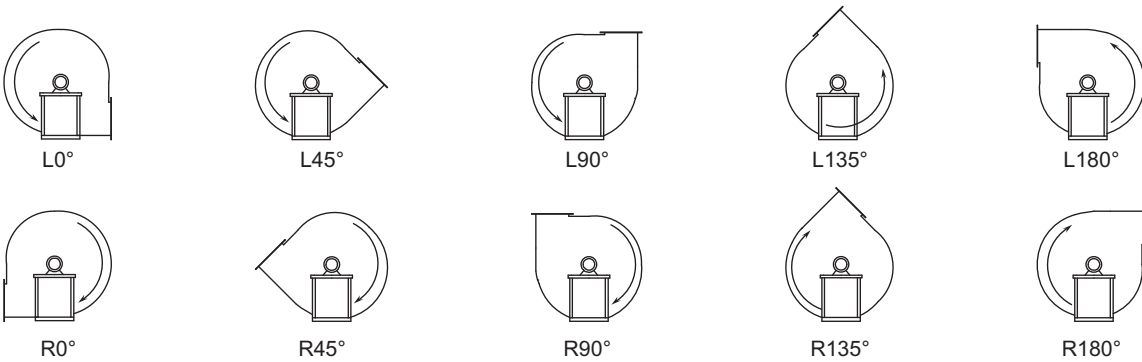
Drive Arrangement 18 (China National Standard: Type E)

Designation for rotation



Note: The rotation is identified from the view of fan drive (as shown in the above figure)

Designation of outlet position



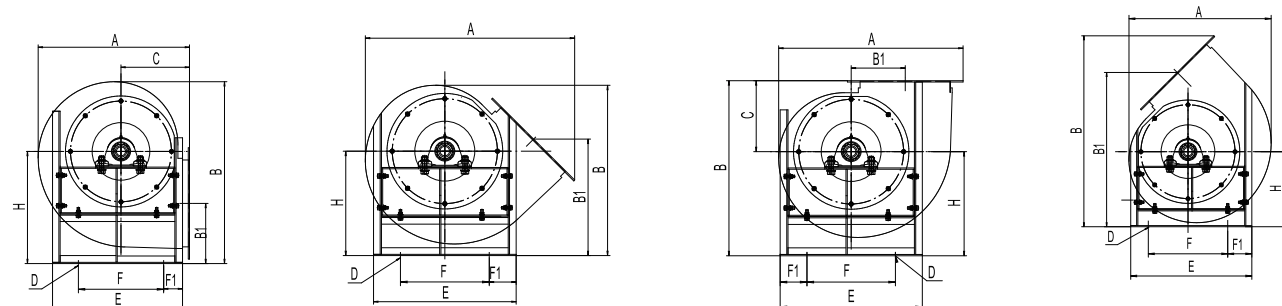
INFINAIR® standard	L	L0	L45	L90	L135	L180
China national standard	L	L 0°	L 45°	L 90°	L 135°	L 180°
ISO standard	LG	LG 270	LG 315	LG 0	LG 45	LG 90
AMCA standard	CCW	CCW270	CCW315	CCW360	CCW45	CCW90
INFINAIR® standard	R	R0	R45	R90	R135	R180
China national standard	R	R 0°	R 45°	R 90°	R 135°	R 180°
ISO standard	RD	RD 270	RD 315	RD 0	RD 45	RD 90
AMCA standard	CW	CW 270	CW 315	CW 360	CW 45	CW 90

Examples of Naming, Drive Arrangements, Rotation Direction, Outlet position:

YFBCDL-630C1-5.5-R0

- Name meaning: centrifugal wheel with backward curved blades, Double-inlet, centrifugal fan Type L, Nominal wheel diameter is 630mm, wheel strength is class I, belt drive, 5.5kW motor.
- Drive arrangements: A6 (China National Standard: E Type)
- Selection of rotation direction: R indicates right-handed rotation (clockwise).
- Selection of outlet position: R0 indicates that 0 degree is selected for outlet position (China National Standard: right 0, ISO Standard: Rd270, AMCA Standard: Cw270)

Outline and Installation Dimensions of YFBCDL-280~1400 (A6)

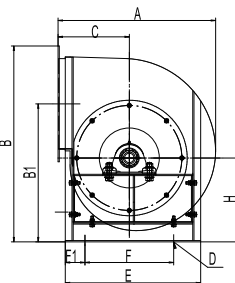


L 0°

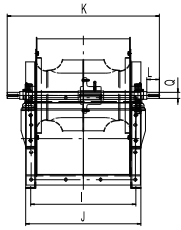
L 45°

L 90°

L 135°



L 180°



Sizes of inlet and outlet flanges

Note: drawing in R rotating direction and drawing in L rotating direction are distributed in the form of mirror image.

L0°/R0°Dimension table

Unit: mm

model	NO.	A	B	B1	C	D	E	F	F1	H	I	J	K	L	Q
YFBCDL-280	497	605	204	225	4-Φ10	390	250	70	375	419	451	610	50		(1910~3575rpm)19轴; (3576~4930rpm)24轴
YFBCDL-315	554	677	224	249	4-Φ10	430	290	70	420	465	497	657	50		(1545~3040rpm)24轴; (3041~4700rpm)28轴
YFBCDL-355	614	747	245	273	4-Φ10	470	330	70	460	521	553	731	50		(1320~2735rpm)24轴; (2736~3660rpm)28轴
YFBCDL-400	682	832	267	299	6-Φ12	520	2*190=380	70	510	582	614	822	60		(1060~2455rpm)28轴; (2456~3515rpm)38轴
YFBCDL-450	761	927	292	331	6-Φ12	580	2*220=440	70	565	648	680	898	60		(890~1935rpm)28轴; (1936~3370rpm)42轴
YFBCDL-500	842	1016	314	365	6-Φ12	630	2*245=490	70	615	718	750	989	70		(780~1940rpm)38轴; (1941~2950rpm)48轴
YFBCDL-560	926	1116	344	400	6-Φ14	710	2*275=550	80	675	808	850	1140	90		(770~1635rpm)38轴; (1636~2450rpm)48轴
YFBCDL-630	1036	1259	390	450	6-Φ14	780	2*310=620	80	765	903	945	1243	90		(675~1565rpm)42轴; (1566~2240rpm)55轴
YFBCDL-710	1164	1423	434	500	8-Φ14	940	3*250=750	95	865	1012	1054	1360	90		(660~1275rpm)48轴; (1276~1940rpm)60轴
YFBCDL-800	1311	1583	478	570	8-Φ16	1020	3*270=810	105	960	1148	1202	1536	110		(565~1160rpm)48轴; (1161~1850rpm)75轴
YFBCDL-900	1467	1790	542	630	8-Φ16	1120	3*300=900	110	1085	1282	1336	1724	110		(480~1005rpm)60轴; (1006~1585rpm)75轴
YFBCDL-1000	1643	2110	590	710	8-Φ18	1250	3*330=990	130	1200	1426	1486	1917	110		(430~775rpm)60轴; (776~1050rpm)75轴; (1051~1320rpm)80轴
YFBCDL-1120	1851	2345	662	800	8-Φ18	1400	3*380=1140	130	1345	1591	1651	2176	140		(405~730rpm)75轴; (731~1180rpm)90轴
YFBCDL-1250	2079	2501	725	900	10-Φ18	1600	4*335=1340	130	1495	1766	1826	2360	140		(380~650rpm)75轴; (651~990rpm)90轴
YFBCDL-1400	2331	2780	807	1020	10-Φ18	1800	4*375=1500	150	1665	1970	2040	2642	170		(360~545rpm)80轴; (546~880rpm)90轴

L45°/R45°Dimension table

Unit: mm

model	NO.	A	B	B1	C	D	E	F	F1	H	I	J	K	L	Q
YFBCDL-280	661	524	353	-	4-Φ10	390	250	70	315	419	451	610	50		(1910~3575rpm)19轴; (3576~4930rpm)24轴
YFBCDL-315	738	583	388	-	4-Φ10	430	290	70	350	465	497	657	50		(1545~3040rpm)24轴; (3041~4700rpm)28轴
YFBCDL-355	815	650	431	-	4-Φ10	470	330	70	390	521	553	731	50		(1320~2735rpm)24轴; (2736~3660rpm)28轴
YFBCDL-400	908	727	475	-	6-Φ12	520	2*190=380	70	435	582	614	822	60		(1060~2455rpm)28轴; (2456~3515rpm)38轴
YFBCDL-450	1014	813	526	-	6-Φ12	580	2*220=440	70	485	648	680	898	60		(890~1935rpm)28轴; (1936~3370rpm)42轴
YFBCDL-500	1118	898	581	-	6-Φ12	630	2*245=490	70	535	718	750	989	70		(780~1940rpm)38轴; (1941~2950rpm)48轴
YFBCDL-560	1230	989	639	-	6-Φ14	710	2*275=550	80	590	808	850	1140	90		(770~1635rpm)38轴; (1636~2450rpm)48轴
YFBCDL-630	1385	1103	708	-	6-Φ14	780	2*310=620	80	655	903	945	1243	90		(675~1565rpm)42轴; (1566~2240rpm)55轴
YFBCDL-710	1560	1245	789	-	8-Φ14	940	3*250=750	95	740	1012	1054	1360	90		(660~1275rpm)48轴; (1276~1940rpm)60轴
YFBCDL-800	1748	1384	883	-	8-Φ16	1020	3*270=810	105	820	1148	1202	1536	110		(565~1160rpm)48轴; (1161~1850rpm)75轴
YFBCDL-900	1968	1564	987	-	8-Φ16	1120	3*300=900	110	925	1282	1336	1724	110		(480~1005rpm)60轴; (1006~1585rpm)75轴
YFBCDL-1000	2198	1865	1096	-	8-Φ18	1250	3*330=990	130	1025	1426	1486	1917	110		(430~775rpm)60轴; (776~1050rpm)75轴; (1051~1320rpm)80轴
YFBCDL-1120	2471	2075	1240	-	8-Φ18	1400	3*380=1140	130	1155	1591	1651	2176	140		(405~730rpm)75轴; (731~1180rpm)90轴
YFBCDL-1250	2773	2213	1387	-	10-Φ18	1600	4*335=1340	130	1295	1766	1826	2360	140		(380~650rpm)75轴; (651~990rpm)90轴
YFBCDL-1400	3098	2447	1545	-	10-Φ18	1800	4*375=1500	150	1430	1970	2040	2642	170		(360~545rpm)80轴; (546~880rpm)90轴

L90°/R90°Dimension table

Unit: mm

model	NO.	A	B	B1	C	D	E	F	F1	H	I	J	K	L	Q
YFBCDL-280	584	520	171	225	4-Φ10	390	250	70	295	419	451	610	50		(1910~3575rpm)19轴; (3576~4930rpm)24轴
YFBCDL-315	654	574	196	249	4-Φ10	430	290	70	325	465	497	657	50		(1545~3040rpm)24轴; (3041~4700rpm)28轴
YFBCDL-355	723	638	215	273	4-Φ10	470	330	70	365	521	553	731	50		(1320~2735rpm)24轴; (2736~3660rpm)28轴
YFBCDL-400	809	704	243	299	6-Φ12	520	2*190=380	70	405	582	614	822	60		(1060~2455rpm)28轴; (2456~3515rpm)38轴
YFBCDL-450	970	781	273	331	6-Φ12	580	2*220=440	70	450	648	680	898	60		(890~1935rpm)28轴; (1936~3370rpm)42轴
YFBCDL-500	996	865	301	363	6-Φ12	630	2*245=490	70	500	718	750	989	70		(780~1940rpm)38轴; (1941~2950rpm)48轴
YFBCDL-560	1096	950	331	400	6-Φ14	710	2*275=550	80	550	808	850	1140	90		(770~1635rpm)38轴; (1636~2450rpm)48轴
YFBCDL-630	1239	1060	375	450	6-Φ14	780	2*310=620	80	610	903	945	1243	90		(675~1565rpm)42轴; (1566~2240rpm)55轴
YFBCDL-710	1399	1185	431	500	8-Φ14	940	3*250=750	95	685	1012	1054	1360	90		(660~1275rpm)48轴; (1276~1940rpm)60轴
YFBCDL-800	1561	1335	482	570	8-Φ16	1020	3*270=810	105	765	1148	1202	1536	110		(565~1160rpm)48轴; (1161~1850rpm)75轴
YFBCDL-900	1768	1490	543	630	8-Φ16	1120	3*300=900	110	860	1282	1336	1724	110		(480~1005rpm)60轴; (1006~1585rpm)75轴
YFBCDL-1000	1970	1725	610	710	8-Φ18	1250	3*330=990	130	955	1426	1486	1917	110		(430~775rpm)60轴; (776~1050rpm)75轴; (1051~1320rpm)80轴
YFBCDL-1120	2211	1875	683	800	8-Φ18	1400	3*380=1140	130	1075	1591	1651	2176	140		(405~730rpm)75轴; (731~1180rpm)90轴
YFBCDL-1250	2480	2105	770	900	10-Φ18	1600	4*335=1340	130	1205	1766	1826	2360	140		(380~650rpm)75轴; (651~990rpm)90轴
YFBCDL-1400	2760	2355	859	1016	10-Φ18	1800	4*375=1500	150	1335	1970	2040	2642	170		(360~545rpm)80轴; (546~880rpm)90轴

L135°/R135°Dimension table

Unit: mm

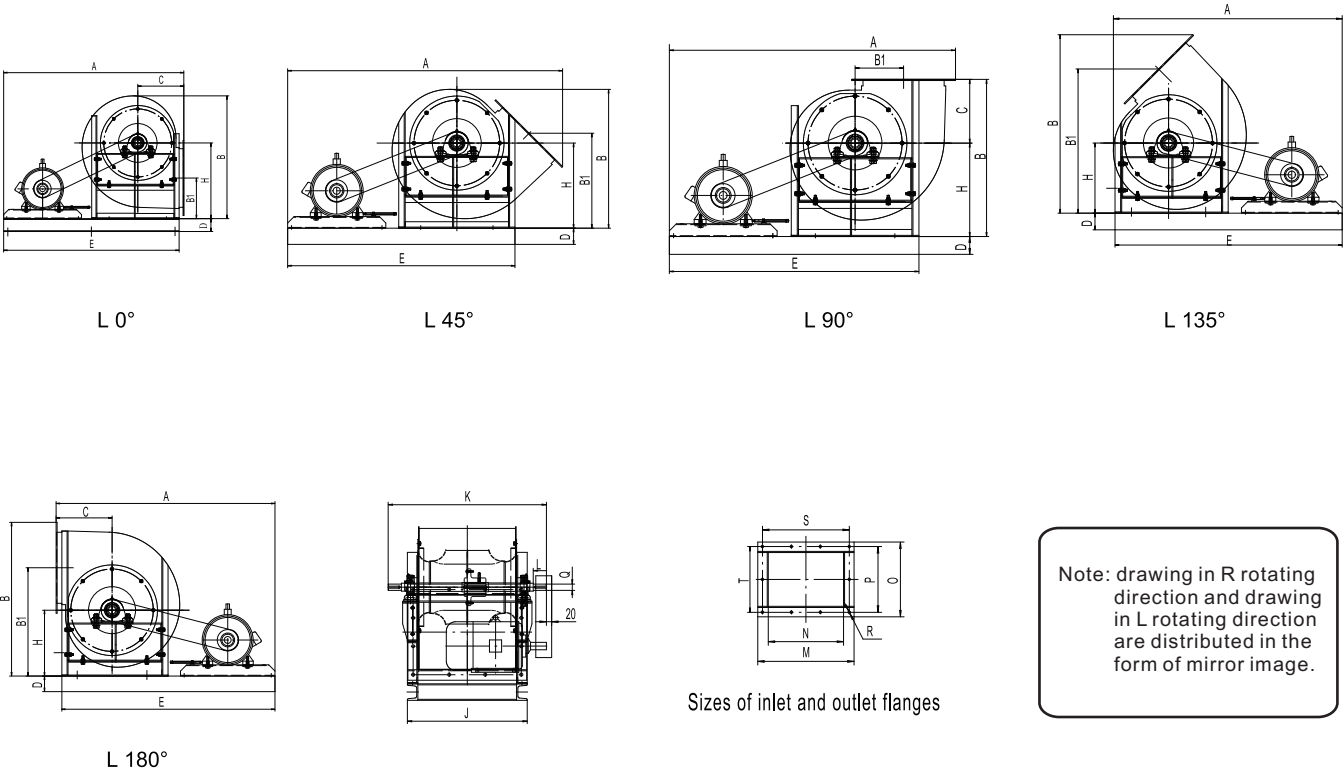
model	NO.	A	B	B1	C	D	E	F	F1	H	I	J	K	L	Q
YFBCDL-280	502	685	555	-	4-Φ10	390	250	70	275	419	451	610	50		(1910~3575rpm)19轴; (3576~4930rpm)24轴
YFBCDL-315	562	762	620	-	4-Φ10	430	290	70	305	465	497	657	50		(1545~3040rpm)24轴; (3041~4700rpm)28轴
YFBCDL-355	628	836	681	-	4-Φ10	470	330	70	335	521	553	731	50		(1320~2735rpm)24轴; (2736~3660rpm)28轴
YFBCDL-400	705	931	759	-	6-Φ12	520	2*190=380	70	375	582	614	822	60		(1060~2455rpm)28轴; (2456~3515rpm)38轴
YFBCDL-450	792	1038	848	-	6-Φ12	580	2*220=440	70	420	648	680	898	60		(890~1935rpm)28轴; (1936~3370rpm)42轴
YFBCDL-500	878	1139	931	-	6-Φ12	630	2*245=490	70	460	718	750	989	70		(780~1940rpm)38轴; (1941~2950rpm)48轴
YFBCDL-560	967	1251	1022	-	6-Φ14	710	2*275=550	80	505	808	850	1140	90		(770~1635rpm)38轴; (1636~2450rpm)48轴
YFBCDL-630	1080	1405	1144	-	6-Φ14	780	2*310=620	80	560	903	945	1243	90		(675~1565rpm)42轴; (1566~2240rpm)55轴
YFBCDL-710	1222	1584	1294	-	8-Φ14	940	3*250=750	95	635	1012	1054	1360	90		(660~1275rpm)48轴; (1276~1940rpm)60轴
YFBCDL-800	1363	1772	1449	-	8-Φ16	1020	3*270=810	105	705	1148	1202	1536	110		(565~1160rpm)48轴; (1161~1850rpm)75轴
YFBCDL-900	1541	1993	1625	-	8-Φ16	1120	3*300=900	110	795	1282	1336	1724	110		(480~1005rpm)60轴; (1006~1585rpm)75轴
YFBCDL-1000	1723	2222	1819	-	8-Φ18	1250	3*330=990	130	885	1426	1486	1917	110		(430~775rpm)60轴; (776~1050rpm)75轴; (1051~1320rpm)80轴
YFBCDL-1120	1941	2495	2044	-	8-Φ18	1400	3*380=1140	130	995	1591	1651	2176	140		(405~730rpm)75轴; (731~1180rpm)90轴
YFBCDL-1250	2189	2794	2296	-	10-Φ18	1600	4*335=1340	130	1115	1766	1826	2360	140		(380~650rpm)75轴; (651~990rpm)90轴
YFBCDL-1400	2426	3120	2564	-	10-Φ18	1800	4*375=1500	150	1235	1970	2040	2642	170		(360~545rpm)80轴; (546~880rpm)90轴

L180°/R180°Dimension table

Unit: mm

model	NO.
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Outline and Installation Dimensions of YFBCDL-280~1400 (A18)



L0°/R0°Dimension table

Unit: mm

model \ NO.	A	B	B1	C	D	E	H	J	K	L	Q
YFBCDL-280	880	605	204	225	63	850	375	451	610	50	(1910~3575rpm)19轴;(3576~4930rpm)24轴
YFBCDL-315	1034	677	224	249	63	1000	420	497	657	50	(1545~3040rpm)24轴;(3041~4700rpm)28轴
YFBCDL-355	1088	747	245	273	63	1050	460	553	731	50	(1320~2735rpm)24轴;(2736~3660rpm)28轴
YFBCDL-400	1239	832	267	299	63	1200	510	614	822	60	(1060~2455rpm)28轴;(2456~3515rpm)38轴
YFBCDL-450	1291	927	292	331	63	1250	565	680	898	60	(890~1935rpm)28轴;(1936~3370rpm)42轴
YFBCDL-500	1450	1016	314	365	63	1400	615	750	989	70	(780~1940rpm)38轴;(1941~2950rpm)48轴
YFBCDL-560	1345	1116	344	400	80	1300	675	850	1140	90	(770~1635rpm)38轴;(1636~2450rpm)48轴
YFBCDL-630	1610	1259	390	450	80	1550	765	945	1243	90	(675~1565rpm)42轴;(1566~2240rpm)55轴
YFBCDL-710	1730	1423	434	500	80	1700	865	1054	1360	90	(660~1275rpm)48轴;(1276~1940rpm)60轴
YFBCDL-800	2060	1583	478	570	100	2000	960	1202	1536	110	(565~1160rpm)48轴;(1161~1850rpm)75轴
YFBCDL-900	2170	1790	542	630	100	2100	1085	1336	1724	110	(480~1005rpm)60轴;(1006~1585rpm)75轴
YFBCDL-1000	2435	2110	590	710	120	2350	1200	1486	1917	110	(430~775rpm)60轴;(776~1050rpm)75轴;(1051~1320rpm)80轴
YFBCDL-1120	2600	2345	662	800	120	2500	1345	1651	2176	140	(405~730rpm)75轴;(731~1180rpm)90轴
YFBCDL-1250	2800	2501	725	900	120	2700	1495	1826	2360	140	(380~650rpm)75轴;(651~990rpm)90轴
YFBCDL-1400	3135	2780	807	1020	140	2950	1665	2040	2642	170	(360~545rpm)80轴;(546~880rpm)90轴

L45°/R45°Dimension table

Unit: mm

model \ NO.	A	B	B1	C	D	E	H	I	J	K	L	Q
YFBCDL-280	1065	524	353	-	63	850	315	419	451	610	50	(1910~3575rpm)19轴;(3576~4930rpm)24轴
YFBCDL-315	1242	583	388	-	63	1000	350	465	497	657	50	(1545~3040rpm)24轴;(3041~4700rpm)28轴
YFBCDL-355	1316	650	431	-	63	1050	390	521	553	731	50	(1320~2735rpm)24轴;(2736~3660rpm)28轴
YFBCDL-400	1496	727	475	-	63	1200	435	582	614	822	60	(1060~2455rpm)28轴;(2456~3515rpm)38轴
YFBCDL-450	1548	813	526	-	63	1250	485	648	680	898	60	(890~1935rpm)28轴;(1936~3370rpm)42轴
YFBCDL-500	1734	898	581	-	63	1400	535	718	750	989	70	(780~1940rpm)38轴;(1941~2950rpm)48轴
YFBCDL-560	1661	989	639	-	80	1300	590	808	850	1140	90	(770~1635rpm)38轴;(1636~2450rpm)48轴
YFBCDL-630	1961	1103	708	-	80	1550	655	903	945	1243	90	(675~1565rpm)42轴;(1566~2240rpm)55轴
YFBCDL-710	2179	1245	789	-	80	1700	740	1012	1054	1360	90	(660~1275rpm)48轴;(1276~1940rpm)60轴
YFBCDL-800	2552	1384	883	-	100	2000	820	1148	1202	1536	110	(565~1160rpm)48轴;(1161~1850rpm)75轴
YFBCDL-900	2713	1564	987	-	100	2100	925	1282	1336	1724	110	(480~1005rpm)60轴;(1006~1585rpm)75轴
YFBCDL-1000	3052	1865	1096	-	120	2350	1025	1426	1486	1917	110	(430~775rpm)60轴;(776~1050rpm)75轴;(1051~1320rpm)80轴
YFBCDL-1120	3290	2075	1240	-	120	2500	1155	1591	1651	2176	140	(405~730rpm)75轴;(731~1180rpm)90轴
YFBCDL-1250	3599	2213	1387	-	120	2700	1295	1766	1826	2360	140	(380~650rpm)75轴;(651~990rpm)90轴
YFBCDL-1400	4000	2447	1545	-	140	2950	1430	1970	2040	2642	170	(360~545rpm)80轴;(546~880rpm)90轴

L90°/R90°Dimension table

Unit: mm

model \ NO.	A	B	B1	C	D	E	H	J	K	L	Q
YFBCDL-280	1009	520	171	225	63	850	295	451	610	50	(1910~3575rpm)19轴;(3576~4930rpm)24轴
YFBCDL-315	1182	574	196	249	63	1000	325	497	657	50	(1545~3040rpm)24轴;(3041~4700rpm)28轴
YFBCDL-355	1251	638	215	273	63	1050	365	553	731	50	(1320~2735rpm)24轴;(2736~3660rpm)28轴
YFBCDL-400	1427	704	243	299	63	1200	405	614	822	60	(1060~2455rpm)28轴;(2456~3515rpm)38轴
YFBCDL-450	1472	781	273	331	63	1250	450	680	898	60	(890~1935rpm)28轴;(1936~3370rpm)42轴
YFBCDL-500	1650	865	301	363	63	1400	500	750	989	70	(780~1940rpm)38轴;(1941~2950rpm)48轴
YFBCDL-560	1570	950	331	400	80	1300	550	850	1140	90	(770~1635rpm)38轴;(1636~2450rpm)48轴
YFBCDL-630	1865	1060	375	450	80	1550	610	945	1243	90	(675~1565rpm)42轴;(1566~2240rpm)55轴
YFBCDL-710	2071	1185	431	500	80	1700	685	1054	1360	90	(660~1275rpm)48轴;(1276~1940rpm)60轴
YFBCDL-800	2423	1335	482	570	100	2000	765	1202	1536	110	(565~1160rpm)48轴;(1161~1850rpm)75轴
YFBCDL-900	2578	1490	543	630	100	2100	860	1336	1724	110	(480~1005rpm)60轴;(1006~1585rpm)75轴
YFBCDL-1000	2895	1725	610	710	120	2350	955	1486	1917	110	(430~775rpm)60轴;(776~1050rpm)75轴;(1051~1320rpm)80轴
YFBCDL-1120	3111	1875	683	800	120	2500	1075	1651	2176	140	(405~730rpm)75轴;(731~1180rpm)90轴
YFBCDL-1250	3394	2105	770	900	120	2700	1205	1826	2360	140	(380~650rpm)75轴;(651~990rpm)90轴
YFBCDL-1400	3760	2355	859	1016	140	2950	1335	2040	2642	170	(360~545rpm)80轴;(546~880rpm)90轴

L135°/R135°Dimension table

Unit: mm

model \ NO.	A	B	B1	C	D	E	H	I	J	K	L	Q
YFBCDL-280	864	685	555	-	63	850	275	419	451	610	50	(1910~3575rpm)19轴;(3576~4930rpm)24轴
YFBCDL-315	1018	762	620	-	63	1000	305	465	497	657	50	(1545~3040rpm)24轴;(3041~4700rpm)28轴
YFBCDL-355	1075	836	681	-	63	1050	335	521	553	731	50	(1320~2735rpm)24轴;(2736~3660rpm)28轴
YFBCDL-400	1232	931	759	-	63	1200	375	582	614	822	60	(1060~2455rpm)28轴;(2456~3515rpm)38轴
YFBCDL-450	1258	1038	848	-	63	1250	420	648	680	898	60	(890~1935rpm)28轴;(1936~3370rpm)42轴
YFBCDL-500	1418	1139	931	-	63	1400	460	718	750	989	70	(780~1940rpm)38轴;(1941~2950rpm)48轴
YFBCDL-560	1314	1251	1022	-	80	1300	505	808	850	1140	90	(770~1635rpm)38轴;(1636~2450rpm)48轴
YFBCDL-630	1568	1405	1144	-	80	1550	560	903	945	1243	90	(675~1565rpm)42轴;(1566~2240rpm)55轴
YFBCDL-710	1735	1584	1294	-	80	1700	635	1012	1054	1360	90	(660~1275rpm)48轴;(1276~1940rpm)60轴
YFBCDL-800	2049	1772	1449	-	100	2000	705	1148	1202	1536	110	(565~1160rpm)48轴;(1161~1850rpm)75轴
YFBCDL-900	2154	1993	1625	-	100	2100	795	1282	1336	1724	110	(480~1005rpm)60轴;(1006~1585rpm)75轴
YFBCDL-1000	2435	2222	1819	-	120	2350	885	1426	1486	1917	110	(430~775rpm)60轴;(776~1050rpm)75轴;(1051~1320rpm)80轴
YFBCDL-1120	2600	2495	2044	-	120	2500	995	1591	1651	2176	140	(405~730rpm)75轴;(731~1180rpm)90轴
YFBCDL-1250	2838	2794	2296	-	120	2700	1115	1766	1826	2360	140	(380~650rpm)75轴;(651~990rpm)90轴
YFBCDL-1400	3132	3120	2564	-	140	2950	1235	1970	2040	2642	170	(360~545rpm)80轴;(546~880rpm)90轴

L180°/R180°Dimension table

Unit: mm

model \ NO.	A	B	B1	C	D	E	H	I	J	K	L	Q
YFBCDL-280	880	604	421	225	63	850	250	419	451	610	50	(1910~3575rpm)19轴;(3576~4930rpm)24轴
YFBCDL-315	1034	677	476	249	63	1000	280	465	497	657	50	(1545~3040rpm)24轴;(3041~4700rpm)28轴
YFBCDL-355	1088	746	525	271	63	1050	310	521	553	731	50	(1320~2735rpm)24轴;(2736~3660rpm)28轴
YFBCDL-400	1239	832	588	299	63	1200	345	582	614	822	60	(1060~2455rpm)28轴;(2456~3515rpm)38轴
YFBCDL-450	1261	927	658	331	63	1250	385	648	680	898	60	(890~1935rpm)28轴;(1936~3370rpm)42轴
YFBCDL-500	1420	1020	726	365	63	1400	425	718	750	989	70	(780~1940rpm)38轴;(1941~2950rpm)48轴
YFBCDL-560	1315	1120	796	400	80	1300	465	808	850	1140	90	(770~1635rpm)38轴;(1636~2450rpm)48轴
YFBCDL-630	1570	1260	890	450	80	1550	515	903	945	1243	90	(675~1565rpm)42轴;(1566~2240rpm)55轴
YFBCDL-710	1730	1421	1011	500	80	1700	580	1012	1054	1360	90	(660~1275rpm)48轴;(1276~1940rpm)60轴
YFBCDL-800	2055	1583	1127	570	100	2000	645	1148	1202	1536	110	(565~1160rpm)48轴;(1161~1850rpm)75轴
YFBCDL-900	2145	1788	1268	630	100	2100	725	1282	1336	1724	110	(480~1005rpm)60轴;(1006~1585rpm)75轴
YFBCDL-1000	2425	1995	1425	710	120	2350	815	1426	1486	1917	110	(430~775rpm)60轴;(776~1050rpm)75轴;(1051~1320rpm)80轴
YFBCDL-1120	2590	2231	1593	800	120	2500	910	1591	1651	2176	140	(405~730rpm)75轴;(731~1180rpm)90轴
YFBCDL-1250	2820	2504	1800	900	120	2700	1030	1766	1826	2360	140	(380~650rpm)75轴;(651~990rpm)90轴
YFBCDL-1400	3135	2780	1994	1020	140	2950	1135	1970	2040	2642	170	(360~545rpm)80轴;(546~880rpm)90轴

Fan approx. weight

Fan approx. weight (kg)

Model \ Drive arr.	A6	A18
YFBCDL-280	55	83
YFBCDL-315	62	101
YFBCDL-355	75	117
YFBCDL-400	106	149
YFBCDL-450	136	183
YFBCDL-500	157	213
YFBCDL-560	190	247
YFBCDL-630	267	341
YFBCDL-710	342	420
YFBCDL-800	473	558
YFBCDL-900	610	737
YFBCDL-1000	765	913
YFBCDL-1120	1200	1384
YFBCDL-1250	1381	1617
YFBCDL-1400	1899	2153

Notes: Motor weight is not included in the table.

Motor approx. weight

Motor approx. weight (kg)

Power(kW) \ Poles	2P	4P	6P	8P
0.25	14.5	14	14.5	17
0.37	15	14.5	16	24
0.55	15.5	15	17	28
0.75	15	16	22	30
1.1	16	21	24	32
1.5	21	23	32	40
2.2	24	33	41	64
3	33	35	63	78
4	41	41	72	105
5.5	63	65	81	115
7.5	70	76	118	145
11	110	118	145	160
15	120	132	178	228
18.5	135	164	200	242
22	165	182	228	265
30	218	245	265	368
37	230	258	370	470
45	280	290	490	538
55	365	388	540	900
75	495	510	900	1000
90	565	606	980	1055
110	890	910	1045	1118
132	980	1000	1100	2000
160	1055	1055	1550	2150
200	1110	1178	1600	2250
250	1900	1700	1700	
315	2300	1900	1900	

Notes: Due to different weights of motors of different brands, motor weights in the table are only for reference.

Standard Accessories

- Half-closed belt cover

Guarantee the personnel security and make sure that the belt can operate normally.
- Access door

Check the rotation of the wheel, and clear attachments on the wheel to ensure the dynamic balance of the wheel.
- Shear-proof spring absorber

Down-load fan dynamic load to prevent fan from moving horizontally and make sure that the fan operate smoothly and decrease the fan running noise.
- Absorber pedestal

Even distribution of fan weight, avoid local stress concentration and ensure fan smooth running.

Optional Accessories

- Outlet flexible duct connector

Flexible device connecting fan and duct for avoiding fan vibration from transferring to the whole system, also used for the connection of fan with ducts of different diameters and different centre heights.
- Second-floor absorber pedestal

On base of the floor pedestal, it can decompose the local stress of the cement pedestal and remedy the problem caused by the surface unevenness.
- Housing drain

Located on the bottom of scroll to discharge contaminated substance such as condensed water etc.
- Epoxy motor weather hood

Protect motor from rain or snow assault and extend the motor life.
- Stainless wheel

Stainless steel material with high capability of corrosion resistance and good mechanical performance, the temperature can be up to 400°C. Thus it's suitable for cases of corrosion resistance and high temperature.

- Outlet/inlet safety protective screening
 - Protect fan and prevent accidental personal injure while wheel is operating.
- Anti-explosion copper loop
 - Be placed at the fan inlet, and applied together with anti-explosion motor to achieve AMCA standard Spark C Anti-explosion grade.
- Outlet companion flange
 - A necessary component for fan and duct connection and it is easy for duct installation and removal.
- Outlet adjusting damper
 - Be installed at the fan inlet to ensure that the fan can start up securely and regulate the necessary air volume freely.
- Totally closed belt protective cover
 - When fan is arranged outdoor, prevent rain and snow from corroding belt and pulley so as to protect the safety of personnel and ensure normal running of belt.

Technical Specifications

- Fan Type
 - The fan shall be double-inlet centrifugal and belt drive (A6/A18), with backward curved centrifugal wheel.
- Quality standards
 - Fan shall be tested in accordance with AMCA Standard 210 and 300 and AMCA Licensed according to AMCA Publication 211 and 311 for air performance, sound and FEG. Each fan shall be affixed with AMCA Certification Seal on air performance, sound and FEG. The manufacturer must own the ISO9001-2008 certification.
- Wheel
 - The wheel shall be steel backward-bladed centrifugal and shall be adopted as the wheel by all-welding. The wheel shall be statically and dynamic-cally balance to level G4.0 in accordance with ISO standard No.1940. When the wheel is operating at the highest allowable speed, the volume shall be stable and the noise shall be low. Wheel features shall be able to avoid performance downgrade resulting from sliding of the working points. Structure of the fan shall allow convenient withdrawal of the wheel for maintenance and cleaning.

- Fan Housing
 - Housing of the fan shall be made of steel. Its thickness and strength shall be able to bear the maximum operation weight of the fan. Housing of the fan shall be made through continuous welding. The upper and lower division structure shall be used for the fan with wheels with diameter of 1,600 to 2,000 mm for convenient transportation and maintenance. The housing of the fan must be equipped with a manhole for removing of foreign matters entering the fan.
- Inlet
 - Fan inlet shall be steel and aerodynamic design round curved section to smoothly transit the air to the wheel cone, it will have well commutate effect to effectively reduce turbulence, improve fan efficiency and reduce noise.
- Surface processing
 - The fan surface shall be first polished to clear protruding foreign matters, welding slag, burrs, sharp edges, iron scraps, oil stain, and then be electrostatic sprayed with epoxy resin in silver gray. The surface after being painted shall have glossiness no less than 70% and shall be free from bump, sag, crack, wrinkled skin or shedding. Under the equipment allowable working conditions, it shall guarantee that the fan not be corroded or rusted in at least ten years.
- Belt drives
 - The fan shaft shall be treated through soaking furnace to the hardness of HB250 to 280. The maximum velocity shall be designed to at least exceed 35% of the maximum fan operation speed. Two bearings shall be used to support the fan shaft. The service life of the bearing shall be more than L10:80000h. At normal temperature, it shall be sealed and lubricated. The pulley shall be constructed of cast-iron, with a dimension selected corresponding to 150% of the driving power. The pulley and belt shall be provided with shield.
- Motor
 - The motor shall be closely matched to the fan load, IP 54, and insulation class F, and the motor bearings shall be ball-bearings and could be lubricated. The motor and the driving mechanism shall be located out of the air flow to avoid accumulation of grease or dust from the air flow.
- Nameplate
 - Permanently fixed aluminum nameplate shall be fixed on fan body clearly display fan mark, product model and serial number. The serial number shall be a unique ID for each fan, so that the customer can use this number to find out the parts used to build this fan.
- Acceptable Manufacturers
 - INFINAIR®** or equivalent. Design based on YFBCDL from **INFINAIR®**.