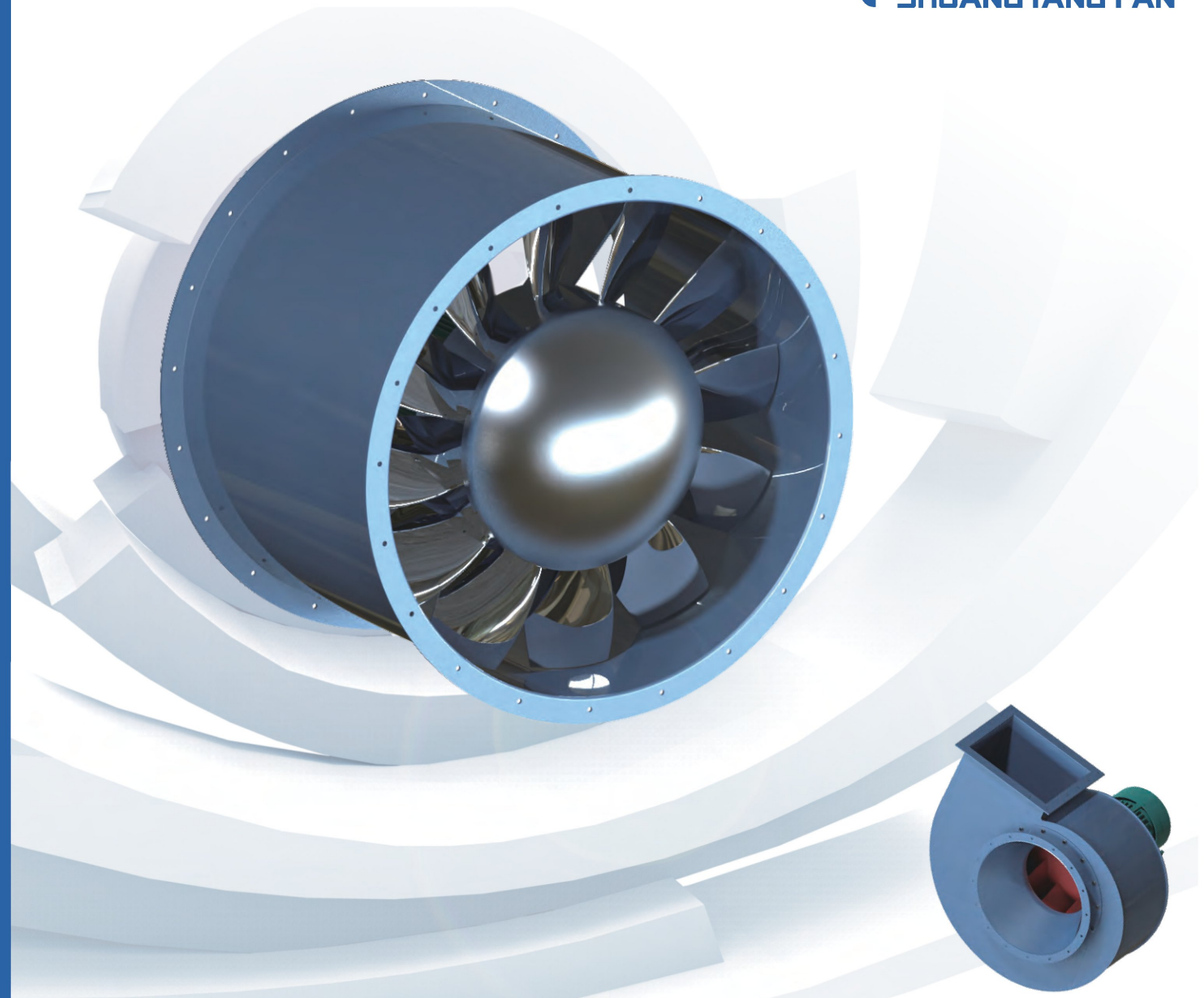
TWOSUN®
SHUANGYANG FAN

浙江双阳风机股份有限公司
ZHEJIANG SHUANGYANG FAN HOLDING CO.,LTD

电话(Tel)：0575-82365388　　邮箱(E-mail)：xs@zj-syfj.com
传真(Fax)：0575-82366700　　官网(Official website)：www.zj-sy.com
地址：浙江省绍兴市上虞区上浦工业区昆仑路16号
Address：No.16,Kunlun Road,Shangpu Industrial Zone,Shangyu District,Shaoxing City,Zhejiang Province,China.

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SHUANGYANG FAN



浙江双阳风机股份有限公司
ZHEJIANG SHUANGYANG FAN HOLDING CO.,LTD

FANS FOR MARINE APPLICATION
舰船用系列风机

SHUANGYANG

COMPANY PROFILE
公司简介





浙江双阳风机股份有限公司是风机、风阀和消声器产品的专业制造企业。公司占地面积10万平方米，建筑面积8.5 万平方米，注册资本30500万元，总资产近7亿元。目前，已形成工业配套、工民建、地铁隧道和核电四大领域应用通风系统装备的设计、制造和销售的完整体系。

公司自成立以来，一直以科技创新为发展方向，长期与国内知名院校、科研单位进行产学研合作，并不断引进、消化和吸收先进技术，公司创新能力持续增强。现有员工500余人，工程技术人员70余人，其中中高级职称40余人。

公司拥有70多项专利，其中发明专利8项，多个产品被国家科技部、发改委列入“国家重点新产品”、“火炬计划”和“十大重点节能工程重大示范项目”，公司还荣获“国家高新技术企业”称号。

公司的历史悠久，资金实力雄厚，质保体系健全，制造设备精良，检验流程完善，设计、制造和服务经验丰富。公司综合实力处于行业领先地位。

欢迎国内外朋友莅临指导！

Zhejiang Shuangyang Fan Co., Ltd. is a professional manufacturer of fans, dampers and silencers. The company covers an area of 100,000 square meters, including construction area of 75,000 square meters, with registered capital of 305 million yuan and total assets of nearly 700 million yuan. At present, it has formed a complete system of design, manufacturing and sales of ventilation equipments in four fields: industrial application, civil construction, metro & tunnel and nuclear power plant.

Since its establishment, the company has been taking scientific and technological innovation as the development direction, long-term cooperation with well-known domestic colleges and research institutions, and continue to introduce, digest and absorb absorb advanced technology, the company's innovation ability continues to be enhanced. There are about 500 employees, more than 70 engineering and technical personnel, including over 30 senior titles.

The company has more than 70 patents, including 8 invention patents, a number of products awarded as the "National Key New Products", "Torch Plan" and "Ten Key Energy-Saving Project Major Demonstration Projects" by the Ministry of Science and Technology, the National Development and Reform Commission. The company also won the "National High-Tech Enterprise" title.

The company has a long history, strong financial strength, sound quality assurance system, good manufacturing equipments, perfect inspection process, and full of design, manufacturing and service experiences. The company's comprehensive strength is in the leading position in the industry. Both domestic and abroad customers are welcome to visit the company.

创行业领先科技 铸双阳风机精品

CREATING LEADING TECHNOLOGY

CASTING SHUANGYANG FAN BOUTIQUE

资质荣誉
QUALIFICATION HONOR

体系认证
Management System Certificates



核级许可证
Licenses For Civil Nuclear Safety Equipments





防爆3C认证
Explosion Proof 3C Certification



名牌产品
Famous Brand



专利
Letters Patent



AMCA认证
AMCA Certification



CNAS认证
CNAS Certification



UL认证
UL Certification



消防3C认证
Fire 3C Certification



高新技术企业
High And New Tech Enterprises



研发中心
R&D Center



标化先进单位
Exemplary Organization



信用AAA
AAA Credit Certificate



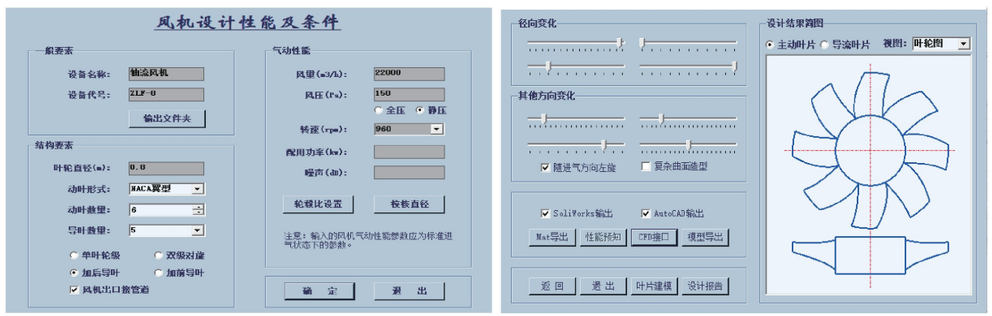
信用等级
Credit Rating



专精特新
SRDI



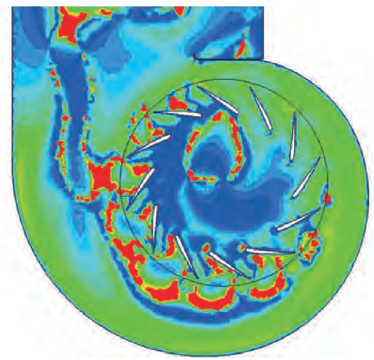
风机气动设计
AERODYNAMIC DESIGN OF FAN

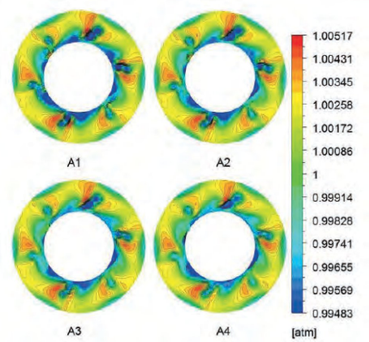


风机CAD设计
FAN CAD DESIGN

采用SY-VI风机设计专用软件设计，设计结果可以SolidWorks或AutoCAD格式自动输出叶片模型，并可导出CFD模型接口文件，便于CFD方案验证和实物加工，大幅度提高产品开发效率。叶片设计报告可Word格式输出。

With SY-VI software for fan design, the blade model can be Solidworks or Auto CAD format, and the CFD model interface files can be obtained for CFD method check and physical processing.The blade design report can be Word format.





风机CAM制造
FAN MANUFACTURED WITH CAM

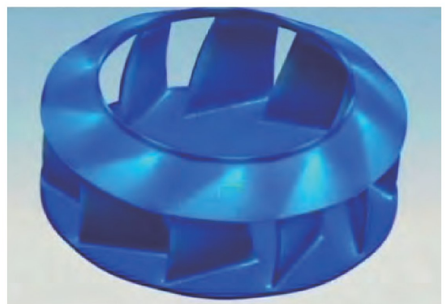
样机开发时，叶片在加工中心自动成型，可以在短时间内将设计方案转化为实物样机。

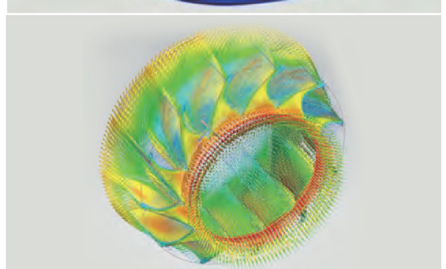
During model development, the blades are automatically moulded, and the design plan can be transfered to physical model within a short time.

风机有限元分析
FAN FEA ANALYSIS

风机结构运用ANSYS有限元分析软件进行强度、刚度验证，运用CFX流场仿真，能够保证风机安全可靠，高效低噪。

The strength and stiffness of the fan assembly is verified with ANSYS, and flow field is simulated with CFX, which can ensure the safety, reliability, high efficiency and low noise of the fan.

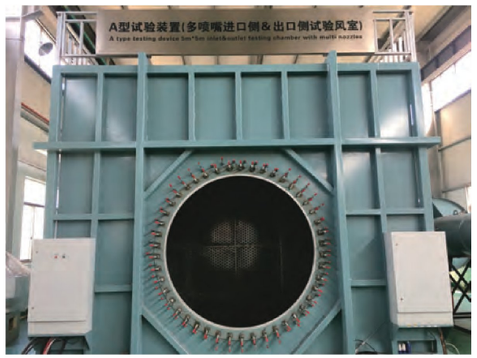




风机性能检验
FAN PERFORMANCE INSPECTION

风机检测中心拥有风管、风室等装置，能够进行装置类型A、B、C、D的性能试验，符合国家标准GB/T 1236和国际标准ISO5801、AMCA 210，已获得CNAS认证，正在进行AMCA评定。

With set-ups of test ducts and test chamber, the fan test center is capable of conducting performance tests for installation category of type A, B, C and D, in accordance with GB/T 1236 and ISO5801 and AMCA 210. It has accredited by CNAS and is undergoing AMCA accreditation program.





生产制造
MANUFACTURING

激光切割下料机
Laser cutting machine





CNC加工中心
Cnc machining center



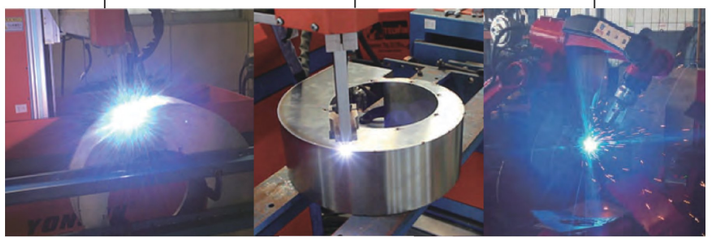
数控机床
Digital Machine



机壳生产流水线
Chassis production line



焊接机器人
Welding robot



抛丸喷砂
Shot/Sand Blasting



装配车间
Assembling workshop



产品设计
PRODUCT DESIGN

舰船用轴流风机
Marine Axial Flow Fans



舰船用防爆轴流通风机
Marine Explosion-Proof Axial Flow Fans



舰船用开启式轴流风机
Open type axial flow fan for ships



防爆离心风机
Explosion-proof centrifugal fan



不锈钢多翼离心风机
Galvanized multi-wing centrifugal fan



镀锌多翼离心风机
Galvanized multi-wing centrifugal fan



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CLHB Marine Explosion-Proof (Spark Free) Centrifugal Fans

舰船用通风机基本技术条件
Overview of Basic Technical Conditions for marine Fans

01 舰船用通风机的设计与制造符合以下船级社船舶规范
The design and manufacture of marine fans are in accordance with the following classification society ship codes

- 1.CCS中国船级社 2.DNV-GL集团 3.LR英国劳氏船级社 4.ABS美国船级社 5.NK日本海事协会 6.BV法国船级社 7.RINA意大利船级社 8.KR韩国船级社

1.CCS 2. DNV-GL 3. LR 4. ABS 5. NK 6. BV 7. RINA 8. KR

02 基本技术条件 General specification

- 通风机性能选用基本工况及适用条件
  The reference condition in fan selection
- 本样本所列参数是指在标准大气状况（大气压力=101325 Pa，介质温度=20 ℃，相对湿度=50 %，气体密度=1.2 kg/m3）下的气动性能。实际状态和转速与参数表中所列不同时，通风机性能可按以下各式换算。

  The data listed in this catalog refer to the aerodynamic performance under standard condition (barometric pressure=101325 Pa, air temperature=20 °C, relative humidity=50%, air density=1.2 kg/m3). When the actual condition and speed are different from those listed in the performance sheet, the fan performance can be converted according to the following equations.

  $Q=Q_0\,(n/n_0)(m^3/h)$ $P=P_0\,(n/n_0)^2\,(r/r_0)(Pa)$ $N=N_0\,(n/n_0)^3\,(r/r_0)(kW)$

通风机使用条件 The application of fans

- 通风机可输送空气；含有盐雾的海洋空气和含有油雾等的腐蚀性空气。通风机满足有关的舰船标准和规范要求。通风机可以在以下条件长期正常地工作:

  The fans are suitable conveying air, marine air containing salt spray, corrosive air containing oil spary. The fans are in accordance with the relevant marine standards and specifications. The fans can operate normally for a long time under the following condition:

环境温度 Ambient temperature	-25°C～+50°C	最大相对湿度 Maximum relative humidity	95%
横　摇 Roll	±45°（周期period8～12s）	纵　摇 Pitch	±15°（周期Period5～7s）
横　倾 Heel	±15°	纵　倾 Trim	±10°
振　动 Vibration	有 Yes	冲　击 Shock	有 Yes

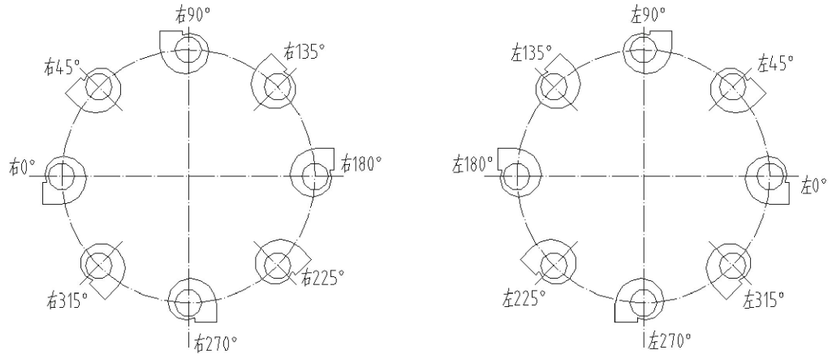
防爆通风机 Explosion-Proof Fans

- 防爆通风机的防爆标志 Exd II BT4，Exd II CT4
  Ex-mark of explosion-proof fan: Exd II BT4, Exd II CT4
- 爆炸危险性混合物的级别按其防爆能力划分；组别系按其引燃温度划分。
  Explosive mixtures are classified according to the explosion-proof capacity, and the group is divided according to the ignition temperature.
- 防爆通风机爆炸性混合物的分级、组别实例：
  The example of classification and group of explosive mixtures of explosion-proof fan as below:

级别/组别 Classification/Group	T1≤450 ℃	T2≤300 ℃	T3≤200 ℃	T4≤135 ℃
IIA	甲烷、乙烷、丙烷、甲苯、醋酸、丙酮、一氧化碳、苯 Methane, ethane, propane, methylbenzene, acetic acid, acetone, carbon monoxide, benzene	醋酸乙酯、甲醇、乙醇、乙苯、二氯乙烷 Acetidin, methyl alcohol, ethyl alcohol, Ethylbenzene dichloroethane	石油、车用汽油、燃料油、煤油、柴油、松节油 Petroleum, motor gasoline, fuel oil, kerosene, diesel oil, turpentine	乙醛、三甲胺 Acetaldehyde, trimethylamine
IIB	焦炉煤气、氯化氢、环丙烷、丙炔 Coke oven gas, hydrogen chloride, cyclopropane, allylene	环氧乙烷、乙烯、丙烯酸甲酯、乙炔 Ethylene oxide, ethylene, methyl acrylate, acetylene	硫化氢、四氢呋喃、二甲苯 Sulfuretted hydrogen, tetrahydrofuran, xylen	四氯乙烯、二乙醚、乙基甲基醚 Tetrachloroethylene, diethyl ether, ethyl methyl ethe
IIC	氢水煤气 Hydrogen water gas	乙炔 acetyl		

通风机安装型式 Fan installation type

- 离心通风机安装型式 Centrifugal installation type
- 通风机为卧式，电动机直联结构，需要时也可以制成立式结构
  The fan is horizontal mounting, direct motor driven, and could be vertical type as per request.
- 通风机可制成顺时针转（右转）或逆时针转（左转）。右转-从电动机端正视，叶轮按顺时针方向旋转，以“R”表示。左转-从电动机端正视，叶轮按逆时针方向旋转，以“L”表示。
  The rotating direction of fan can be clockwise (right rotating) or counter clockwise (left rotating). Clockwise (Right rotating): viewing from motor side, the impeller rotating direction is clockwise, represented by “R”. Counter clockwise (left rotating): viewing from motor side, the impeller rotating direction is counter clockwise, represented by “L”.
- 通风机出风口位置按叶轮旋向制成如下图所示的几种基本形式。
  The fan outlet position can be the following basic arrangements according to impeller rotating direction.



从电动机端正视

防爆离心通风机 Fan installation type

- 防爆离心通风机可制成I型卧式、II型隔舱式两种结构
  There will be 2 types for explosion-proof centrifugal fan: type I, horizontal; type II, bulkhead:
- I 型为卧式，电动机直联结构，需要时也可以制成立式结构。
  Type I, horizontal, direct motor driven, vertical is available as per request.
- II型为隔舱式结构，由通风机、传动组、联轴器和电动机组成。
  Type II, bulkhead, composed of fan body, transmission, coupling and motor.

轴流通风机安装型式 Fan installation type

- 通风机制成从电动机端正视，叶轮按顺时针方向旋转。
  Viewing from motor side, the rotating direction of impeller is clockwise.
- 通风机一般情况下为立式结构，根据需要也可以制成卧式带机架结构。
  The general structure of fan is vertical, and horizontal structure with mounting frame is available as per request.

防爆轴流通风机 Explosion-proof axial flow fan

- 防爆轴流通风机可制成I型甲板式、II型管道式、IV型橄榄式、V型上出风等结构：
  There are different types for explosion-proof axial flow fan: type I, decked; type II, ducted; type IV, olive-shape; type V, up-blasting.
- I型甲板式防爆电动机装在机架上部，整机立式安装在甲板上。
  The explosion-proof motor for type I is mounted on the top of the frame, and the assembly vertically mounted on deck.
- II型管道式不带风帽，可立式或卧式安装在管道内，也可以安装在甲板上。
  Type II ducted fan without bowl, can be verticallly or horizontally connected with duct system, and be mounted on deck as well.
- IV型橄榄型、V型上出风与I型甲板式结构近似，但气流不经过电动机。
  The structure of type IV, olive-shape, and type V, up-blasting is similar to type I, but motor is not immsersed in airstream.

通风机防护等级 The protection degrees of fan

- 外壳防护主要是防人体触电或接近壳内带电部分或转动部件，防固体异物进入和防止由于进水、油等而引起有害影响，符合GB 4942及IEC 34-5的规定。
  In accordance with GB 4942 and IEC 34-5, the protection provided by enclosures is to protect persons against contacts with or approach to live parts and against contact with moving parts inside the enclosure and protect the machine, against ingress of solid foreign objects, to protect machines against the harmful effects due to ingress of water, dust and oil.
- 防护形式的代号及含义如下表：
  The protection designation and description as shown in the table below:

表征字母 Characteristic letters	含义 Description	第一位数字 First characteristic numeral	含义 Description	第二位数字 Second characteristic numeral	含义 Description
IP	国际防护形式 The standard protection code	4	防大于1mm固体 Protection against solid objects greater than 1 mm	4	防溅水 Protection against splashing water
				5	防喷水 Protection against water jet
		5	防尘 Dust-protected 1 mm	6	防海浪 Protection against heavy seas

绝缘等级及温升极限 Insulation grades and temperature rise limits

- 通风机电机为了可靠运行，在带电部件及壳体之间或带电部件之间需要用绝缘材料加以隔离，而绝缘材料的使用寿命与其材料本身的绝缘等级及使用温度有很大的关系。电机作为一个能量转换或信号转换元件，在运转过程中本身存在着能量损耗，有部分能量损耗造成自身温度升高，在一般状态下，绝缘材料等级、承受最高使用极限温度、用电阻法测量电机的温升限值之间符合下表的规定，在此温升限值内电机应能正常工作。符合GB755和IEC34-1规定。

  In order to operate reliably, the fan motor needs to be isolated with insulating materials between the live parts and the housing or between the live parts, and the service life of the insulating materials has a great relationship with the insulation grade and the use temperature of the material itself. As an energy conversion or signal conversion component, the motor itself has energy loss during operation, and some energy loss causes its own temperature to rise. In the general state, the insulation material grade, the maximum operation temperature limit, and the temperature rise limit of the motor measured by resistance method meet the provisions of the following table, and the motor should be able to work normally within this temperature rise limit. Comply with GB755 and IEC34-1 regulations.

绝缘等级 Insulation grade	使用极限温度 Operation temperature limit	温升限值 Temperature rise limit
E	120 °C	75 K
B	130 °C	80 K
F	155 °C	105 K
H	180 °C	125 K

03 常用计算单位 Common unit in application

风量 Air flow rate	压力 Pressure	功率 Power	备注 Note
m^3/h、m^3/min、m^3/s	Pa、mmH_2O、mmAq	KW、W	1m mH_2O=9.807Pa

04 性能容差范围 Performance tolerance

- 通风机标准流量下的全压值，允许偏差为-5%~+15%
  The tolerance of fan pressure is -5%~+15% against specified air flow rate.

05 订货需知 Ordering

- 订货时请详细说明通风机的型号、流量、压力、转速和结构形式等。
  When ordering, please specify the model, air flow rate, pressure, speed and structure of the fan.
- 请说明船用或舰用（船用型配用Y-H型船用电机，舰用型配用JY-H型舰用电机），380V、415V、50Hz或440V、460V、480V、60Hz。
  Please specify the application of the ship (civil ship type with Y-H Marine motor, military ship type with JY-H naval Marine motor), 380V, 415V, 50Hz or 440V, 460V, 480V, 60Hz.
- 通风机若用于舰、船甲板上，请按有关规定提出机壳的壁厚。
  If the fan is used on the deck, please propose the thickness of the fan casing according to the relevant regulations.
- 订货时说明通风机电机的绝缘等级和防护等级（未写明的为B级绝缘，IP44防护等级），防爆通风机说明通风机的隔爆等级（未写明的为ExdIIBT4）。
  When ordering, please specify the insulation grade and protection degree of the fan motor (Class B, IP44as default), explosion-proof classification for the explosion-proof fan (ExdIIBT4 as default).
- 本公司可按用户需要提供特殊规格和用途的通风机。
  We are able to provide fans with special specifications and applications according to the request of users.

CZI系列舰船用轴流通风机
CZI series marine axial flow fan

01 舰船用通风机的设计制造符合以下船级社船舶规范
The design and manufacture of the marine fans comply with the following specifications of classification society

- CZI系列舰船用轴流通风机（以下简称“通风机”）可输送空气，含有盐雾的海洋空气和含 有油雾、蓄电池自然蒸发形成的少量酸蒸汽等腐蚀性空气。通风机适用于船舶上各种舱室的通风换气、锅炉通风，也可适用于其他适当的场合。

  CZI series marine axial flow fan (hereinafter referred to as "fan") can deliver air, marine air with salt spray, as well as corrosive air such as oil mist and a small amount of acid steam formed by natural evaporation of the battery. The fan is suitable for ventilation of various cabins on the ship, boiler ventilation, and the other appropriate applications.

- 通风机是按照国际GB/T11864《舰船用轴流通风机》和现行的《船舶建造规范》设计制造的。

  The fans are designed and manufactured in accordance with GB/T11864 "Marine Axial Flow Fans" and the "Code for Ship Construction".

02 特点 Features

- 机壳可制成开启式，风机可逆转，防腐性能好，抗摇摆、振动和冲击性能强。

  The fan casing can be made of open type. The fan can be reversible running, good performance of corrosion-proof, anti-swing, vibration and shock.

03 结构型式 Structure

- 通风机制成电动机置于机壳内的结构，叶轮直接安装在电动机轴上。

  The motor will be mounted inside fan casing, and impeller on the motor shaft.

- 叶轮由防腐铝合金浇铸制成，机壳采用优质钢板焊接而成。

  The impeller is made of corrosion-proof aluminum alloy casting, and the casing is welded with quality steel sheet.

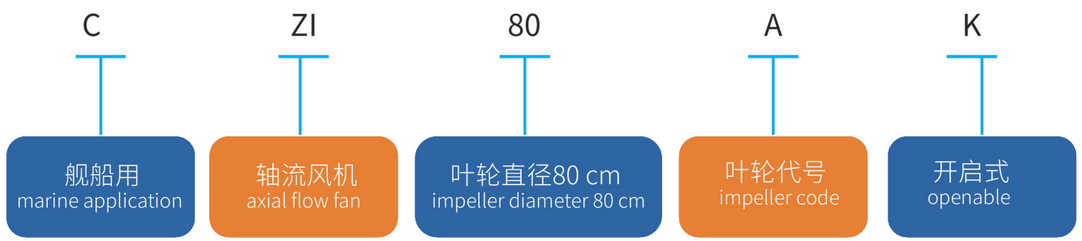
- 机壳可根据需要制成整体式或沿轴向开启式，开启式机壳是将叶轮和电动机装在可开启的半机壳上，故便于现场检修和更换零部件。

  The fan casing can be made into an integral type or axially open type as per request. The open type casing is equipped with the impeller and the motor in an openable half casing for easy maintenance on site.

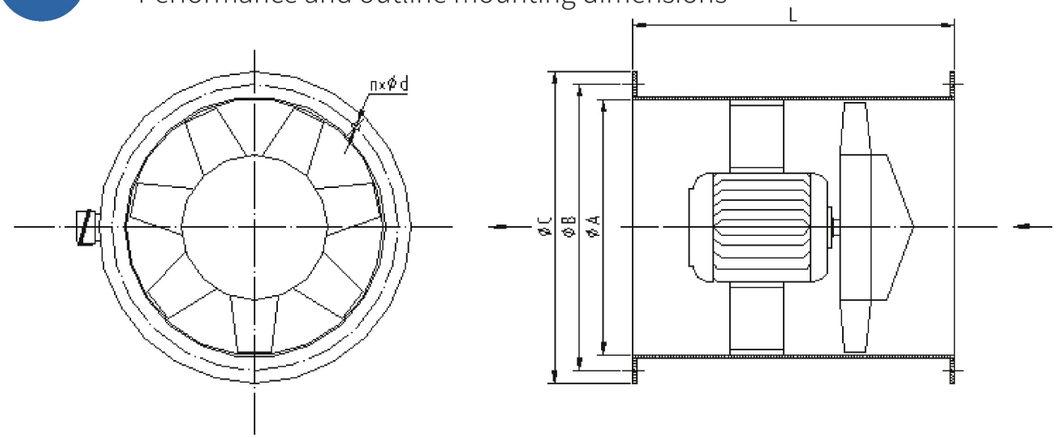
- 通风机可配用380V，415V,50Hz或440V,460V,60Hz舰船用交流电动机。

  The fan can be equipped with 380V, 415V,50Hz or 440V,460V,60Hz AC marine motor.

04 型号说明 Model description



05 主要性能及外形安装尺寸
Performance and outline mounting dimensions



型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZI-30A	1000	220	220	2900	50	0.75	Y801-2-H	300	345	375	400	8	12	45
	1500	220	195											
	2000	210	190											
	1200	300	280	3500	60									
	1800	290	275											
	2300	300	280											
CZI-30B	1100	195	185	2900	50									
	1600	220	195											
	2100	220	185											
	1300	290	280	3500	60									
	1800	300	275											
	2300	330	285											
CZI-35A	1850	335	320	2900	50	1.1	Y802-2-H	350	395	425	450	8	12	56
	2300	310	285											
	3000	270	215											
	2400	520	490	3500	60	1.5	Y90S-2-H							61
	3100	410	355											
	3750	410	345											
CZI-35B	1650	270	255	2900	50	0.75	Y801-2-H							55
	2050	255	230											
	2500	235	205											
	2000	370	350	3500	60	1.1	Y802-2-H							56
	2550	335	300											
	3100	330	280											

CZI系列舰船用轴流通风机
CZI series marine axial flow fan

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZI-40A	3900	370	320	2900	50	1.5	Y90S-2-H	400	445	475	500	10	12	70
	4400	350	285											
	5050	345	275											
	2350	715	710	3500	60	2.2	Y90L-2-H							73
	3800	490	450											
	5000	470	400											
CZI-40B	3000	315	290	2900	50	1.1	Y802-2-H							65
	4000	290	245											
	4500	280	230											
	3400	620	520	3500	60	2.2	Y90L-2-H							75
	4400	490	435											
	5100	470	405											
CZI-45A	2700	170	160	1450	50	1.1	Y90S-4-H	450	510	545	500	12	15	80
	4050	150	125											
	3450	240	230	1750	60									
	4000	230	205											
	4900	225	180											
CZI-45B	3850	430	400	2900	50	2.2	Y90L-2-H							80
	5000	390	350											
	5900	370	315											
	5100	660	600	3500	60	3	Y100L-2-H							85
	7500	650	550											
	8600	590	450											
CZI-45C	5500	460	415	2900	50	3	Y100L-2-H							85
	6900	470	390											
	8100	460	345											
	6500	720	650	3500	60	4	Y112M-2-H							90
	8700	640	500											
	9000	600	460											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZI-50A	4300	175	160	1450	50	1.1	Y90S-4-H	500	560	595	550	12	15	85
	4900	170	155											
	5500	180	150											
	5100	230	185	1750	60	1.5	Y90L-4-H							88
	5800	250	205											
	6500	265	215											
CZI-50B	5800	565	525	2900	50	2.2	Y90L-2-H							90
	7200	550	490											
	9400	470	370											
	7300	770	670	3500	60	4	Y112M-2-H							110
	10550	690	550											
	11250	630	475											
CZI-50C	8600	830	750	2900	50	4	Y112M-2-H							110
	10000	640	520											
	11400	635	490											
	8800	740	600	3500	60	7.5	Y132S2-2-H							135
	10300	700	575											
	11650	700	570											
CZI-60	6900	245	210	1450	50	1.5	Y90l-4-H	600	660	695	550	12	15	90
	8500	235	195											
	9500	230	180											
	8100	340	285	1750	60	2.2	Y100L1-4-H							100
	11600	360	280											
	14000	400	280											
CZI-70A	8500	320	300	1450	50	3	Y100L2-4-H	700	760	795	700	16	15	143
	11400	315	275											
	14000	320	270											
	13400	550	470	1750	60	5.5	Y132S-4-H							173
	18000	560	465											
	21500	560	415											
CZI-70B	6100	385	370	1450	50	2.2	Y100L1-4-H							139
	9700	320	295											
	15000	320	260											
	9000	405	380	1750	60	4	Y112M-4-H							148
	11000	385	350											
	13500	380	340											
CZI-75	14700	385	305	1450	50	4	Y112M-4-H	750	820	860	700	16	19	173
	17800	380	300											
	21000	345	240											
	17000	465	400	1750	60	7.5	Y132M-4-H							211
	19000	500	420											
	23500	450	335											

CZI系列舰船用轴流通风机

CZI series marine axial flow fan

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZI-80A	21000	570	440	1450	50	7.5	Y132M-4-H	800	870	910	780	16	19	260
	23500	600	430											
	25000	610	420											
	23000	640	560	1750	60	1.1	Y160M-4-H							300
	25500	640	550											
	29000	690	550											
CZI-80B	15900	450	370	1450	50	5.5	Y132S-4-H							250
	19200	400	330											
	23500	395	295											
	19800	570	500	1750	60	7.5	Y132M-4-H							270
	23500	550	450											
	26500	550	420											
CZI-90A	23000	465	405	1450	50	7.5	Y132M-4-H	900	970	1010	850	16	19	250
	25500	440	370											
	28500	420	330											
	28500	650	560	1750	60	15	Y160L4-H							305
	31500	620	530											
	34500	630	530											
CZI-90B	28500	500	410	1450	50	1.1	Y160M-4-H							310
	31500	525	415											
	34500	540	410											
	31500	630	520	1750	60	18.5	Y180M-4-H							370
	35000	680	560											
	38000	715	570											
CZI-90C	25500	825	730	1450	50	15	Y160L-4-H							374
	28500	790	700											
	31000	730	620											
	25500	450	375	1160	60	7.5	Y160M-6-H							349
	28000	395	305											
	31000	375	260											
	33000	800	610	1750		18.5	Y180M-4-H							385
	36500	820	600											
	44500	670	450											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZI-100A	24700	335	290	960	50	7.5	Y160M-6-H	1000	1070	1110	900	20	19	379
	29500	315	250											
	36000	345	250											
	29300	515	450	1160	60	11	Y160L6-H							407
	35500	470	360											
	42500	460	350											
CZI-100B	35800	520	425	1450	50	11	Y160M-4-H							383
	37400	505	400											
	41400	435	305											
	40500	800	680	1750	60	18.5	Y180M-4-H							349
	43500	740	600											
	47500	645	480											
CZI-100C	32500	600	520	1450	50	15	Y160L-4-H							404
	38000	580	475											
	44000	530	385											
	39000	1085	975	1750	60	30	Y200L-4-H							450
	44800	950	800											
	54500	910	685											
CZI-110A	30650	480	430	960	50	15	Y180L-6-H	1100	1170	1210	1000	20	19	455
	36600	400	330											
	42300	355	265											
	45000	605	500	1160	60	22	Y200L2-H							540
	51500	595	465											
	59000	610	450											
CZI-110B	37000	340	270	960	50	7.5	Y160M-6-H							385
	40000	335	250											
	45500	330	235											
	44000	545	400	1160	60	11	Y160L-6-H							410
	47500	545	380											
	50550	540	350											
CZI-110C	40000	675	595	1450	50	18.5	Y180M-4-H							465
	45500	670	575											
	51500	685	555											
	47500	980	860	1750	60	30	Y200L-4-H							545
	54500	970	815											
	61500	970	790											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZI-120A	51500	425	330	960	50	15	Y180L-6-H	1200	1280	1330	1000	20	24	650
	57000	420	310											
	62500	415	285											
	61500	625	490	1160	60	22	Y200L2-6-H							710
	68500	620	450											
	80000	610	380											
CZI-120B	42800	475	410	960	50	18.5	Y200L1-6-H							665
	49500	400	310											
	59500	455	325											
	60000	730	605	1160	60	37	Y250M-6-H				1200			805
	66500	680	520											
	74500	720	520											
CZI-140A	50800	525	475	960	50	30	Y225M-6-H	1400	1480	1530	1200	20	24	795
	56500	505	445											
	63500	450	360											
	68500	585	495	1160	60	37	Y250M-6-H							900
	82000	750	520											
	95000	820	500											
CZI-140B	60700	650	525	960	50	30	Y225M-6-H							850
	69200	620	450											
	80100	540	360											
	80000	1100	1050	1160	60	55	Y280M-6-H							1065
	95000	950	885											
	95800	895	770											

CZX系列舰船用小型轴流通风机
CZX series marine small axial flow fan

01 概述 General

● CZX系列舰船用小型轴流通风机（以下简称“通风机”）可适用于各种军船与民船上的厨房、厕所、舱壁、公共场所、会议室等通风换气，也可适用于其他适当的场合。

CZX series marine small axial flow fan (hereinafter referred to as "fan") can be applied to ventilation systems in kitchen, toilet, bulkhead, public places, meeting rooms of military and civil ships, and can also be used in other appropriate applications.

02 特点 Features

● 通风机具有噪声低，尺寸小，重量轻，性能稳定等特点。

The fan has the characteristics of low noise, compact, light weight and stable performance.

● 通风机适用于380V/220V，50Hz或440V/220V，60Hz的场所。

The fan is suitable for power of 380V/220V, 50Hz or 440V/220V, 60Hz.

03 结构型式 Structure

● 通风机可分为Ⅰ型管道式、Ⅱ型舷窗式两种结构：

The fan can be divided into two structures: type I ducted and type II porthole mounted:

● Ⅰ型管道式可直接用于短管道或安装在舱壁上通风。

The type I fan can be used for ventilation directly connected with short duct or mounted on bulkheads.

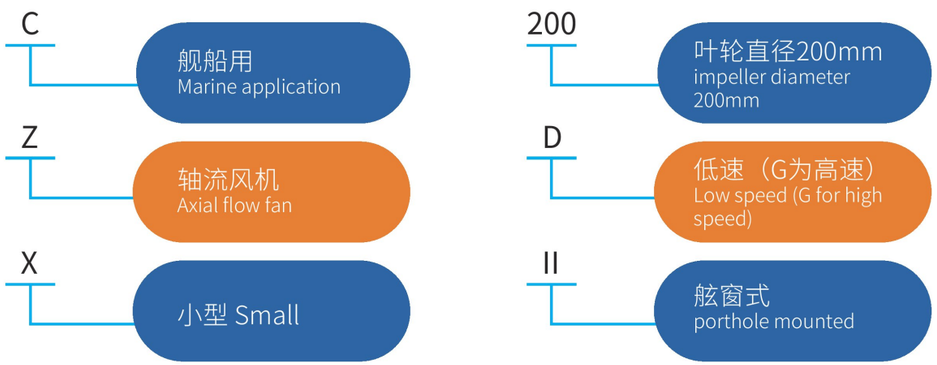
● Ⅱ型舷窗式可固定装于舷窗和舱壁上，由于有水密封装置，可方便地开启、关闭，以防海水、雨水进入。

The type II fan can be fixed on the porthole and bulkhead, and can be easily opened and closed due to the water tight device to prevent seawater and rain from entering.

● 通风机叶轮为铝合金铸造成型，机壳为钢板焊接成型，配用电机接线盒为压板式

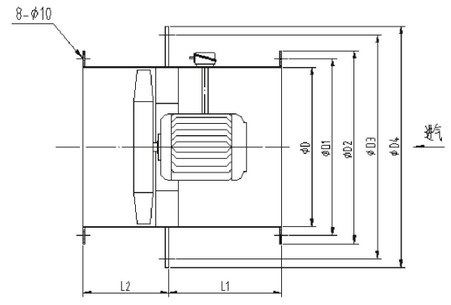
The fan impeller is made of cast aluminum alloy, the casing is welded by steel sheet, and the motor terminal box is press plate mounting type.

04 型号说明 Model description

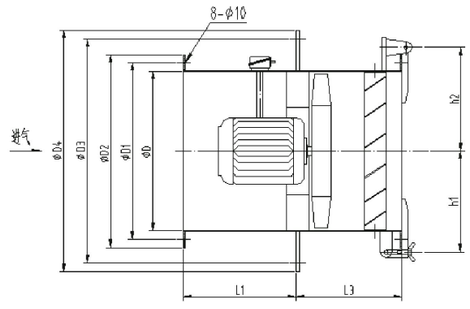


CZX系列舰船用小型轴流通风机
CZX series marine small axial flow fan

05 主要性能及外形安装尺寸
Performance and outline mounting dimensions



Ⅰ型



Ⅱ型

型号 Model	流量 flow m3/h	全压 T-pressure Pa	转速 Speed r/min	电动机 Motor			外形尺寸 Outline dimension									重量 Weight kg	
				频率 freq	功率 Power	型号 Model	D	D1	D2	D3	D4	L1	L2	L3	h1	h2	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CZX-200D	400	30	1400	50	0.04	YS-5024	200	244	264	340	365	192	88	122	146	150	13	14.5
	500	40	1700	60														
CZX-200G	900	120	2800	50	0.06	YS-5022											13	14.5
	1100	170	3400	60														
CZX-224D	600	30	1400	50	0.04	YS-5024	224	268	288	365	390	192	88	132	158	162	14	16
	750	50	1700	60														
CZX-224G	1300	140	2800	50	0.12	YS-5622											15	16.5
	1500	210	3400	60														
CZX-250D	900	40	1400	50	0.04	YS-5024	250	297	318	405	440	277	105	142	172	175	15	16.5
	1100	60	1700	60														
CZX-250G	1800	175	2800	50	0.25	YS-6322											16.5	18.5
	2200	270	3400	60													17.5	20
CZX-280	1250	50	1400	50	0.09	YS-5624	280	324	344	435	470	242	104	142	187	190	20	22.5
	1500	80	1700	60														

CZL系列舰船用低噪声轴流通风机
CZL series low-noise axial flow ventilation fan for ships

01 概述 General

● CZL系列舰船用低噪声轴流通风机（以下简称通风机）是我公司开发的一种新型节能、低噪声舰船用产品。具有效率高、噪声低、运转平稳和满足舰船用条件要求等特点。它适用于各种舰船的通风换气，也适用于其他相适应的场合。

CZL series marine low noise axial flow fan (hereinafter referred to as fan) is a new type of energy-saving and low noise marine products developed by the company. It has the characteristics of high efficiency, low noise, stable operation and meeting the requirements of marine condition. It is suitable for the ventilation of various ships, as well as other appropriate applications.

02 特点 Features

● 通风机采用变环量法设计。根据通风机的参数选取合理的变环量系数，合理分配叶片各个截面上的特性速度和长度等，从而充分利用了叶尖处的高圆周速度,使通风机具有效率高、噪声低、流量系数和压力系数大、重量轻等特点，通风机可逆转

The fan is designed by variable circular rector method. According to the parameters of the fan, a reasonable variable circular rector coefficient is selected, and the characteristic speed and length of each section of the blade are reasonably distributed, so as to make full use of the high circular speed at the tip of the blade, so that the fan has the characteristics of high efficiency, low noise, large flow coefficient and pressure coefficient, and light weigh. The fan can be reversible operating.

● 通风机在设计和制造中充分考虑到舰船用的特殊条件要求；叶轮经过严格的动平衡校正、超速试验，故通风机具有耐蚀性好、抗摇摆、抗冲击、振动、运转平稳和安全可靠等特点

In the design and manufacture of the fan, the special marine conditions are fully taken into account. Each impeller has undergone strict dynamic balance correction and overspeed test, so the fan has the characteristics of good corrosion resistance, anti-swing, shock, vibration, and stable , safe and reliable in operation.

03 结构型式 Structure

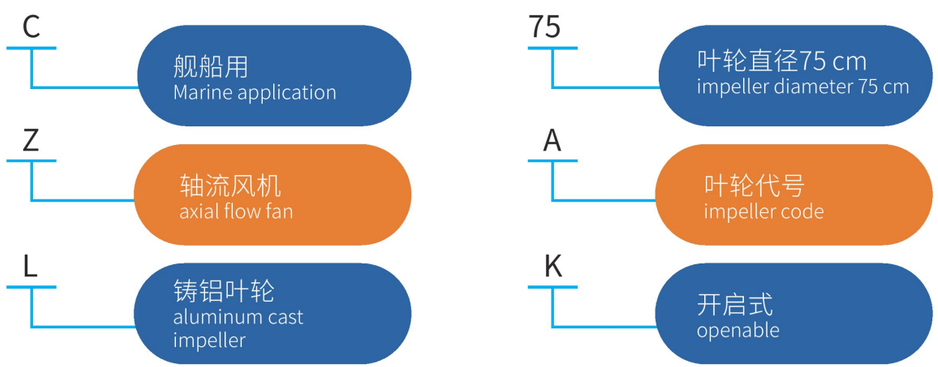
● 叶轮由防腐铝合金整体浇铸而成，机壳与支架等由优质钢板制成，并经防腐处理。

The impeller is made of anti-corrosion aluminum alloy by rigid cast. The casing and bracket are made of quality steel sheet, and have been treated with anti-corrosion process.

● 通风机从电动机端正视，叶轮按顺时针方向旋转，使用时通风机可以逆转。

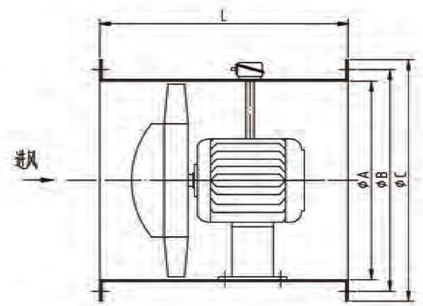
Viewing from motor side, fan impeller is rotating in clockwise direction. The fan is capable of reversible running in application.

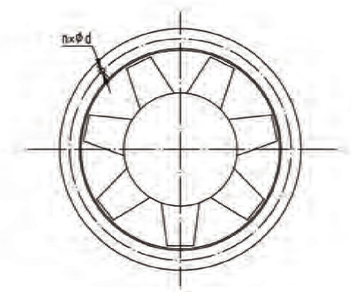
04 型号说明 Model description



CZL系列舰船用低噪声轴流通风机
CZL series low-noise axial flow ventilation fan for ships

05 主要性能及外形安装尺寸
Performance and outline mounting dimensions





型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZL-30	1200	220	200	2900	50	0.75	Y801-2-H	300	345	375	400	8*	φ12	38
	1800	205	175											
	1400	300	260	3500	60									
	2100	290	250											
CZL-35	3200	370	320	2900	50	1.1	Y802-2-H	350	395	425	450	8*	φ12	49
	4500	250	150											
	3800	500	320	3500	60									
	5400	355	150											
CZL-40	4500	340	280	2900	50	1.5	Y90S-2-H	400	445	475	500	12*	φ12	59
	6000	350	260											
	5400	470	400	3500	60	2.2	Y90L-2-H							62
	7200	400	300											
CZL-50A	6500	550	500	2900	50	3	Y100L-2-H	500	560	595	550	12*	φ15	91
	9500	440	325											
	4000	240	200	1750	60	0.75	Y802-4-H							78
	5700	190	150											
CZL-50B	9000	915	815	2900	50	4	Y112M-2-H							103
	12000	650	500											
	5400	240	200	1750	60	1.1	Y90S-4-H							93
	7200	195	145											
CZL-55	5500	250	210	1450	50	1.1	Y90S-4-H	550	610	645	550	12*	φ15	82
	8000	205	155											
	7000	350	310	1750	60	1.5	Y90L-4-H							85
	9000	280	200											
CZL-60	90000	220	180	1450	50	1.5	Y90L-4-H	600	660	695	550	12*	φ15	95
	11400	205	145											
	11500	345	280	1750	60	2.2	Y100L1-4-H							105
	16000	350	220											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZL-70A	9000	350	310	1450	50	2.2	Y100L1-4-H	700	760	795	700	16*ϕ15		130
	12000	325	280											
	15000	310	260											
	10000	395	360	1750	60	4	Y112M-4-H							140
	13500	370	340											
	16500	365	315											
CZL-70B	11500	300	275	1450	50	3	Y100L2-4-H							136
	14000	305	270											
	17000	290	230											
	13500	540	470	1750	60	5.5	Y132S-4-H							151
	18000	525	465											
	21000	510	420											
CZL-75	15000	385	330	1450	50	4	Y112M-4-H	750	820	860	700	16*ϕ19		170
	18000	380	310											
	21000	380	280											
	17000	460	400	1750	60	7.5	Y132M-4-H							185
	19000	500	425											
	23500	450	335											
CZL-80A	15900	430	370	1450	50	5.5	Y132S-4-H	800	870	910	780	16*ϕ19		225
	19200	400	330											
	23500	395	295											
	19800	570	500	1750	60	7.5	Y112M-4-H							245
	23500	550	450											
	26500	545	420											
CZL-80B	11500	570	440	1450	50	7.5	Y112M-4-H							330
	14000	600	430											
	17000	610	420											
	13500	640	560	1750	60	11	Y160M-4-H							245
	18000	640	550											
	21000	690	550											
CZL-90A	24500	580	520	1450	50	11	Y160M-4-H	900	970	1010	850	16*ϕ19		320
	27000	575	500											
	29500	545	450											
	19000	370	330	1160	60	5.5	Y132M2-6-H							305
	21800	345	295											
	24500	330	265											
CZL-90B	30000	580	480	1450	50	15	Y160L-4-H							342
	33000	600	490											
	36000	620	480											
	24000	500	400	1160	60	7.5	Y160M-6-H							340
	27000	460	380											
	30000	430	330											
CZL-100A	24700	335	290	960	50	7.5	Y160M-6-H	1000	1070	1100	900	20*ϕ19		322
	29500	315	250											
	36000	345	250											
	29300	510	450	1160	60	11	Y160L-6-H							345
	35500	470	360											
	42500	460	350											
CZL-100B	35800	520	425	1450	50	11	Y160M-4-H							222
	37400	505	400											
	41400	430	305											
	32000	315	240	1160	60	5.5	Y132M2-6-H							305
	34000	285	200											
	38000	235	130											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZL-100C	31000	700	630	1450	50	15	Y160L-4-H	1000	1070	1100	900	20*ϕ19		283
	37200	600	495											
	44200	525	380											
	34000	400	310	1160	60	11	Y160L-6-H							283
	38000	370	260											
	42000	340	200											
CZL-110A	42000	370	280	960	50	7.5	Y160M-6-H	1100	1170	1210	1000	20*ϕ19		345
	48000	350	230											
	50000	580	450	1160	60	11	Y160L-6-H							370
	57000	550	380											
CZL-110B	42000	490	400	960	50	15	Y180L-6-H							561
	48000	510	410											
	54000	540	400											
	50000	660	540	1160	60	22	Y200L2-6-H							580
	57000	700	530											
	64000	710	500											
CZL-110C	40000	675	595	1450	50	18.5	Y180M-4-H							450
	45500	670	575											
	51500	685	555											
	34000	515	430	1160	60	11	Y160L-6-H							350
	38000	485	380											
	42000	450	320											
CZL-120A	51500	425	330	960	50	15	Y180L-6-H	1200	1800	1330	1000	20*ϕ24		495
	57000	420	310											
	62500	415	285											
	61500	625	490	1160	60	22	Y200L2-6-H							515
	68500	620	450											
	80000	610	380											
CZL-120B	42800	475	410	960	50	18.5	Y200L1-6-H	1200	1800	1330	1000	20*ϕ24		550
	49500	400	310											
	59500	455	325											
	60000	730	605	1160	60	37	Y250M-6-H				1200			750
	66500	680	520											
	74500	720	520											
CZL-140	50800	525	475	960	50	30	Y225M-6-H	1400	1480	1530	1200	20*ϕ24		875
	56500	505	445											
	63500	450	360											
	68500	585	495	1160	60	37	Y250M-6-H							1115
	82000	750	520											
	95000	820	500											
CZL-160A	76500	330	265	750	50	15	Y200L-8-H	1600	1680	1730	1500	24*ϕ24		965
	88000	300	220											
	105000	265	145											
	100000	505	395	870	60	30	Y250M-8-H							1200
	105000	435	315											
	122000	370	200											
CZL-160B	88000	400	250	750	50	22	Y225M-8-H							1015
	101000	390	195											
	115000	385	130											
	106000	590	370	870	60	37	Y280S-8-H							1300
	121000	560	280											
	135000	550	195											

CZD系列舰船用低噪声轴流通风机
CZD series low-noise axial flow ventilation fan for ships

01 概述 General

● CZD系列舰船用低噪声轴流通风机(以下简称通风机)是我公司开发的一种新型节能、低噪声舰船用产品。具有效率高、噪声低、运转平稳和满足舰船用条件要求等特点。它适用于各种舰船的通风换气，也适用于其他相适应的场合。

CZD series marine low noise axial flow fan (hereinafter referred to as fan) is a new type of energy-saving and low noise marine products developed by our company. It has the characteristics of high efficiency, low noise, stable operation and meeting the requirements of marine condition. It is suitable for the ventilation of various ships, as well as other appropriate applications.

02 特点 Features

● 通风机叶片采用阔形叶片，充分利用了叶尖处的高圆周速度，使通风机具有效率高、噪声低、流量系数和压力系数大、重量轻等特点。

The wide blade of the fan makes full use of the high tip speed , so that the fan has the characteristics of high efficiency, low noise, large flow coefficient and pressure coefficient, and light weight.

● 通风机在设计和制造中充分考虑到舰船用的特殊条件要求，叶轮经过严格的动平衡校正、超速试验，通风机具有耐蚀性好、抗摇摆、抗冲击、振动、运转平稳和安全可靠等特点。

In the design and manufacture of the fan, the special marine conditions are fully taken into account. The impeller has undergone strict dynamic balance correction and overspeed test. The fan has the characteristics of good corrosion resistance, anti-swing, shock, vibration, and stable, safe and reliable operation.

03 结构型式 Structure

● 叶轮由铝板模压成的叶片与钢制镀锌的轮盘铆接而成，机壳与支架等由优质钢板制成，并经防腐处理。

The impeller is made of aluminum plate moulded blade and riveted with galvanized steel wheel. The casing and bracket are made of quality steel sheet, and have been treated with anti-corrosion process.

● 通风机制成从电动机端正视，叶轮按逆时针方向旋转。

Viewing from motor side, fan impeller is rotating in counter clockwise direction.

● 通风机可配用舰船用交流电动机。

The fan will be equipped with marine AC motor.

04 型号说明 Model description

C — 舰船用 Marine application

Z — 轴流风机 axial flow fan

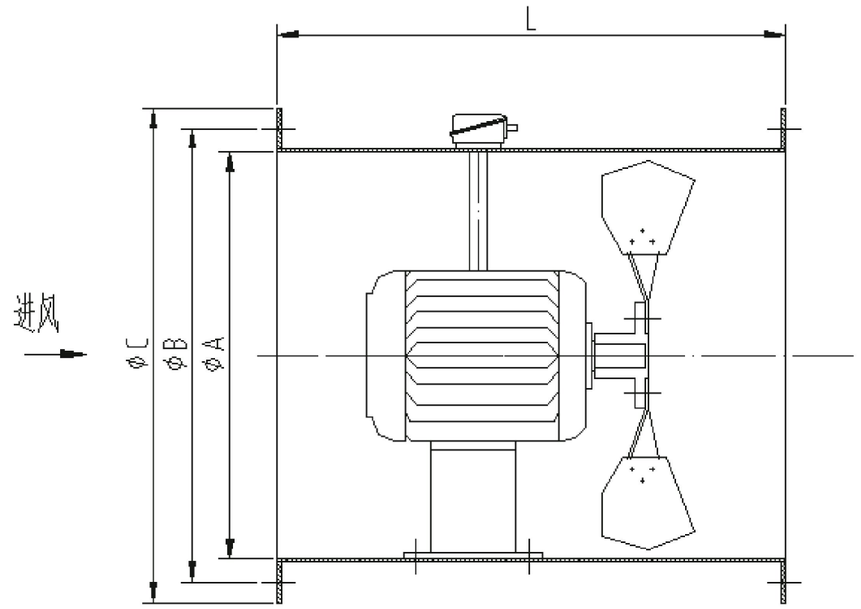
D — 低噪声 low noise

25 — 叶轮直径25 cm impeller diameter 25cm

2 — 2极电动机 2-pole motor

CZD系列舰船用低噪声轴流通风机
CZD series low-noise axial flow ventilation fan for ships

05 主要性能及外形安装尺寸
Performance and outline mounting dimensions



型号 Model	流量 flow m3/h	全压 T-pressure Pa	转速 Speed r/min	电动机 Motor			外形尺寸 Outline dimension					重量 Weight kg
				频率 freq	功率 Power	型号 Model	A	B	C	L	n*d	
CZD-25-2	1500-1800	200-170	2900	50	0.25	YS-6322-H	254	280	298	330	8*φ10	15
CZD-30-2	3500-3800	270-220	2900	50	0.55	YS-7122-H	305	345	381	330	8*φ10	26
CZD-30-4	1600-1900	65-45	1450	50	0.09	YS-5624-H						22
CZD-40-4	3800-4800	135-115	1450	50	0.55	Y801-4-H	405	445	481	430	8*φ12	43
CZD-50-4	7600-9000	205-175	1450	50	0.75	Y802-4-H	506	560	602	450	12*φ15	53
CZD-50-6	5000-6000	85-75	960	50	0.55	Y802-6-H						45.5
CZD-60-4	14500-15500	330-280	1450	50	2.2	Y100L1-4-H	606	660	712	550	12*φ15	92
CZD-60-6	90000-10500	120-105	960	50	0.75	Y90S-6-H						78
CZD-70-4	22000-25000	400-350	1450	50	4	Y112M-4-H	706	760	814	600	16*φ15	85
CZD-70-6	14500-16000	160-120	960	50	1.5	Y100L-6-H						73
CZD-80-6	22500-25000	200-175	960	50	3	Y132S-6-H	807	870	925	720	16*φ15	103

CZBH系列舰船用防爆轴流通风机

CZBH series marine explosion-proof axial flow fans

01 概述 General

- CZBH系列舰船用防爆轴流通风机（以下简称“防爆通风机”）是按照GB11800《舰船防爆轴流通风机》、GB3836.1《爆炸性环境用防爆电气设备》中的1通用要求、GB3836.2《爆炸性环境用防爆电气设备、隔爆型电气设备“d”》的有关规定和中国船舶检验局现行《钢质海船入级和建造规范》的有关规定设计制造的。

The design and manufacture of CZBH series marine explosion-proof axial flow fan (hereinafter referred to as "explosion-proof fan") is in accordance with GB11800 "Marine explosion-proof axial flow fan", GB3836.1 "Explosion-proof electrical equipment for Explosive environment Part1: General requirements", GB3836.2 "Explosion-proof electrical equipment for explosive environment, flameproof electrical equipment" d "" and the relevant provisions of "Code for Classification and Construction of Steel sea-going Vessels" of China Register of shipping.

- 本系列防爆通风机经中华人民共和国防爆电气产品质量监督检验中心检验合格，取得了防爆合格证，同时也经中华人民共和国船舶检验局检验合格，取得了产品船检证书。

This series of explosion-proof fan has passed the inspection of the explosion-proof Electrical Products Quality Supervision and Inspection Center of the People's Republic of China and obtained the explosion-proof certificate. It has also passed the inspection of Register of Shipping of the People's Republic of China and obtained the ship inspection certificate of the products.

02 特点 Features

- 防爆，运转安全可靠、防腐蚀性能好、抗摇摆、振动和冲击性能强。

The fan has the characteristics of explosion-proof, good corrosion resistance, anti-swing, shock, vibration, and stable, safe and reliable operation.

03 结构型式 Structure

- 防爆通风机可制成Ⅰ型（甲板式）、Ⅱ型（管道式）、Ⅳ型橄榄式、Ⅴ型上出风等结构。

The explosion-proof fan can be made into type I (deck type), type II (duct type), type IV olive-shape, V-type up-blasting structure.

- Ⅰ型甲板式配有风帽，防爆电机装在机架上部，整机立式安装在甲板上。

The explosion-proof motor for type I is mounted on the top of the frame, and the assembly vertically mounted on deck. The fan equipped with a bowl.

- Ⅱ型管道式不带风帽，可立式或卧式安装在管道内，也可安装在甲板上。

Without a bowl, type II fan can be vertically or horizontally connected with duct, and can be also mounted on deck.

- Ⅳ型橄榄式和Ⅴ型上出风式与Ⅰ型甲板式结构近似，但气流不经过电动机。

The structure of type IV, olive-shape, and type V, up-blasting is similar to type I, but motor is not immsersed in airstream。

- 防爆通风机制成从防爆电机端正视，叶轮按顺时针方向旋转的结构。

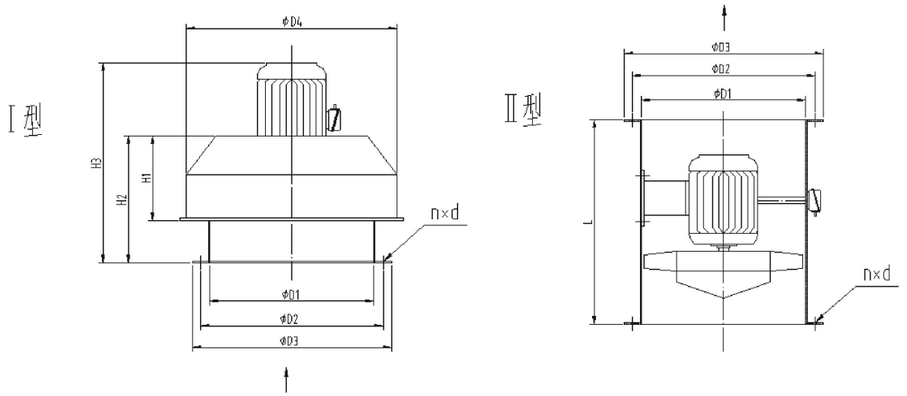
Viewing from motor side, the impeller is rotating in clockwise direction.

04 型号说明 Model description

C	Z	BH	30	II
舰船用 marine application	轴流风机 axial flow fan	防爆 Explosion-proof	叶轮直径30 cm impeller diameter 30 cm	管道式 duct type

05 主要性能及外形安装尺寸

Performance and outline mounting dimensions



型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq	功率 Power	型号 Model	外形尺寸 Outline dimension D1	D2	D3	D4	H1	H2	H3	L	n*d	重量 Weigh kg Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CZBH-30A	1200	220	200	2900	50	0.75	YB801-2-H	φ300	φ345	φ375	φ600	200	405	640	400	8*φ12	83	78
	1800	170	140															
	1400	330	300	3500	60													
	2100	240	200															
CZBH-30B	1000	200	180	2900	50												84	79
	1200	150	140															
	1200	290	270	3500	60													
	1400	220	200															
CZBH-35A	3000	260	200	2900	50	1.1	YB802-2-H	φ350	φ395	φ425	φ700	220	425	660	450	8*φ12	92	86
	3500	205	160															
	3600	410	350	3500	60	1.5	YB90S-2-H											
	4500	380	300															
CZBH-35B	1800	260	240	2900	50	1.1	YB802-2-H										91	85
	3000	220	180															
	2100	340	320	3500	60													
	3600	310	250															
CZBH-40A	4400	340	270	2900	50	2.2	YB90L-2-H	φ400	φ445	φ475	φ800	250	485	730	500	12*φ12	97	90
	5500	320	240															
	5000	450	380	3500	60													
	6000	390	300															
CZBH-40B	3000	295	260	2900	50												96	89
	4500	270	220															
	3500	580	480	3500	60													
	5500	445	375															
CZBH-50A	5000	165	150	1450	50	1.1	YB90S-4-H	φ500	φ560	φ595	φ900	280	515	720	550	12*φ15	99	91
	6100	160	140															
	5100	220	170	1750	60												111	103
	7500	230	180															
CZBH-50B	6000	550	500	2900	50	3	YB100L-2-H							780			111	103
	9500	440	340															
	7200	750	650	3500	60	4	YB112M-2-H							810			191	111
	11000	600	445															
CZBH-50C	9000	690	540	2900	50	4	YB112M-2-H							810			191	111
	12000	570	390															
	10000	670	550	3500	60	5.5	YB132S1-2-H							850			143	135
	12500	650	460															

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq	功率 Power	型号 Model	外形尺寸 Outline dimension D1	D2	D3	D4	H1	H2	H3	L	n*d	重量 Weight kg I型 Type I	II型 Type II
CZBH-60	8500	220	180	1450	50	2.2	YB100L1-4-H	ϕ600	ϕ660	ϕ695	ϕ1020	300	545	800	550	12*ϕ15	140	130
	11000	170	100															
	11000	330	250	1750	60													
	16000	320	180															
CZBH-70A	8500	300	280	1450	50	3	YB100L2-4-H	ϕ700	ϕ760	ϕ795	ϕ1200	320	585	830	700	16*ϕ15	218	205
	14000	290	250															
	17000	280	200															
	13000	520	440	1750	60	5.5	YB132S-4-H							860			229	216
	18000	500	400															
	25000	410	220															
CZBH-70B	9000	320	300	1450	50	2.2	YB100L1-4-H							830			216	203
	12000	270	230															
	18000	210	140															
	9000	385	360	1750	60	4	YB112M-4-H							830			218	205
	11000	365	330															
	16500	350	280															
CZBH-75	15000	370	300	1450	50	4	YB112M-4-H	ϕ750	ϕ820	ϕ860	ϕ1280	350	625	880	700	16*ϕ19	240	225
	18000	360	280															
	21000	320	220															
	22500	300	180															
	17000	450	390	1750	60	7.5	YB132M-4-H							960			267	252
	19000	480	400															
	23000	450	320															
	26000	330	170															
CZBH-80A	21000	580	430	1450	50	7.5	YB132M-4-H	ϕ800	ϕ870	ϕ910	ϕ1356	380	665	985	780	16*ϕ19	255	240
	23500	580	410															
	25000	570	380															
	28500	500	350															
	23000	610	520	1750	60	11	YB160M-4-H							1060			308	293
	25500	600	510															
	29000	650	510															
	33000	640	460															
CZBH-80B	16000	430	350	1450	50	5.5	YB132S-4-H							945			240	225
	19000	370	300															
	23000	380	280															
	25500	260	150															
	20000	550	480	1750	60	7.5	YB132M-4-H							985			255	240
	23000	520	430															
	26500	520	400															
	30000	500	350															
CZBH-90A	23000	460	400	1450	50	7.5	YB132M-4-H	ϕ900	ϕ970	ϕ1010	ϕ1500	400	705	1010	850	16*ϕ19	283	265
	25500	420	350															
	28000	390	300															
	31000	290	270															
	28000	640	550	1750	60	15	YB160L-4-H							1085			336	318
	31000	620	510															
	34500	630	500															
	37000	610	450															
CZBH-90B	28000	465	385	1450	50	11	YB160M-4-H							1085			336	318
	31000	480	380															
	34500	505	375															
	37500	510	360															
	31500	610	500	1750	60	18.5	YB180M-4-H							1125			354	336
	35000	650	530															
	38000	680	540															
	42000	625	420															

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq	功率 Power	型号 Model	外形尺寸 Outline dimension D1	D2	D3	D4	H1	H2	H3	L	n*d	重量 Weight kg I型 Type I	II型 Type II
CZBH-90C	28000	740	650	1450	50	15	YB160L-4-H	ϕ900	ϕ970	ϕ1010	ϕ1500	400	705	1125	850	16*ϕ19	354	336
	30000	710	600															
	34000	600	450															
	33000	780	600	1750	60	18.5	YB180M-4-H							1160			408	396
	36000	780	560															
	44500	620	400															
	50000	540	250															
CZBH-100A	29000	315	240	960	50	7.5	YB160M-6-H	ϕ1000	ϕ1070	ϕ1110	ϕ1800	480	805	1140	900	20*ϕ19	347	327
	36000	310	220															
	39000	300	180															
	35000	460	350	1160	60	11	YB160L-6-H							1180			365	345
	43000	440	330															
	46000	420	250															
CZBH-100B	37000	500	390	1450	50	11	YB160M-4-H							1140			347	327
	41500	410	300															
	45000	370	220															
	43000	720	580	1750	60	18.5	YB180M-4-H							1180			365	345
	47000	610	450															
	54000	570	350															
CZBH-100C	37000	570	480	1450	50	15	YB160L-4-H							1180			365	340
	43000	500	360															
	49000	450	260															
	40000	1000	900	1750	60	30	YB200L-4-H							1235			469	449
	54000	885	650															
	62000	710	420															
CZBH-110A	30000	460	410	960	50	15	YB180L-6-H	ϕ1100	ϕ1170	ϕ1210	ϕ2000	500	845	1265	1000	20*ϕ19	570	545
	36000	370	300															
	42000	335	235															
	45000	570	460	1160	60	22	YB200L2-6-H							1320			575	550
	51500	550	420															
	59000	530	385															
CZBH-110B	40000	310	220	960	50	7.5	YB160M-6-H							1170			351	326
	51000	260	140															
	50000	450	320	1160	60	11	YB160L-6-H							1210			475	350
	54000	370	200															
CZBH-110C	40000	650	560	1450	50	18.5	YB180M-4-H							1245			530	505
	50000	635	530															
	56000	630	480															
	47000	940	820	1750	60	30	YB200L-4-H							1320			610	585
	55000	910	780															
	68000	890	680															

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor			外形尺寸 Outline dimension									重量 Weight kg	
					频率 freq	功率 Power	型号 Model	D1	D2	D3	D4	H1	H2	H3	L	n*d	I型 Type I	II型 Type II
CZBH-120A	60000	400	270	960	50	15	YB180L-6-H	ϕ1200	ϕ1280	ϕ1330	ϕ2150	620	985	1435	1000	20*ϕ24	700	665
	69000	390	200															
	68000	590	400	1160	60	22	YB200L2-6-H							1460			705	670
	80000	520	280															
CZBH-120B	42000	465	400	960	50	18.5	YB200L1-6-H							1490	1000		705	670
	59000	440	310															
	64000	415	275															
	60000	710	600	1160	60	37	YB250M-6-H							1545	1200		845	810
	74500	700	500															
	82000	690	460															
CZBH-140A	55000	480	420	960	50	30	YB225M-6-H	ϕ1400	ϕ1480	ϕ1530	ϕ2450	750	1125	1460	1200	20*ϕ24	950	900
	63000	420	340															
	69000	405	320															
	82000	620	500	1160	60	37	YB250M-6-H							1525			1168	1118
	95000	550	475															
	110000	520	350															
CZBH-140B	60000	625	500	960	50	30	YB225M-6-H							1460			1078	1028
	80000	590	420															
	93000	400	180															
	80000	1050	1000	1160	60	55	YB280M-6-H							1525			1300	1260
	95000	820	720															
	105000	770	600															

CZBL系列舰船用防爆(无火花)轴流通风机

CZBL series explosion-proof (spark free) axial flow fan for ships

01 概述 General

- CZBL系列舰船用防爆（无火花）轴流通风机（以下简称“防爆通风机”）是按照GB11800《舰船用防爆轴流通风机》、GB3836.1《爆炸性环境用防爆电气设备》中的1通用要求、GB3836.2《爆炸性环境用防爆电气设备、隔爆型电气设备“d”》的有关规定和中国船舶检验局现行《钢质海船入级和建造规范》的有关规定设计、制造的。

CZL series marine low noise axial flow fan (hereinafter referred to as fan) is a new type of energy-saving and low noise marine products developed by the company. It has the characteristics of high efficiency, low noise, stable operation and meeting the requirements of marine condition. It is suitable for the ventilation of various ships, as well as other appropriate applications.

- 本系列通风机经中华人民共和国防爆检验单位检验合格，取得了防爆合格证，同时也经中华人民共和国船舶检验局检验合格，取得了产品船检证书。

This series of explosion-proof fan has passed the inspection of the explosion-proof Electrical Products Quality Supervision and Inspection Center of the People's Republic of China and obtained the explosion-proof certificate. It has also passed the inspection of Register of Shipping of the People's Republic of China and obtained the ship inspection certificate of the products.

02 特点 Features

- 防爆，运转安全可靠、尺寸小、重量轻、噪声低、防腐蚀性能好、抗摇摆、振动和冲击性能强。

The fan has the characteristics of explosion-proof, good corrosion resistance, compact, anti-swing, shock, vibration, and stable, safe and reliable operation.

03 结构型式 Structure

- 防爆通风机可制成Ⅰ型（甲板式）、Ⅱ型（管道式）、Ⅳ型橄榄式、Ⅴ型上出风等结构。

The explosion-proof fan can be made into type I (deck type), type II (duct type), type IV olive-shape, V-type up-blasting structure.

- Ⅰ型甲板式配有风帽，防爆电机装在机架上部，整机立式安装在甲板上。

The explosion-proof motor for type I is mounted on the top of the frame, and the assembly vertically mounted on deck. The fan equipped with a bowl.

- Ⅱ型管道式不带风帽，可立式或卧式安装在管道内，也可安装在甲板上。

Without a bowl, type II fan can be vertically or horizontally connected with duct, and can be also mounted on deck.

- Ⅳ型橄榄式和Ⅴ型上出风式与Ⅰ型甲板式结构近似，但气流不经过电动机。

The structure of type IV, olive-shape, and type V, up-blasting is similar to type I, but motor is not immersed in airstream。

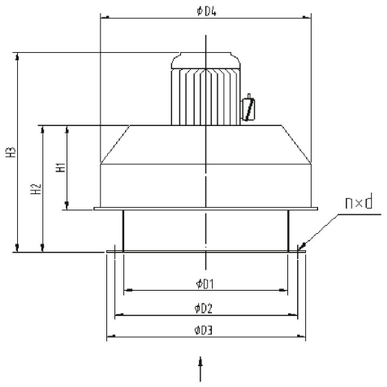
- 防爆通风机制成从防爆电机端正视，叶轮按顺时针方向旋转的结构。

Viewing from motor side, the impeller is rotating in clockwise direction.

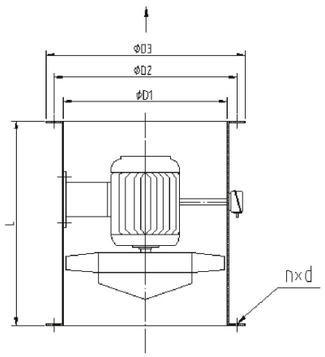
04 型号说明 Model description

C	Z	BL	40	I
舰船用 marine application	轴流风机 axial flow fan	防爆 Explosion-proof	叶轮直径40 cm impeller diameter 40 cm	甲板式 Deck type

05 主要性能及外形安装尺寸
Performance and outline mounting dimensions



Ⅰ型



Ⅱ型

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor			外形尺寸 Outline dimension								重量 Weight kg	
					频率 freq	功率 Power	型号 Model	D1	D2	D3	D4	H1	H2	H3	L	n*d	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CZBL-30	1200	200	180	2900	50	0.75	YB801-2-H	φ300	φ345	φ375	φ600	400	200	405	640	8*φ12	83	78
	1800	195	165															
	1400	290	250	3500	60													
	1800	270	230															
CZBL-35	3200	350	300	2900	50	1.1	YB802-2-H	φ350	φ395	φ425	φ700	450	220	425	660	8*φ12	92	86
	4500	380	320															
	3800	520	460	3500	60													
	5400	600	500															
CZBL-40	4500	580	420	2900	50	1.5	YB90S-2-H	φ400	φ445	φ475	φ800	500	250	485	705	12*φ12	97	90
	6000	480	370															
	5400	650	580	3500	60	2.2	YB90L-2-H								730			
	7200	670	520															
CZBL-50A	6500	570	510	2900	50	3	YB100L-2-H	φ500	φ560	φ595	φ900	550	280	515	780	12*φ15	99	91
	9500	500	400															
	4000	220	180	1750	60	0.75	YB802-4-H								690			
	5700	170	130															
CZBL-50B	9000	880	780	2900	50	4	YB112M-2-H								810		119	111
	12000	630	470															
	5400	220	180	1750	60	1.1	YB90S-4-H								710			
	7200	170	130															
CZBL-55	5500	240	200	1450	50	1.1	YB90S-4-H	φ550	φ610	φ645	φ960	550	280	515	710	12*φ15	125	107
	8000	200	150															
	7000	350	300	1750	60	1.5	YB90L-4-H								735			
	9000	260	180															
CZBL-60	90000	250	200	1450	50	1.5	YB90L-4-H	φ600	φ660	φ695	φ1020	550	300	540	760	12*φ15	140	130
	12000	240	160															
	10000	370	280	1750	60	2.2	YB100L1-4-H								800			
	14000	310	200															

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor			外形尺寸 Outline dimension								重量 Weight kg	
					频率 freq	功率 Power	型号 Model	D1	D2	D3	D4	H1	H2	H3	L	n*d	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CZBL-70A	9000	340	300	1450	50	2.2	YB100L1-4-H	φ700	φ760	φ795	φ1200	700	320	585	830	16*φ15	218	205
	12000	320	270															
	15000	300	240															
	10000	440	400	1750	60	4	YB112M-4-H								830			
	14000	410	350															
	18000	390	320															
CZBL-70B	12000	360	300	1450	50	3	YB100L2-4-H								830		229	216
	15000	340	280															
	18000	315	245															
	15000	510	450	1750	60	4	YB112M-4-H								860			
	18000	530	440															
	21000	515	390															
CZBL-75	15000	355	300	1450	50	4	YB112M-4-H	φ750	φ820	φ860	φ1280	700	350	625	800	16*φ19	240	225
	18000	340	280															
	21000	360	250															
	18000	510	430	1750	60	7.5	YB132M-4-H								960			
	21000	560	450															
	25000	520	370															
CZBL-80A	18000	530	470	1450	50	5.5	YB132S-4-H	φ800	φ870	φ910	φ1350	780	380	665	945	16*φ19	240	225
	21000	510	420															
	24000	500	400															
	27000	480	360															
	21000	630	550	1750	60	7.5	YB132M-4-H								985			
	25000	620	520															
	28000	610	470															
	32000	600	435															
CZBL-80B	21000	480	400	1450	50	7.5	YB132M-4-H								985		225	240
	24000	510	420															
	27000	530	400															
	30000	520	360															
	25000	700	600	1750	60	11	YB160M-4-H								1060			
	28000	840	610															
	32000	790	600															
	36000	740	500															
CZBL-90A	24500	560	500	1450	50	11	YB160M-4-H	φ900	φ970	φ1010	φ1500	850	400	705	1085	16*φ19	283	265
	27000	550	480															
	29500	500	420															
	32500	470	350															
	19000	350	310	1160	60	5.5	YB132M2-6-H								980			
	21800	325	275															
	24500	300	235															
	27000	265	185															
CZBL-90B	30000	560	460	1450	50	15	YB160L-4-H								1125		336	318
	33000	550	450															
	36000	560	430															
	39000	580	420															
	24000	470	370	1160	60	7.5	YB160M-6-H								1010			
	27000	430	350															
	30000	400	300															
	33000	370	250															

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq	功率 Power	型号 Model	外形尺寸 Outline dimension D1	D2	D3	D4	H1	H2	H3	L	n*d	重量 Weight kg I型 Type I	II型 Type II
CZBL-100A	33000	390	300	960	50	7.5	YB160M-6-H	ϕ1000	ϕ1070	ϕ1110	ϕ1800	900	480	805	1140	20*ϕ19	347	327
	36000	370	270															
	39000	330	220															
	39000	510	400	1160	60	11	YB160L-6-H								1180			
	42000	500	380															
	48000	500	350															
CZBL-100B	39000	550	440	1450	50	11	YB160M-4-H								1140		347	327
	42000	500	360															
	48000	440	270															
	32000	300	220	1160	60	5.5	YB132M2-6-H								1040			
	34000	270	180															
	38000	230	120															
CZBL-100C	42000	670	530	1450	50	15	YB160L-4-H								1180		347	327
	48000	600	420															
	54000	550	330															
	34000	390	300	1160	60	7.5	YB160M-6-H								1140			
	38000	360	250															
	42000	320	180															
CZBL-110A	42000	320	230	960	50	7.5	YB160M-6-H								1170		570	545
	48000	300	200															
	50000	530	400	1160	60	11	YB160L-6-H								1210			
	57000	520	350															
CZBL-110B	42000	490	400	960	50	15	YB180L-6-H	ϕ1100	ϕ1170	ϕ1210	ϕ2000	1000	500	845	1265	20*ϕ19	351	326
	48000	490	370															
	54000	500	360															
	57000	500	350															
	50000	640	520	1160	60	22	YB200L2-6-H								1320			
	57000	680	510															
	64000	660	450															
	72000	540	270															
CZBL-110C	42000	750	650	1450	50	18.5	YB180M-4-H								1245		530	505
	48000	720	620															
	54000	710	570															
	60000	700	520															
	34000	460	400	1160	60	11	YB160L-6-H								1170			
	38000	420	350															
	42000	390	300															
	47000	280	170															
CZBL-120A	54000	480	370	960	50	15	YB180L-6-H	ϕ1200	ϕ1280	ϕ1330	ϕ2150	1000	620	985	1435	20*ϕ24	700	665
	60000	450	320															
	72000	400	220															
	64000	680	540	1160	60	22	YB200L2-6-H								1460			
	72000	670	500															
	84000	650	400															
CZBL-120B	60000	430	400	960	50	18.5	YB200L1-6-H								1460		705	670
	72000	480	300															
	84000	470	220															
	72000	790	600	1160	60	37	YB250M-6-H					1200			1545			
	86000	800	550															
	100000	800	450															
CZBL-140	72000	500	400	960	50	30	YB225M-6-H	ϕ1400	ϕ1480	ϕ1530	ϕ2450	1000	750	955	1460	20*ϕ24	950	900
	84000	490	350															
	96000	450	270															
	65000	470	380	880	60	18.5	YB225S-8-H								1525			
	76000	410	300															
	87000	350	200															

CZT系列舰船用可调轴流通风机
CZT series adjustable axial flow fan for ships

01 概 述General

● CZT系列舰船用可调轴流通风机(以下简称“通风机”)可输送空气，含有盐雾的海洋空气和含有油雾、蓄电池自然蒸发形成的少量酸蒸汽等腐蚀性空气，通风机适用于船舶上各种舱室的通风换气、锅炉通风，也可适用于其他适当的场合。

CZT series marine adjustable axial flow fan (hereinafter referred to as "fan") can deliver air, marine air with salt spray, as well as corrosive air such as oil mist and a small amount of acid steam formed by natural evaporation of the battery. The fan is suitable for ventilation of various cabins on the ship, boiler ventilation, and the other appropriate applications.

● 本系列轴流风机为我公司自主研发产品，有效地增强市场竞争力；叶轮经过严格的动平衡校正、超速试验，通风机具有耐蚀性好、抗冲击、振动、运转平稳和安全可靠等特点。

Independently developed by our company, this series of axial flow fan effectively enhance the market competitiveness. The impeller has undergone strict dynamic balance correction and overspeed test. The fan has the characteristics of good corrosion resistance, anti-swing, shock, vibration, and stable, safe and reliable operation.

● 通风机是按照国标GB/T11864《舰船用轴流通风机》和现行的《船舶建造规范》设计制造。

The design and manufacture of the fan is in accordance with GB/T 11864 “Marine axial flow fans” and the “Code for Ship Construction”.

02 特点 Features

● 性能：风机性能范围覆盖广，叶片安装角度可调，易于适应于不同工况要求的船用轴流风机设计、生产.

The fan has a wide performance range for operation. The adjustable blade pitch angle design will facilitate the fan to operate under various duty points.

● 噪声：其倍频带声压级与原铸铝叶轮差异性更显优势，A声级噪声1~3dB(A)

Noise: the octave band sound pressure level has more advantages than that of rigid cast impeller. A-weighted sound level is reduced by 1~3dB(A).

● 效率：效率比整体铸铝叶轮通风机高2~5%

Efficiency: higher than rigid cast impeller by 2~5%.

● 重量：重量轻、轴向尺寸合理、维护更换方便

Weight: light weight, reasonable axial size, easy maintenance and replacement.

● 负荷：该系列叶轮转动惯量与电机的转矩匹配较合理，对电机使用寿命影响不大，启动负荷较小。

Load: the moment of inertia of this series of impeller and motor torque match more reasonable, the service life of the motor is not affected, the starting load is small.

03 结构型式 Structure

● 组成：通风机主要由壳体、叶轮及船用电机等组成；机壳为圆筒型结构，电机置于机壳内部，叶轮直接安装在电机轴上；根据风机使用场所、性能要求等，可综合考虑确定电机与筒体之间的连接方式——静叶支撑、钢板支架、内置导流筒等结构型式。

Composition: The fan is mainly composed of casing, impeller and marine motor. The casing is cylindrical type, the motor is placed inside the casing, and the impeller is directly installed on the motor shaft. According to the application and performance requirements of the fan, the connection mode between the motor and the casing can be determined by comprehensive consideration - guide vane support, steel plate support, inner motor casing and other structural types.

● 压铸铝叶轮的叶片、轮毂材料采用ZL104;挤压铝叶轮的叶片材料采用挤压铝合金6063T5，叶片型材表面处理采用阳极氧化；机壳可根据需要制成整体式或沿轴向开启式，开启式机壳是将叶轮和电动机装在可开启的半机壳上，故便于现场检修和更换零部件。

ZL104 is used for the blade and hub of the die-cast aluminum impeller. The blade material of the extruded aluminum impeller is made of extruded aluminum alloy 6063T5, and the surface treatment of the blade profiles is anodized. The casing can be made into an integral or axially open type according to the request, and the open casing is to install the impeller and the motor on the open half housing, so it is convenient for on-site maintenance and replacement of parts.

● 通风机可配用380V，415V,50Hz或440V,460V,60Hz舰船用交流电动机

The fan can be equipped with 380V, 415V,50Hz or 440V,460V,60Hz marine AC motor.

04 型号说明 Model description

C — 舰船用 Marine application

Z — 轴流风机 Axial flow fan

T — 可调 Adjustable

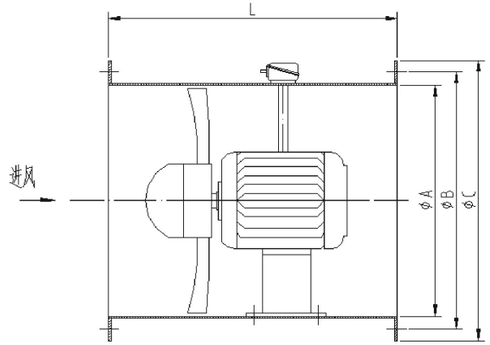
80 — 叶轮直径80cm Impeller diameter 80 cm

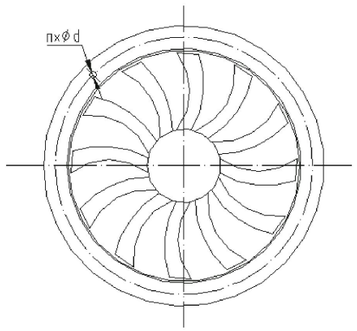
A — 叶轮代号 impeller code

01 — 设计优化序号 series number of optimized design

K — 开启式 openable

05 主要性能及外形安装尺寸 Performance and outline mounting dimensions





型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZT-60-01	5800	290	270	1450	50	1.5	Y90L-4-H	600	660	695	550	12	15	100
	8100	280	240											
	10500	280	200											
	12300	235	150											
	9000	420	375	1750	60	3	Y100L2-4-H							115
	11300	430	355											
	13500	425	315											
	16100	400	240											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZT-70A-01	10800	375	340	1450	50	3	Y100L2-4-H	700	760	795	700	16	15	135
	14500	410	340											
	18000	350	240											
	21000	310	175											
	15000	585	515	1750	60	5.5	Y132S-4-H							170
	18000	560	460											
	23000	500	330											
	25550	450	245											
CZT-70B-01	9800	425	400	1450	50	2.2	Y100L1-4-H							130
	13200	415	360											
	18000	335	235											
	20220	295	165											
	13600	590	530	1750	60	4	Y112M-4-H							140
	17100	535	445											
	21000	460	320											
	23700	395	220											
CZT-75-01	12600	426	385	1450	50	4	Y112M-4-H	750	820	860	700	16	19	150
	17500	455	385											
	22000	435	320											
	24600	380	235											
	16700	640	570	1750	60	7.5	Y132M-4-H							200
	22000	610	500											
	25100	575	425											
	29100	520	320											
CZT-80A-01	19000	570	515	1450	50	7.5	Y132M-4-H	800	870	910	780	16	19	260
	23500	580	480											
	29000	610	470											
	32300	590	400											
	21000	870	785	1750	60	11	Y160M-4-H							285
	29000	815	660											
	32500	770	580											
	36100	735	495											
CZT-80B-01	15200	535	490	1450	50	5.5	Y132S-4-H							240
	20000	515	440											
	25000	475	355											
	28350	455	305											
	17200	775	725	1750	60	7.5	Y132M-4-H							270
	25000	660	545											
	29000	620	465											
	31800	575	390											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZT-90A-01	24800	625	560	1450	50	11	Y160M-4-H	900	970	1010	850	16	19	305
	31500	585	470											
	36500	510	360											
	41000	395	200											
	32000	850	735	1750	60	18.5	Y180M-4-H							370
	39000	725	550											
	44500	630	400											
	48800	545	275											
CZT-100A-01	27100	690	630	1450	50	11	Y160M-4-H							340
	31500	555	480											
	36000	475	385											
	40700	320	195											
	29100	1080	1015	1750	60	18.5	Y180M-4-H							405
	34500	890	800											
	40100	685	565											
	48500	455	275											
CZT-100B-01	34000	775	685	1450	50	15	Y160L-4-H	1000	1070	1110	900	20	19	380
	39500	650	535											
	44500	585	425											
	51100	495	300											
	40000	1100	1015	1750	60	30	Y200L-4-H							450
	46000	910	750											
	56200	800	565											
	62400	740	445											
CZT-100C-01	33500	810	725	1450	50	18.5	Y180M-4-H							350
	37350	785	680											
	41500	660	530											
	47500	640	470											
	54500	575	350											
CZT-110A-01	36000	985	915	1450	50	18.5	Y180M-4-H	1100	1170	1210	1000	20	19	495
	42800	760	665											
	49500	650	520											
	55500	525	365											
	39700	1375	1295	1750	60	30	Y200L-4-H							570
	48100	995	875											
	56050	750	595											
	60800	610	420											

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	B	C	L	n	d	重量 Weight kg
CZT-120A-01	39500	580	520	960	50	18.5	Y200L1-6-H	1200	1280	1330	1000	20	24	645
	51500	440	345											
	58500	445	325											
	64800	460	305											
	45200	810	735	1160	60	22	Y200L2-6-H							690
	55000	615	500											
	64200	580	430											
	71900	560	380											
CZT-140A-01	43200	715	675	960	50	22	Y200L2-6-H							890
	61500	610	535											
	68500	545	455											
	74200	505	400											
	45000	860	820	960	50	30	Y225M-6-H	1400	1480	1530	1200	20	24	940
	56000	775	710											
	70000	690	600											
	80300	605	480											
	61500	1140	1060	1160	60	55	Y280M-6-H							1200
	73000	910	805											
	82200	870	735											
	91500	785	620											
CZT-160A-01	49000	820	775	960	50	30	Y225M-6-H	1600	1680	1730	1500	24	24	1100
	55200	855	795											
	67300	705	615											
	76000	655	545											
	80000	610	485											
CZT-180-01	122000	725	650	870	60	90	Y315L1-8-H	1800	1880	1930	1600	24	24	2200
	160400	715	580											
	187000	630	445											
	211500	500	260											

CLQ系列舰船用离心通风机
CLQ series marine centrifugal fans

01 概述 General

- CLQ系列舰船用离心通风机(以下简称“通风机”)可输送空气、含有盐雾的海洋空气和含有油雾、蓄电池自然蒸发形成的少量酸蒸汽等腐蚀性空气，通风机适用于船舶上各种舱室的通风换气、锅炉通风，也可适用于其他适当的场合。

CLQ series marine centrifugal fan (hereinafter referred to as "fan") can deliver air, marine air with salt spray, as well as corrosive air such as oil mist and a small amount of acid steam formed by natural evaporation of the battery. The fan is suitable for ventilation of various cabins on the ship, boiler ventilation, and the other appropriate applications.

- 通风机是按照国标GB/T11865《船用离心通风机》和现行的《船舶建造规范》设计制造的。

The design and manufacture of the fan is in accordance with GB/T 11864 “Marine axial flow fans” and the “Code for Ship Construction”.

02 特点 Features

- 尺寸小、重量轻、低噪声、防腐性好、气密性好、启动力矩小、抗摇摆、振动和冲击性强。

The fan is characterized by compact, light weight, low noise, good performance of corrosion-resistance and air-tight, small starting torque, strong resistance to swing, vibration and shock.

03 结构型式 Structure

- 通风机为卧式，电动机直联式结构，亦可制成立式结构。

The fan is horizontal mount, direct motor driven. Vertical type is available.

- 叶轮由铝合金材料铆接制成，并经静、动平衡校正

The impeller is made of aluminum alloy and by riveted, and corrected by static and dynamic balance.

- 机壳、进风口等采用优质钢质材料焊接而成，并制成气密式结构。

The casing and inlet are welded with quality steel materials and made into an air-tight structure.

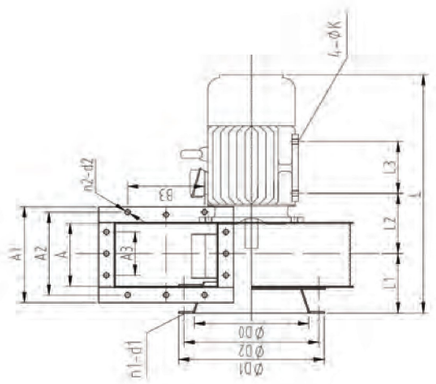
04 型号说明 Model description

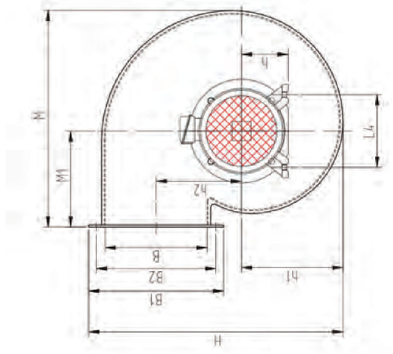
C — 舰船用 Marine application

L — 离心风机 Centrifugal fan

Q — 前向叶片 Forward blade

15 — 叶轮直径为15 cm Impeller diameter 15 cm





05 主要性能及外形安装尺寸 Performance and outline mounting dimensions

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	ΦD1	ΦD2	ΦD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M	M1	L	重量 Weight kg
CLQ-15	300	570	545	2900	50	0.75	Y801-2-H	105	160	135	60	135	188	165	80	210	185	156	8-Φ10	8-Φ10	4-Φ10	87	109	100	125	80	125	95	314	126	270	393	24
	500	550	490																													
	800	540	390																													
	360	820	780		60																											
	600	780	700	3500																												
	960	770	560																													
CLQ-16	700	640	550	2900	50	0.75	Y801-2-H	110	165	140	70	150	203	180	90	224	200	170	8-Φ10	8-Φ10	4-Φ10	92	112	100	125	80	133	104	3385	134	290	401	24.5
	800	600	490																													
	1200	590	340																													
	840	910	790		60																											
	960	860	700	3500																												
	1400	840	490																													

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-17	600	740	680	2900	50	0.75	Y801-2-H	110	165	140	70	150	203	180	90	234	210	180	8-φ10	8-φ10	4-φ10	92	112	100	125	80	133	104	338.5	134	290	401.5	26
	800	700	590																														
	1200	690	440																														
	350	330	310	1750	60	0.55	Y801-4-H																										
	480	250	210																														
	700	240	160																														
	700	1020	930	3500		0.75	Y801-2-H																										
	960	1000	840																														
	1400	990	630																														
CLQ-18	1000	870	710	2900	50	0.75	Y801-2-H	125	180	155	80	155	208	185	100	244	220	190	8-φ10	8-φ10	4-φ10	100	119	100	125	80	143	112	359	144	310	417	27
	1200	810	640																														
	1500	810	540																														
	600	310	250	1750	60	0.55	Y801-4-H																										
	700	290	230																														
	800	290	220																														
	1200	1116	1010	3500		1.1	Y802-2-H																										
	1400	1100	910																														
	1800	1100	780																														
CLQ-19	500	230	200	1450	50	0.55	Y801-4-H	140	195	175	80	180	233	215	120	254	235	200	8-φ10	10-φ10	4-φ10	108	128	100	125	80	159	123	398.5	154	340	437.5	28
	700	225	190																														
	800	225	180																														
	1300	920	810	2900		1.1	Y802-2-H																										
	1500	900	740																														
	2000	880	590																														
	800	330	290	1750	60	0.55	Y801-4-H																133.5	125	140	90							
	900	320	260																														
	1200	315	210																														
	1600	1320	1160	3500		2.2	Y90L-2-H																									472.5	36
	1800	1300	1060																														
	2400	1270	840																														

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-20	750	260	220	1450	50	0.55	Y801-4-H	140	195	175	80	180	233	215	120	264	245	210	8-φ10	10-φ10	4-φ10	108	128	100	125	80	159	123	398.5	154	340	438	29
	800	250	200																														
	900	250	190																														
	1500	1050	880	2900		1.1	Y802-2-H																										
	1600	1040	780																														
	1800	1035	750																														
	900	380	320	1750	60	0.55	Y801-4-H																134	125	140	90							
	950	375	280																														
	1100	370	270																														
	1800	1510	1270	3500		2.2	Y90L-2-H																									487	37
	1900	1500	1130																														
	2100	1490	1080																														
CLQ-21	900	300	260	1450	50	0.55	Y801-4-H	145	210	180	90	190	253	225	140	284	255	250	8-φ10	10-φ10	4-φ10	115	130	100	125	80	172	139	437.5	167	370	446	29.5
	1000	290	230																														
	1200	280	200																														
	1800	1200	1060	2900		2.2	Y90L-2-H																136	125	140	90						495	37
	2000	1180	930																														
	2500	1170	780																														
	1080	432	374	1750	60	0.55	Y801-4-H																130	100	125	80						446	29.5
	1200	417	331																														
	1440	400	288																														
	2160	1728	1520	3500		3	Y100L-2-H																143	125	160	100						555	45
	2400	1690	1340																														
	3000	1680	1130																														
CLQ-22	1100	340	290	1450	50	0.55	Y801-4-H	150	215	190	90	210	273	245	160	294	265	230	8-φ10	10-φ10	4φ10	115	133	100	125	80	181	142	459.5	181	395	441.5	30
	1250	320	250																														
	1380	315	230																														
	2200	1350	1150	2900		2.2	Y90L-2-H																139	125	40	90						532.5	38
	2500	1280	980																														
	2800	1260	910																														
	1300	480	410	1750	60	0.75	Y802-4-H																133	100	125	80						447.5	30
	1500	460	350																														
	1600	450	330																														
	2600	1920	1640	3500		4	Y112M-2-H														4φ12		146	140	190	112						542.5	59
	3000	1840	1420																														
	3300	1800	1320																														

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型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	重量 Weight kg
CLQ-23	2250	1335	1200	2900	50	2.2	Y90L-2-H	165	230	200	100	215	278	250	40
	2500	1400	1180												
	3000	1410	1080												
	1350	480	430	1750	60	0.75	Y802-4-H								33
	1500	500	420												
	1800	510	390												
	2700	1920	1730	3500		4	Y112M-2-H								60
	3000	2010	1690												
	3600	2030	1550												
CLQ-24	1350	480	430	1450	50	0.55	Y801-4-H	175	240	210	100	225	288	260	50
	1500	410	340												
	2000	360	250												
	2700	1660	1400	2900		4	Y112M-2-H								58
	3000	1640	1370												
	4000	1560	1080												
	1600	600	500	1750	60	1.1	Y90S-4-H								60
	1800	590	490												
	2400	570	390												
	3200	2390	2010	3500		5.5	Y132S1-2-H								89
	3600	2370	1970												
	4800	2090	1410												
CLQ-25	1800	440	390	1450	50	1.1	Y90S-4H	185	260	220	110	230	323	285	38
	2000	430	340												
	2500	430	290												
	3600	1950	1600	2900		4	Y112M-2-H								65
	4000	1910	1570												
	5000	1730	1180												
	2150	730	560	1750	60	1.1	Y90S-4H								42
	2400	670	540												
	3000	640	440												
	4300	2530	2230	3500		7.5	Y132S2-2-H								84
	4800	2480	1970												
	6000	2480	1690												

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	重量 Weight kg
CLQ-27	2300	520	440	1450	50	1.1	Y90S-4-H	200	275	235	120	250	323	285	43
	2500	510	390												
	3000	510	340												
	1800	330	280	1160	60	0.75	Y90S-6-H								48
	2000	320	250												
	2400	320	220												
	2750	750	640	1750		1.5	Y90L-4-H								47
	3000	730	560												
	3600	730	490												
CLQ-29	2200	760	570	1450	50	1.1	Y90S-4-H	210	286	255	150	270	344	310	51
	2500	630	540												
	3000	570	440												
	1700	480	360	1160	60	0.75	Y90S-6-H								53
	2000	400	340												
	2400	370	290												
	2600	1080	810	1750		2.2	Y100L1-4-H								51
	3000	900	770												
	3600	820	630												
CLQ-30	2700	660	560	1450	50	1.5	Y90L-4-H	220	296	265	160	280	354	320	53
	3000	650	540												
	4000	640	440												
	1800	420	350	1160	60	0.75	Y90S-6-H								49
	2000	410	340												
	2400	400	280												
	3200	950	800	1750		4	Y112M-4-H								64
	3600	930	770												
	4800	920	630												
CLQ-32	3600	760	640	1450	50	2.2	Y100L1-4-H	230	306	275	170	300	374	340	62
	4000	750	590												
	5000	740	490												
	2825	480	410	1160	60	1.1	Y90L-6-H								53
	3200	470	370												
	4000	460	310												
	4300	1090	930	1750		4	Y112M-4-H								62
	4800	1070	850												
	6000	1060	800												

型号 Model	外形尺寸 Outline dimension B3	φD1	φD2	φD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-23	160	304	275	240	8-φ10	10-φ10	4-φ10	125	146	125	140	90	186	145	470	191	410	551	40
									139	100	125	80						446	33
							4-φ12		159	140	190	112						561	60
CLQ-24	170	314	285	250	8-φ10	10-φ12	4-φ10	131	144	100	125	80	196	157	497	195	428	479	50
									157	140	190	112						584	58
							4-φ12		144	100	140	90						479	60
									183	140	216	132						629	89
CLQ-25	190	334	295	260	8-φ12	10-φ12	4-φ10	136	150	100	140	90	203	155	519	205	447	487	38
									163	140	190	112						582	65
							4-φ12		156	100	140	90						507	42
									189	140	216	132						637	84

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	ΦD1	ΦD2	ΦD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-33	3500	750	670	1450	50	2.2	Y100L1-4-H	240	316	285	180	310	384	350	240	414	380	340	8-Φ12	12-Φ12	4-Φ12	170	192	140	140	100	266	205	663	266	580	624	64
	4000	820	690																													
	5000	790	590																													
	2800	570	420	1160	60	1.1	Y90L-6-H														4-Φ10		185	140	125	140	90	266	205	663	266	580	634	55
	3200	520	430																													
	4000	500	370																													
	4200	1180	980	1750		4	Y112M-4-H														4-Φ12		192	140	140	190	112	266	205	663	266	580	624	64
	4800	1180	980																													
	6000	1140	830																													
CLQ-34	4500	880	740	1450	50	3	Y100L2-4H	250	326	295	200	325	399	365	250	424	390	350	8-Φ12	12-Φ12	4-Φ12	175	196	140	160	100	278	217.5	695	280	610	633	70
	5000	860	690																													
	6000	840	590																													
	3550	550	470	1160	60	1.5	Y100L-6-H														4-Φ12		175	196	140	160	100	278	217.5	695	280	610	633	70
	4000	540	430																													
	4750	530	370																													
	5400	1260	1070	1750		4	Y112M-4-H														4-Φ12		203	140	190	190	112	313	249	785	300	675	653	75
	6000	1240	980																													
	7200	1200	850																													
CLQ-36	4500	980	870	1450	50	4	Y112M-4-H	270	346	315	210	340	414	380	260	444	410	370	12-Φ12	12-Φ12	4-Φ12	185	213	140	190	112	292	228	727	289	635	674	79
	5000	970	830																													
	6000	930	740																													
	3550	620	550	1160	60	1.5	Y100L-6-H														4-Φ12		206	140	160	100	292	228	727	289	635	654	69
	4000	610	530																													
	4750	590	460																													
	5400	1410	1250	1750		5.5	Y132S-4-H														4-Φ12		232	140	216	132	313	249	785	300	675	729	104
	6000	1400	1200																													
	7200	1340	1060																													
CLQ-37	5400	1030	890	1450	50	4	Y112M-4-H	270	346	315	210	340	414	380	260	444	410	370	12-Φ12	12-Φ12	4-Φ12	185	214	140	190	112	300	234	751	292	650	676	84
	6000	1010	830																													
	7200	990	740																													
	4300	650	560	1160	60	2.2	Y112M-6-H														4-Φ12		214	140	190	112	313	249	769	313	680	676	84
	4750	640	530																													
	5700	630	460																													
	6500	1480	1270	1750		5.5	Y132S-4-H														4-Φ12		233	178	216	132	313	249	769	313	680	733	120
	7200	1450	1200																													
	8600	1420	1060																													

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	ΦD1	ΦD2	ΦD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-39	4300	600	510	960	50	2.2	Y112M-6-H	290	366	335	230	370	444	410	280	474	440	400	12-Φ12	12-Φ12	4-Φ12	195	224	140	190	112	313	250	785	313	675	694	90
	4800	520	430																													
	6000	480	350																													
	6500	1350	1150	1450		5.5	Y132S-4-H														4-Φ12		243	140	216	132						749	113
	7200	1190	980																													
	9000	1090	780																													
	5100	850	730	1160	60	2.2	Y112M-6-H														4-Φ12		224	140	190	112						694	90
	5700	750	620																													
	7200	690	500																													
	7800	1930	1650	1750		7.5	Y132M-4-H														4-Φ12		243	178	216	132						789	108
	8600	1700	1400																													
	10500	1560	1120																													
CLQ-40	4500	1230	1100	1450	50	4	Y112M-4-H	270	346	315	210	340	414	380	260	474	440	400	12-Φ12	12-Φ12	4-Φ12	185	214	140	190	112	313	249	769	313	680	674	83
	5000	1220	1080																													
	6000	1180	980																													
	5400	1760	1590	1750	60	7.5	Y132M-4-H														4-Φ12		233	178	216	132						769	121
	6000	1770	1550																													
	7200	1690	1410																													
CLQ-42	5500	600	520	960	50	2.2	Y112M-6-H	320	396	365	270	400	476	440	340	506	470	430	12-Φ12	12-Φ12	4-Φ12	210	239	140	190	112	341	266	845	331	735	724	100
	6000	590	490																													
	7200	540	390																													
	8250	1350	1180	1450		7.5	Y132M-4H														4-Φ12		258	178	216	132						819	128
	9000	1300	1080																													
	10500	1290	980																													
	6600	850	750	1160	60	4	Y132M1-6-H														4-Φ12		258	178	216	132						819	146
	7200	840	700																													
	8600	770	560																													
	9900	1930	1670	1750		11	Y160M-4-H														4-Φ15		277	210	254	160						874	178
	10500	1910	1600																													
	12500	1750	1280																													

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-44	6500	645	510	960	50	3	Y132S-6-H	320	396	365	270	420	496	460	350	526	490	450	12-φ12	12-φ12	4-φ12	210	258	140	216	132	356	276	880	344	765	779	134
	7200	640	490																														
	9000	600	390																														
	9800	1460	1160	1450		11	Y160M-4-H														4-φ15		276	210	254	160						895	181
	10800	1440	1110																														
	13500	1360	890																														
	7800	920	740	1160	60	4	Y132M1-6-H														4-φ12		258	178	216	132						819	131
	8600	910	700																														
	10500	860	560																														
	11500	2080	1670	1750		15	Y160L-4-H														4-φ15		276	254	254	160						940	181
	13000	2060	1590																														
	16000	1940	1270																														
CLQ-46	7000	710	600	960	50	4	Y132M1-6-H	320	396	365	270	440	516	480	360	545	510	470	12-φ12	14-φ12	4-φ12	210	258	178	216	132	373	286	917	360	800	803	160
	8000	710	560																														
	10000	660	430																														
	10500	1620	1350	1450		11	Y160M-4-H														4-φ15		278	210	254	160						891	189
	12000	1610	1270																														
	15000	1599	990																														
	8400	1020	860	1160	60	5.5	Y132M2-6-H														4-φ12		258	178	216	132						803	160
	9500	1020	810																														
	12000	950	620																														
	12500	2320	1940	1750		18.5	Y180M-4-H														4-φ15		291	241	279	180						953	248
	14000	2310	1830																														
	18000	2160	1410																														
CLQ-48	8000	770	630	960	50	4	Y132M1-6-H	350	438	400	280	450	536	500	390	586	550	500	12-φ15	14-φ15	4-φ12	230	275	178	216	132	391	307	966	377	840	856	138
	9000	740	590																														
	10000	750	560																														
	12000	1740	1470	1450		15	Y160L-4-H														4-φ15		294	254	254	160						956	209
	13500	1720	1350																														
	15000	1700	1270																														
	9600	1100	900	1160	60	5.5	Y132M2-6-H														4-φ12		275	178	216	132						856	138
	10500	1090	850																														
	12000	1080	810																														
	14000	2500	2110	1750		22	Y180L-4-H														4-φ15		307	279	279	180						1011	268
	16000	2470	1940																														
	18000	2440	1830																														
CLQ-50	9000	870	650	960	50	5.5	Y132M2-6-H	360	448	408	290	470	556	515	390	520	606	570	12-φ15	14-φ15	4-φ12	235	278	178	216	132	402	312	992	394	870	866	166
	10000	810	640																														
	12000	800	560																														
	13500	1740	1480	1450		15	Y160L-4-H														4-φ15		297	254	254	160						966	205
	15000	1830	1470																														
	18000	1790	1270																														

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	4-K	L1	L2	L3	L4	h	h1	h2	H	M1	M	L	重量 Weight kg
CLQ-50	10500	1100	940	1160	60	7.5	Y160M-6-H	360	448	408	290	470	556	515	390	606	570	520	12-φ15	14-φ15	4-φ15	235	297	210	254	160	402	312	992	394	870	921	180
	12000	1170	930																														
	14000	1140	810																														
	16000	2500	2120	1750		22	Y180L-4-H														4-φ15		400	279	279	180						1021	251
	18000	2640	2110																														
	21500	2580	1830																														
CLQ-52	11000	950	790	960	50	7.5	Y160M-6-H	380	468	428	310	480	566	526	400	626	590	540	12-φ15	14-φ15	4-φ15	245	307	210	254	160	420	331	1034	412	910	939	234
	12000	930	740																														
	15000	850	540																														
	9500	760	630	870	60	5.5	Y160M2-8-H														4-φ15		307	210	254	160						939	224
	10500	750	590																														
	13500	690	430																														
	13000	1360	1130	1160		11	Y160L-6-H														4-φ15		307	254	254	160						989	262
	14000	1330	1050																														
	18000	1220	780																														
CLQ-54	13000	970	770	960	50	7.5	Y160M-6-H	380	468	428	310	530	616	576	450	646	610	560	12-φ15	14-φ15	4-φ15	250	307	210	254	160	437	329	1074	416	935	935	231
	14000	960	730																														
	15000	940	690																														
	11500	780	620	870	60	7.5	Y160L-8-H														4-φ15		307	254	254	160						980	257
	12000	770	590																														
	13500	760	550																														
	15500	1390	1090	1160		11	Y160L-6-H														4-φ15		307	254	254	160						980	259
	16500	1370	1040																														
	18000	1350	980																														
CLQ-56	13500	1070	900	960	50	11	Y160L-6-H	400	488	448	330	540	626	586	460	666	630	580	14-φ15	14-φ15	4-φ15	260	319	254	254	160	449	344	1106	442	975	1011	267
	15000	1060	830																														
	18000	1010	690																														
	12000	860	720	870	60	7.5	Y160L-8-H														4-φ15		319	254	254	160						1011	265
	13500	850	670																														
	16000	810	550																														
	16000	1530	1290	1160		15	Y180L-6-H														4-φ15		332	279	279	180						1066	315
	18000	1500	1180																														
	21500	1440	980																														
CLQ-58	16000	1200	1020	960	50	15	Y180L-6-H	420	508	468	350	560	646	606	480	686	650	600	14-φ15	14-φ15	4-φ15	270	340	279	279	180	470	355	1148	454	1010	1080	395
	17000	1180	930																														
	18000	1160	880																														
	14000	680	570	870	60	11	Y180L-8-H														4-φ15		340	279	279	180						1080	384
	15000	660	520																														
	16000	650	500																														
	19000	1200	1020	1160		18.5	Y200L1-6-H														4-φ19		352	305	318	200						1115	420
	20000	1180	930																														
	21500	1160	880																														

TWOSUN SHUANGYANG FAN
创行业领先科技
Creating industry-leading technology

CLQB系列舰船用防爆离心通风机
CLQB series explosion-proof marine centrifugal fans

01 概述 General

- CLQB系列舰船用防爆离心通风机（以下简称“防爆通风机”）是按照GB11799《舰船防爆离心通风机》、GB3836.1《爆炸性环境用防爆电气设备》中的1通用要求、GB3836.2《爆炸性环境用防爆电气设备、隔爆型电气设备“d”》的有关规定和 中国船舶检验局现行《钢质海船人级和建造规范》的有关规定设计制造的。

fan") is in accordance with GB11799 "Marine explosion-proof centrifugal fan", GB3836.1 "Explosion-proof electrical equipment for Explosive environment Part1: General requirements", GB3836.2 "Explosion-proof electrical equipment for explosive environment, flameproof electrical equipment" d "" and the relevant provisions of "Code for Classification and Construction of Steel sea-going Vessels" of China Register of shipping

- 本系列防爆通风机经中华人民共和国防爆检验单位检验合格，取得了防爆合格证，同时经中华人民共和国船舶检验局检验合格，取得了产品船检证书。

This series of explosion-proof fan has passed the inspection of the explosion-proof Electrical Products Quality Supervision and Inspection Center of the People's Republic of China and obtained the explosion-proof certificate. It has also passed the inspection of Register of Shipping of the People's Republic of China and obtained the ship inspection certificate of the products.

02 特点 Features

- 防爆、运转安全可靠、尺寸小、重量轻、噪声低、防腐蚀性能好、抗摇摆、振动和冲击性能强。

The fan has the characteristics of explosion-proof, good corrosion resistance, compact, anti-swing, shock, vibration, and stable, safe and reliable operation.

03 结构型式 Structure

- 防爆通风机制成Ⅰ型（直联式）和Ⅱ型（隔舱式）两种结构。整机结构均为无火花型结构。

The explosion-proof fan assembly is non-spark structure, and can be two kinds of structures: type I (direct driven type) and type II (compartment-type).

- Ⅰ型（直联式）防爆通风机制成防爆电动机直接传动式结构，叶轮直接装在电动机轴上，机壳固定在防爆电动机法兰上。

The type I (direct driven type) explosion-proof fan is directly driven by an explosion-proof motor, the impeller is installed on the motor shaft, and the casing is fixed on the explosion-proof motor flange.

- Ⅱ型（隔舱式）为防爆通风机和电机分隔舱结构，由风机、传动机、弹性联轴器、电动机等组成;传动组由轴承体、轴承、轴、铜环、密封填料函等组成，能测温加油。一端直联防爆通风机，一端直联隔舱壁

Type II (compartment type) is the arrangement that explosion-proof fan body and motor are compartmental mounting , which is composed of fan, transmission group, elastic coupling, motor, etc.. The transmission group is composed of bearing housing, bearing, shaft, copper ring, sealing stuffing box, etc., which will be accessible to temperature measurement and greasing. One end of transmission group is directly connected to the explosion-proof fan body, and the other end is directly connected to the bulkhead.

- 防爆通风机为卧式、单级、单吸入和气密式结构，也可制成立式结构。

The explosion-proof fan is horizontal mounting, single stage, single inlet and air-tight. Vertical structure is available.ad.

04 型号说明 Model description

- C 舰船用 Marine application
- L 离心风机 Centrifugal fan
- Q 前向叶片 Forward blade
- B 防爆 Explosion-proof
- 23 叶轮直径为23 cm Impeller diameter 23 cm
- I 直联式 Direct driven

05 主要性能及外形安装尺寸
Performance and outline mounting dimensions

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor				
					频率 freq Hz	功率Power kW		型号Model	
						Ⅰ型 Type I	Ⅱ型 Type Ⅱ	Ⅰ型 Type I	Ⅱ型 Type Ⅱ
CLQB-15	300	570	545	2900	50	0.75	1.5	YB801-2-H	YB90S-2-H
	500	550	490						
	800	540	390						
	360	820	780	3500	60				
	600	780	700						
	960	770	560						
CLQB-16	700	640	550	2900	50	0.75	1.5	YB801-2-H	YB90S-2-H
	800	600	490						
	1200	590	340						
	840	910	790	3500	60				
	960	860	700						
	1400	840	490						
CLQB-17	600	740	680	2900	50	0.75	1.5	YB801-2-H	YB90S-2-H
	800	700	590						
	1200	690	440						
	700	1020	930	3500	60				
	960	1000	840						
	1400	990	630						
CLQB-18	1000	870	710	2900	50	1.1	1.5	YB802-2-H	YB90S-2-H
	1200	810	640						
	1500	810	540						
	1200	1116	1010	3500	60	1.1	1.5	YB802-2-H	YB90S-2-H
	1400	1100	910						
	1800	1100	780						

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor			
					频率 freq Hz	功率Power kW		型号Model	
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLQB-19	1300	920	810	2900	50	1.5	2.2	YB90S-2-H	YB90L-2-H
	1500	900	740						
	2000	880	590						
	1600	1320	1160	3500	60	2.2	2.2	YB90L-2-H	YB90L-2-H
	1800	1300	1060						
	2400	1270	840						
CLQB-20	750	260	220	1450	50	0.75	1.1	YB802-4-H	YB90S-4-H
	800	250	200						
	900	250	190						
	900	380	320	1750	60				
	950	375	280						
	1100	370	270						
	1500	1050	880	2900	50	2.2	3	YB90L-2-H	YB100L-2-H
	1600	1040	780						
	1800	1035	750						
	1800	1510	1270	3500	60				
	1900	1500	1130						
	2100	1490	1080						
CLQB-21	1800	1180	1040	2900	50	2.2	3	YB90L-2-H	YB100L-2-H
	2000	1160	910						
	2500	1140	740						
	2160	1720	1500	3500	60				
	2400	1690	1310						
	3000	1660	1110						
CLQB-22	2200	1340	1140	2900	50	2.2	4	YB90L-2-H	YB112M-2-H
	2500	1270	970						
	2800	1250	900						
	2600	1915	1630	3500	60	4		YB112M-2-H	
	3000	1833	1412						
	3300	1790	1310						
CLQB-23	2250	1335	1200	2900	50	2.2	4	YB90L-2-H	YB112M-2-H
	2500	1400	1180						
	3000	1410	1080						
	2700	2029	1725	3500	60	4		YB112M-2-H	
	3000	2010	1686						
	3600	1915	1549						
CLQB-24	1350	480	430	1450	50	0.75	1.1	YB802-4-H	YB90S-4-H
	1500	410	340						
	2000	360	245						
	1600	590	495	1750	60				
	1800	588	490						
	2400	519	390						
	2700	1650	1390	2900	50	3	4	YB100L-2-H	YB112M-2-H
	3000	1637	1370						
	4000	1559	1078						
	3200	2380	2005	3500	60	5.5	5.5	YB132S1-2-H	YB132S1-2-H
	3600	2352	1970						
	4800	2235	1410						
CLQB-25	1800	440	390	1450	50	1.1	1.1	YB90S-4-H	YB90S-4-H
	2000	430	340						
	2500	425	290						
	2150	710	540	1750	60				
	2400	630	490						
	3000	617	420						

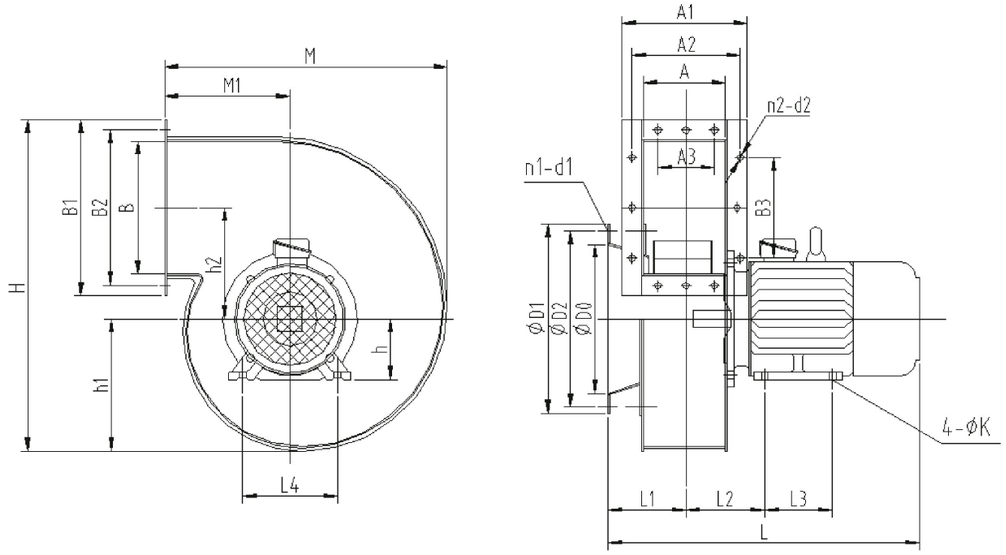
型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor			
					频率 freq Hz	功率Power kW		型号Model	
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLQB-25	3600	1950	1600	2900	50	4	4	YB112M-2-H	YB112M-2-H
	4000	1910	1570						
	5000	1730	1180						
	4300	2530	2230	3500	60	7.5	7.5	YB132S2-2-H	YB132S2-2-H
	4800	2480	1970						
	6000	2480	1690						
CLQB-27	2300	520	440	1450	50	1.5	1.5	YB90L-4-H	YB90L-4-H
	2500	510	390						
	3000	509	340						
	2750	750	640	1750	60				
	3000	730	558						
	3600	730	490						
CLQB-29	2200	758	568	1450	50	1.5	2.2	YB90L-4-H	YB100L1-4-H
	2500	627	539						
	3000	568	440						
	2600	1080	810	1750	60	2.2		YB100L1-4-H	
	3000	900	770						
	3600	813	630						
CLQ-30	2700	658	559	1450	50	1.5	4	YB90L-4-H	YB112M-4-H
	3000	647	539						
	4000	637	440						
	3200	950	800	1750	60	4		YB112M-4-H	
	3600	930	770						
	4800	912	630						
CLQB-32	3600	755	638	1450	50	2.2	3	YB100L1-4-H	YB100L2-4-H
	4000	745	588						
	5000	735	490						
	4300	1088	920	1750	60	3		YB100L2-4-H	
	4800	1068	843						
	6000	1059	706						
CLQB-33	4000	820	686	1450	50	2.2	3	YB100L1-4-H	YB100L2-4-H
	5000	790	588						
	6000	680	360						
	4800	1180	980	1750	60	3		YB100L2-4-H	
	6000	1137	830						
	7200	980	520						
CLQB-34	4500	880	738	1450	50	3	4	YB100L2-4-H	YB112M-4-H
	5000	860	686						
	6000	840	588						
	5400	1260	1065	1750	60	4		YB112M-4-H	
	6000	1235	980						
	7200	1200	843						
CLQB-36	4500	980	870	1450	50	4	4	YB112M-4-H	YB112M-4-H
	5000	970	830						
	6000	930	735						
	5400	1410	1250	1750	60	5.5	5.5	YB132S-4-H	YB132S-4-H
	6000	1392	1196						
	7200	1333	1059						
CLQB-37	5400	1030	880	1450	50	4	4	YB112M-4-H	YB112M-4-H
	6000	1010	830						
	7200	990	735						
	6500	1480	1270	1750	60	5.5	5.5	YB132S-4-H	YB132S-4-H
	7200	1450	1196						
	8600	1420	1059						

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor			
					频率 freq Hz	功率Power kW		型号Model	
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLQB-39	4300	600	505	960	50	2.2	2.2	YB112M-6-H	YB112M-6-H
	4800	520	425						
	6000	480	343						
	5100	850	720	1160	60				
	5700	750	610						
	7200	690	490						
	6500	1345	1145	1450	50	5.5	7.5	YB132S-4-H	YB132M-4-H
	7200	1180	980						
	9000	1090	780						
	7800	1930	1650	1750	60	7.5		YB132M-4-H	
	8600	1700	1400						
	10500	1555	1120						
CLQB-40	4500	1230	1100	1450	50	4	4	YB112M-4-H	YB112M-4-H
	5000	1210	1050						
	6000	1170	980						
	5400	1760	1590	1750	60	7.5	7.5	YB132M-4-H	YB132M-4-H
	6000	1750	1540						
	7200	1680	1410						
CLQB-42	5500	600	520	960	50	2.2	4	YB112M-6-H	YB132M1-6-H
	6000	588	490						
	7200	539	390						
	6600	850	750	1160	60	4		YB132M1-6-H	
	7200	843	700						
	8600	770	555						
	8250	1350	1175	1450	50	7.5	7.5	YB132M-4-H	YB132M-4-H
	9000	1300	1075						
	10500	1280	980						
	9900	1930	1670	1750	60	11	11	YB160M-4-H	YB160M-4-H
	10800	1870	1550						
	12500	1750	1280						
CLQB-44	6500	645	510	960	50	3	4	YB132S-6-H	YB132M1-6-H
	7200	637	490						
	9000	598	390						
	7800	920	740	1160	60	4		YB132M1-6-H	
	8600	910	700						
	10500	860	558						
	9800	1450	1150	1450	50	11	11	YB160M-4-H	YB160M-4-H
	10800	1430	1100						
	13500	1350	880						
	11500	2070	1660	1750	60	15	15	YB160L-4-H	YB160L-4-H
	13000	2050	1580						
	16000	1930	1260						
CLQB-46	7000	705	595	960	50	4	4	YB132M1-6-H	YB132M1-6-H
	8000	700	555						
	10000	655	425						
	8400	1015	855	1160	60	5.5	5.5	YB132M2-6-H	YB132M2-6-H
	9500	1015	805						
	12000	945	610						
	10500	1620	1345	1450	50	15	15	YB160L-4-H	YB160L-4-H
	12000	1605	1270						
	15000	1500	980						
	12500	2320	1940	1750	60	18.5	18.5	YB180M-4-H	YB180M-4-H
	14000	2310	1830						
	18000	2157	1412						

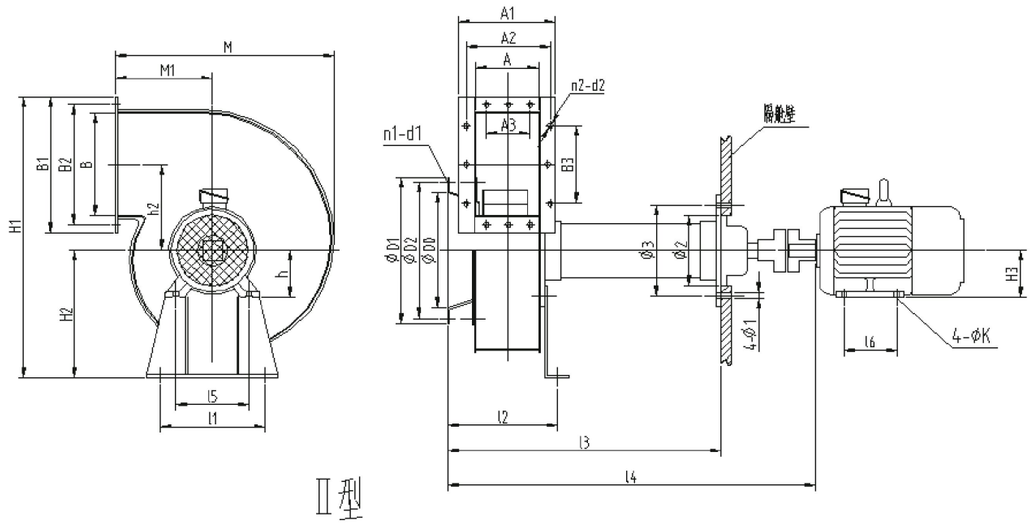
型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor			
					频率 freq Hz	功率Power kW		型号Model	
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLQB-48	8000	770	630	960	50	4	4	YB132M1-6-H	YB132M1-6-H
	9000	735	585						
	10000	750	560						
	9600	1100	900	1160	60	5.5	5.5	YB132M2-6-H	YB132M2-6-H
	10500	1090	850						
	12000	1080	810						
	12000	1735	1470	1450	50	15	15	YB160L-4-H	YB160L-4-H
	13500	1715	1345						
	15000	1696	1270						
	14000	2490	2110	1750	60	22	22	YB180L-4-H	YB180L-4-H
	16000	2470	1940						
	18000	2440	1800						
CLQB-50	9000	865	645	960	50	5.5	5.5	YB132M2-6-H	YB132M2-6-H
	10000	805	635						
	12000	770	535						
	12000	1160	920	1160	60	7.5	7.5	YB160M-6-H	YB160M-6-H
	14000	1108	774						
	15500	900	580						
	13500	1740	1480	1450	50	18.5	18.5	YB180M-4-H	YB180M-4-H
	15000	1830	1470						
	18000	1790	1270						
	16000	2500	2120	1750	60	22	22	YB180L-4-H	YB180L-4-H
	18000	2635	2110						
	21500	2575	1830						
CLQB-52	11000	950	790	960	50	7.5	7.5	YB160M-6-H	YB160M-6-H
	12000	930	735						
	15000	850	535						
	13000	1360	1130	1160	60	11	11	YB160L-6-H	YB160L-6-H
	14000	1330	1050						
	18000	1220	770						
CLQB-54	13000	970	770	960	50	7.5	7.5	YB160M-6-H	YB160M-6-H
	14000	960	730						
	15000	940	685						
	15500	1390	1090	1160	60	11	11	YB160L-6-H	YB160L-6-H
	16500	1370	1040						
	18000	1350	980						
CLQB-56	13500	1070	900	960	50	11	11	YB160L-6-H	YB160L-6-H
	15000	1060	830						
	18000	1010	690						
	16000	1530	1290	1160	60	15	15	YB180L-6-H	YB180L-6-H
	18000	1500	1180						
	21000	1440	980						
CLQB-58	16000	1200	1020	960	50	15	15	YB180L-6-H	YB180L-6-H
	17000	1180	930						
	18000	1150	880						
	19000	1200	1020	1160	60	18.5	18.5	YB200L1-6-H	YB200L1-6-H
	20000	1180	930						
	21000	1150	880						

CLQB系列舰船用防爆离心通风机

CLQB series explosion-proof marine centrifugal fans



Ⅰ型



Ⅱ型

型号 Model	电动机Motor 型号Model I型 TypeⅠ	电动机Motor 型号Model Ⅱ型 TypeⅡ	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	ϕD1	ϕD2	ϕD3	n1-d1	n2-d2	H	h	h1	h2	M	M1	L	L1	L2	L3	L4	4-ΦK I型 TypeⅠ	4-ΦK Ⅱ型 TypeⅡ	H1	H2	H3	ϕ1	ϕ2	ϕ3	1	2	3	4	5	6	重量 Weight kg I型 TypeⅠ	重量 Weight kg Ⅱ型 TypeⅡ
CLQB-15	YB801-2-H	YB80S-2-H	105	160	135	60	135	188	165	80	210	185	156	8-ϕ10	8-ϕ10	314	80	125	95	270	126	432	87	106	100	125	10	10	439.5	250	90	12	140	165	250	100	140	125	10	64	35
CLQB-16	YB801-2-H	YB80S-2-H	110	165	140	70	150	203	180	90	224	200	170	8-ϕ10	8-ϕ10	338.5	80	133	104	290	134	440.5	92	109	100	125	10	10	455.5	250	90	12	140	165	250	100	140	125	10	62	36
CLQB-17	YB801-2-H	YB80S-2-H	110	165	140	70	150	203	180	90	234	210	180	8-ϕ10	8-ϕ10	338.5	80	133	104	290	134	440.5	92	109	100	125	10	10	455.5	250	90	12	140	165	250	100	140	125	10	63	37
CLQB-18	YB802-2-H	YB80S-2-H	125	180	155	80	155	208	185	100	244	220	190	8-ϕ10	8-ϕ10	359	80	143	112	310	144	456	100	116	100	125	10	10	465.5	250	90	12	140	165	250	100	140	125	10	64	38
CLQB-19	YB90L-2-H	YB90L-2-H	140	195	175	80	180	233	215	120	254	235	200	8-ϕ10	10-ϕ10	398.5	80	159	123	340	154	492	108	121	100	140	10	10	489.5	250	90	12	140	165	250	100	140	125	10	71	44
CLQB-20	YB802-4-H	YB80S-4-H	140	195	175	80	180	233	215	120	264	245	210	8-ϕ10	10-ϕ10	398.5	80	159	123	340	154	472	108	124	100	125	10	10	489.5	250	90	12	140	165	250	100	140	125	10	67	40
	YB90L-2-H	YB100L-2-H															90					517		129.5	125	140		12	589.5	350	100	15	190	215	300	140	160	140	12	80	53
CLQB-21	YB90L-2-H	YB100L-2-H	145	210	180	90	190	253	225	140	284	255	220	8-ϕ10	10-ϕ10	437.5	90	172	139	370	167	526	115	132	125	140	10	12	615.5	350	100	15	190	215	300	140	160	140	12	79	52
CLQB-22	YB90L-2-H	YB112M-2-H	150	215	190	90	210	273	245	160	294	265	230	8-ϕ10	10-ϕ10	459.5	90	181	142	395	181	528.5	115	135	125	140	10	12	638.5	350	112	15	190	215	300	236.5	467.5	643	640.5	86	55	63
CLQB-23	YB90L-2-H	YB112M-2-H	165	230	200	100	215	278	250	160	304	275	240	8-ϕ10	10ϕ10	470	90	186	145	410	191	563.5	125	142	125	140	10	12	638.5	350	112	15	190	215	300	254	485	680.5	640.5	88	57	65

型号 Model	电动机Motor 型号Model I型 Type I	II型 Type II	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	H	h	h1	h2	M	L	L1	L2	L3	L4	4-φK I型 Type I	II型 Type II	H1	H2	H3	φ1	φ2	φ3	11	12	13	14	15	16	重量 Weight kg I型 Type I	II型 Type II
CLQB-24	YB80S4-H													8-φ10	10-φ12	497	80		157	428	515.5																					
	YB100L2-H		175	240	210	100	225	288	260	170	314	285	250				100	196			595.5	131	156	140	190	10		652	350	112	15	190	215	300	267	498	673.5	190	140	81	102
	YB132S1-2-H																132									12														
	YB132S1-2-H																				655.5		182	140	216			732	430	132	15	240	265	400	271	538	756	216	140	104	127
CLQB-25	YB80S-4-H																90				545.5																		
	YB112M-2-H		185	260	220	110	230	323	285	190	334	295	260	8-φ12	10-φ12	519.5	112	203	155	447	635.5	136	168	140	190	10		667.5	350	112	15	190	215	300	277	478.5	633.5	140	100	79	104
	YB132S2-2-H																132									12														
	YB132S2-2-H																				765.5		187	140	216			747.5	430	132	15	240	265	400	281	548	766	216	140	110	143
CLQB-27	YB90L-4-H		200	275	235	120	250	323	285	190	354	315	280	8-φ12	10-φ12	558.5	90	222	175	482	592	153	160	125	140	10		587.5	250	90	12	140	165	250	299.5	501	656	140	125	65	85
CLQB-29	YB90L-4-H		210	286	255	150	270	344	310	200	374	340	300	8-φ12	12-φ12	587	90	234	181	510	599	155	165	125	140	10		603	250	90	12	140	165	250	307	508.5	633.5	140	125	68	88
CLQB-30	YB90L-4-H		220	296	265	160	280	354	320	210	384	350	310	8-φ12	12-φ12	607	90	242	188	535	609	160	170	125	140	10		715	350	100	15	190	215	300	317	548	725.5	160	140	70	101
	YB112M-4-H																112				644		177	140	190	12													78
CLQB-32	YB100L-4-H		230	306	275	170	300	374	340	230	404	370	330	8-φ12	12-φ12	649	100	259	203	565	654	165	182	140	160	12		740	350	100	15	190	215	300	327	558	733.5	160	140	81	106
	YB100L2-4-H																																							83
CLQB-33	YB100L-4-H		240	316	285	180	310	384	350	240	414	380	340	8-φ12	12-φ12	663	100	266	205	580	664	170	187	140	160	12		747	350	100	15	190	215	300	337	568	743.5	160	140	84	109
	Y100L2-4-H																																							86
CLQB-34	YB100L2-4-H		250	326	295	200	325	399	365	250	424	390	350	8-φ12	12-φ12	695	100	278	218	610	674	175	192	140	160	12		767	350	112	15	190	215	300	347	578	753.5	190	140	87	123
	YB112M-4-H																112				704		199	140	190	12													100

型号 Model	电动机Motor 型号Model I型 Type I	II型 Type II	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	H	h	h1	h2	M	L	L1	L2	L3	L4	4-φK I型 Type I	II型 Type II	H1	H2	H3	φ1	φ2	φ3	11	12	13	14	15	16	重量 Weight kg I型 Type I	II型 Type II
CLQB-36	YB112M-4-H		270	346	315	210	340	414	380	260	444	410	370	12-φ12	12-φ12	727	112	292	228	635	724	185	209	140	190	12		785	350	112	15	190	215	300	367	598	773.5	190	140	83	106
	YB132S-4-H																132				754		228	140	216			865	430	132	15	240	265	400	371	638	856	216	140	105	138
CLQB-37	YB112M-4-H		270	346	315	210	360	434	400	280	454	420	380	12-φ12	12-φ12	751	112	300	234	650	724	185	209	140	190	12		801	350	112	15	190	215	300	367	598	773.5	190	140	108	131
	YB132S-4-H																132				754		228	140	216			901	430	132	15	240	265	400	371	638	856	216	140	130	163
CLQB-39	YB112M-6-H		290	366	335	230	370	444	410	280	474	440	340	12-φ12	12-φ12	785	112	313	250	675	744	195	219	140	190	12		822	350	112	15	190	215	300	387	618	793.5	190	140	111	134
	YB132S-4-H																132				774		238	140	216			902	430	132	15	240	265	400	391	658	876	216	140	138	186
	YB132M-4-H																132				814		238	178	216			902	430	132	15	240	265	400	391	658	876	216	140	153	186
CLQB-40	YB112M-4-H		270	346	315	210	340	414	380	260	474	440	410	12-φ12	12-φ12	769	112	313	249	680	724	185	209	140	190	12		806	350	112	15	190	215	300	367	598	773.5	190	140	112	135
	YB132M-4-H																132				795		229	178	216			886	430	132	15	240	265	400	371	638	856	216	140	149	182
CLQB-42	YB112M-6-H		320	396	365	270	400	476	440	340	506	470	430	12-φ12	12-φ12	845	112	341	266	735	774	210	234	140	190	12		933.5	430	112	15	240	265	400	421	688	906	216	140	123	179
	YB132M1-6-H																132				804		253	140	216			933.5	430	132	15	240	265	400	421	688	906	216	140	146	179
	YB132M-4-H																132				844		253	178	216			933.5	430	132	15	240	265	400	421	688	906	216	140	165	198
	YB160M-4-H																160				919		272	210	254	15		1014	510	160	19	260	300	450	421	722	1006	254	140	218	263
CLQB-44	YB132S-6-H		320	396	365	270	400	476	440	340	506	470	430	12-φ12	12-φ12	880	132	356	276	765	804	210	253	140	216	12		954.5	430	132	15	240	265	400	421	688	906	216	140	150	193
	YB132M1-6-H																132				844		253	178	216			954.5	430	132	15	240	265	400	421	688	906	216	140	160	193
	YB160M-4-H																160				919		272	210	254	15		954.5	510	160	15	260	300	450	421	722	1006	254	140	222	267
	YB160L-4-H																160				959		272	254	254	15		1035	510	160	19	260	300	450	421	722	1006	254	254	240	285
CLQB-46	YB132M1-6-H		320	396	365	270	440	516	480	360	545	510	470	12-φ12	14-φ12	915	132	373	286	800	844	210	253	178	216	12		974	430	132	15	240	265	400	421	688	906	216	178	166	199
	YB132M2-6-H																160				919		272	210	254	15		974	510	160	19	260	300	450	421	722	1006	254	210	228	273
	YB160L-4-H																160				994		285	241	279	15		1054	510	180	19	260	300	450	421	722	1006	279	241	245	300
	YB180M-4-H																160																								

型号 Model	电动机Motor 型号Model Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	外形尺寸 Outline dimension A	A1	A2	A3	B	B1	B2	B3	φD1	φD2	φD3	n1-d1	n2-d2	H	h	h1	M	M1	L	L1	L2	L3	L4	4-φK 型 Type Ⅰ	4-φK Ⅱ型 Type Ⅱ	H1	H2	H3	φ1	φ2	φ3	11	12	13	14	15	16	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	重量 Weight kg
CLQB-48	YB132M1-6-H	YB132M-6-H	350	438	400	280	450	536	500	390	586	550	500	12-φ15	14-φ15	966	132	391	840	377	880	230	269	178	216	12	12	1005	430	132	15	240	265	400	457	724	942	216	178	169	202
	YB132M2-6-H	YB132M2-6-H																			995																				
	YB160L-4-H	YB160L-4-H															160					288	254	254	15	15				19	260	300	450	457	758	942	254	254	185	218
	YB180L-4-H	YB180L-4-H															180				1050	301	279	279	15	15	1085	510	180	19	260	300	450	457	758	1042	279	279	249	294
CLQB-50	YB132M2-6-H	YB132M2-6-H	360	448	408	290	470	556	515	390	606	570	520	12-φ15	14-φ15	992	132	402	870	394	890	235	274	178	216	12	12	1020	430	132	15	240	265	400	467	734	952	216	178	190	223
	YB160M-6-H	YB160M-6-H															160				965		293	210	254	15	15		510	160	19	260	300	450	467	768	1052	254	210	230	275
	YB160L-4-H	YB160L-4-H															160				1005		293	254	254	15	15		510	160	19	260	300	450	467	768	1052	254	254	255	309
	YB180L-4-H	YB180M-4-H															180				1060		306	279	279	15	15		510	180	19	260	300	450	467	768	1052	279	279	359	404
CLQB-52	YB160M-6-H	YB160M-6-H	380	468	428	310	480	566	526	400	626	590	540	12-φ15	14-φ15	1034	160	420	910	412	985	245	303	210	254	15	15	1124	510	160	19	260	300	450	487	788	1072	254	210	241	286
	YB160L-6-H	YB160L-6-H															160				1025		303	254	254	15	15		510	160	19	260	300	450	487	788	1072	254	254	265	310
CLQB-54	YB160M-6-H	YB160M-6-H	380	468	428	310	530	616	576	450	646	610	560	12-φ15	14-φ15	1074	160	437	935	416	990	250	303	210	254	15	15	1147	510	160	19	260	300	450	492	793	1077	254	210	252	297
	YB160L-6-H	YB160L-6-H															160				1030		303	254	254	15	15		510	160	19	260	300	450	192	793	1077	254	254	276	321
CLQB-56	YB180L-6-H	YB180L-6-H	400	488	448	330	540	626	586	460	666	630	580	14-φ15	14-φ15	1106	160	449	975	442	1050	260	313	254	254	15	15	1163	510	160	19	260	300	450	512	813	1097	254	254	287	312
	YB180L-6-H	YB180L-6-H															180				1150		326	279	279	15	15		510	180	19	260	300	450	512	813	1097	279	279	382	247
CLQB-58	YB180L-6-H	YB180L-6-H	420	508	468	350	560	646	606	480	686	650	600	14-φ15	14-φ15	1148	180	470	1010	454	1125	270	326	279	279	15	15	1188	510	180	19	260	300	450	532	833	1117	279	279	393	439
	YB200L1-6-H	YB200L1-6-H															200				1180		348	305	318	19	19	1278	600	200	19	310	300	500	540	863	1158	305	318	198	455

CLQX系列舰船用小型离心通风机

CLQX series small marine centrifugal fans

01 概述 General

- LQCX系列舰船用小型离心通风机可输送空气，含有盐雾的海洋空气和含有油雾等腐蚀性空气。

CLQX series marine small centrifugal fans can deliver air, marine air containing salt spray and corrosive air containing oil spray.

- 本型风机适用于军船与民船上的厨房、厕所、舱壁、公共场所

This type of fan is suitable for kitchens, toilets, bulkheads and public places on military ships and civil ships.

- CLQX型舰船用小型离心通风机,可配用AO2- H舰船用三相微型异步电动机，适用于380V/440V、50Hz/60Hz，根据需要亦可配单相、220V、50Hz/60Hz电动机。

CLQX marine small centrifugal fan can be equipped with AO2-H three-phase miniature marine asynchronous motor, suitable for 380V/440V, 50Hz/60Hz power source. Single-phase, 220V, 50Hz/60Hz motor will be available as per request.

02 特点 Features

- 尺寸小、重量轻、性能稳定、噪声

Compact, light weight, stable operating, low noise

- 强度好，耐腐蚀，适用范围广

Robust, anti-corrosion, wide range of application

- 抗摇摆、振动和冲击性能强

Anti-swing, shock, and vibration

03 结构型式

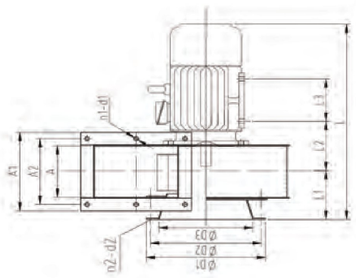
- CLQX型舰船用小型离心通风机，为电机直连式结构，可制成卧式或立式。本型风机的机壳、叶轮和进风口采用不锈钢制成，叶轮为铆接成型，进风口和机壳为焊接结构。

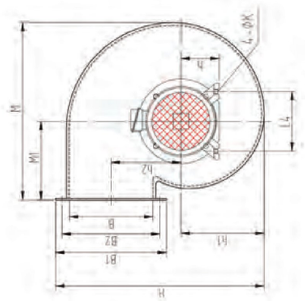
Structure

CLQX marine small centrifugal fan is of direct motor driven structure and can be made into horizontal or vertical type. The casing, impeller and inlet of the fan are made of stainless steel. The impeller is riveted and the inlet and casing are welded.

04 型号说明 Model description

- C 舰船用 Marine application
- L 离心风机 Centrifugal fan
- Q 前向叶片 Forward blade
- X 小型 Small size
- 100D 叶轮直径为100mm，D为低速 Impeller diameter 100mm, D for low speed





05 主要性能及外形安装尺寸 Performance and outline mounting dimensions

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	噪声 noise db(A)	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	A1	A2	B	B1	B2	φD1	φD2	φD3	n1-d1	n2-d2	H	h	h1	h2	M	M1	L	L1	L2	L3	L4	4-K	重量 Weight kg
CLQX-100D	110	90	67	1400	58	50	0.12	A02-6314-H	64	98	84	76	108	94	119	104	86	6-Φ6	6-Φ6	192	63	76	62	1635	75	280	56	74	80	100	4-Φ7	12
CLQX-100G	135	133	99	1700	61	60	0.12																									
	220	360	268	2800	69	50	0.18	A02-6312-H																								
	270	532	396	3400	73	60	0.18																									
CLQX-110D	150	110	80	1400	61	50	0.12	A02-6314-H	70	104	90	84	116	102	128	113	95	6-Φ6	6-Φ6	205	68	83.5	68	180	82.5	290	61.5	77	80	100	4-Φ7	13.5
CLQX-110G	185	162	118	1700	65	60	0.12																									
	300	440	320	2800	71	50	0.18	A02-6312-H																								
	370	648	472	3400	75	60	0.18																									
CLQX-125D	220	140	102	1400	63	50	0.12	A02-6314-H	80	114	100	95	127	113	141	126	108	6-Φ6	6-Φ6	205	78	95	78	205	94	301	68.5	82.5	80	100	4-Φ7	15.5
CLQX-125G	270	206	150	1700	67	60	0.12																									
	440	560	408	2800	76	50	0.18	A02-6312-H																								
	540	824	600	3400	78	60	0.18																									
CLQX-140D	300	180	135	1400	67	50	0.12	A02-6314-H	90	134	114	107	149	129	164	144	121	6-Φ7	6-Φ7	267	63	106	86.5	228.5	105	315	77.5	87.5	80	100	4-Φ7	17
CLQX-140G	365	265	199	1700	71	60	0.12																									
	600	720	540	2800	77	50	0.25	A02-6322-H																								
	730	1060	796	3400	82	60	0.37	A02-7112-H																								
CLQX-160D	450	230	170	1400	71	50	0.12	A02-6314-H	102	146	126	122	165	145	181	161	138	6-Φ7	6-Φ7	303	63	121.5	99	261.5	120	346	86	93.5	80	100	4-Φ7	20
	550	339	251	1700	75	60	0.12																									
CLQX-160G	900	920	680	2800	82	50	0.37	A02-7112-H																								
	1100	1356	1004	3400	86	60	0.75	Y801-2-H																								
CLQX-180D	640	290	217	1400	74	50	0.37	A02-7124-H	115	171	146	137	190	165	208	183	155	6-Φ9	6-Φ9	343	71	135.5	115	294	135	382	96.5	103	90	112	4-Φ7	23
	780	428	320	1700	78	60	0.37																									
CLQX-180G	1280	1160	868	2800	84	50	0.75	Y801-2-H																								
	1600	1812	1356	3400	89	60	1.5	Y90S-2-H																								
CLQX-200D	900	375	276	1400	77	50	0.55	Y801-4-H	128	184	159	152	205	180	225	200	172	6-Φ9	6-Φ9	378	80	151.5	124	306.5	150	442	104.5	117	100	125	4-Φ10	30
	1080	553	407	1700	81	50	0.55																									
CLQX-200G	1880	1631	1201	2800	89	50	1.5	Y90S-2-H																								
	2250	2343	1725	3400	93	60	2.2	Y90L-2-H																								
CLQX-224D	1200	530	390	1400	80	50	0.75	Y90S-2-H	145	209	179	172	230	205	255	227	195	6-Φ9	6-Φ9	427	90	171	140	346	170	500	118	132	112	140	4-Φ10	43
	1440	780	574	1700	84	50	1.1	Y90L-2-H																								
CLQX-224G	2500	2300	1692	2800	93	50	3	Y100L-2-H																								
	3000	3300	2428	3400	97	60	4	Y112M-2-H																								
CLQX-250D	1500	830	610	1400	83	50	1.1	Y90L-2-H	160	230	200	190	255	225	285	250	215	6-Φ9	6-Φ9	477	100	190	155	386	190	560	132	147	125	140	4-Φ10	45
	1800	1200	883	1700	87	50	1.5	Y100L-2-H																								
CLQX-250G	3000	3600	2648	2800	96	50	4	Y112M-2-H																								
	3600	5040	3708	3400	100	60	5.5	Y132S-2-H																								

CLHG系列舰船用高效率低噪声离心通风机
CLHG series high-efficiency and low-noise marine centrifugal fans

01 概述 General

● CLHG系列舰船用高效率低噪声离心通风机（以下简称通风机）是我公司开发的一种新型节能、低噪声舰船用产品。通风机通过专门设计和加工，具有效率高（>80%）、噪声低、不会超载、运转平稳和满足舰船条件要求等特点，它适用于各种舰船的通风换气，也适用于其他相适
应的场合。

CLHG series marine high efficiency and low noise centrifugal fan (hereinafter referred to as fan) is a new type of energy-saving and low noise marine products developed by our company. Through special design and processing, the fan has the characteristics of high efficiency (> 80%), low noise, no overload, stable operation and meeting the requirements of marine conditions, etc. It is suitable for ventilation of various ships, and it is also suitable for other suitable applications.

02 特点 Features

● 风机采用了特殊设计的机翼型叶片和进风口。机壳的尺寸和型线也按特征速度进行专门设计，叶轮进行专门加工，从而使气流流动更良好，使通风机具有效率高、噪声低等优点。由于功率特征至大流量区后反而下降，故电动机不会因超载而损坏

The fan has specially designed airfoil blades and inlet. The size and profile of the casing are also specially designed according to the characteristic speed, and the impeller is specially processed, for better air flow profile. The fan has the advantages of high efficiency and low noise. Since the power characteristic decreases after reaching the large flow area, the motor will not be overloaded.

● 通风机在设计和制造中充分考虑到舰船用的特殊条件要求，叶轮用铝制造并经严格平衡校正、超速试验。故通风机还具有腐蚀性能好、抗摇摆、振动和冲击，运转平稳和安全可靠等特点。

In the design and manufacture of the fan, the special marine conditions are fully taken into account. The impeller is made of aluminum and has undergone strict balance correction and overspeed test. The fan also has the characteristics of good corrosion resistance performance, anti-swing, vibration and shock, stable operation, safety and reliability.

03 结构型式 Structure

● 风机为卧式，电动机直联结构，需要时也可制成立式结构。

The fan is horizontal, direct motor driven. Vertical structure will also be available as per request.

● 通风机叶轮由铝合金制成，叶片为机翼型，并经过严格动平衡校正，具有优良的空气动力性能。机壳、进风口等由优质钢板制成，采用镀锌等防腐措施，机号≥40时，通风机加有机架（40以下无机架）。

The impeller of the fan is made of aluminum alloy, with airfoil blade, corrected by dynamic balancing. The fan has excellent aerodynamic performance. The casing and inlet are made of quality steel plate with and anti-corrosion measures such as galvanized. Mounting frame will be equipped for fan size ≥40 (no mounting frame for fan size below 40).

● 通风机机号40-80的风口方向在0～255°间，按22.5°变化

The direction of the outlet of the fan with size No. 40-80 is between 0°and 255° and with interval of 22.5°.

04 型号说明 Model description

C — 舰船用 Marine application

L — 离心风机 Centrifugal fan

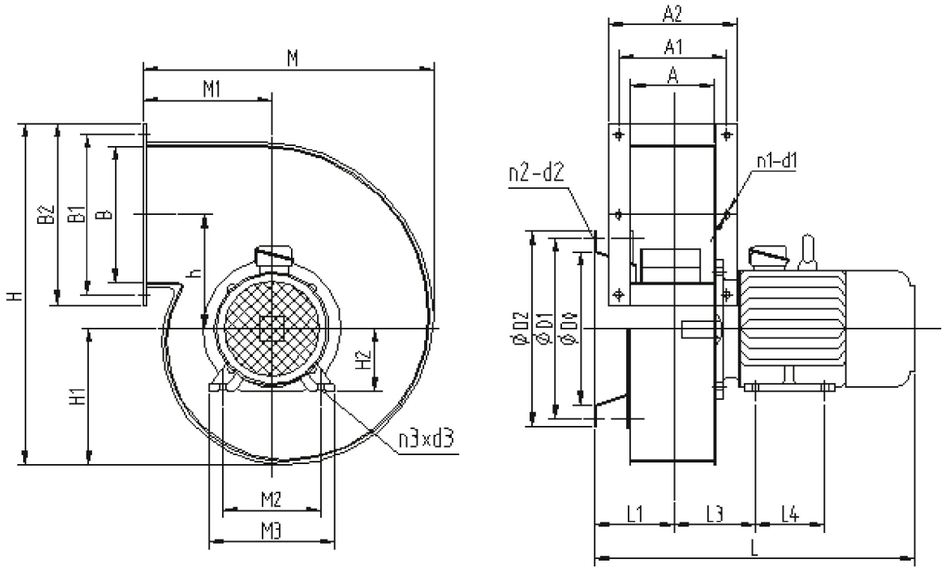
H — 后向叶片 Backward blade

G — 高效率 High efficiency

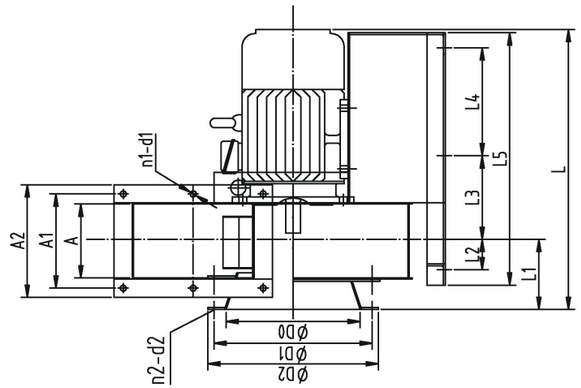
40 — 叶轮直径为40cm Impeller diameter 40 cm

4 — 4极电动机 4-pole motor

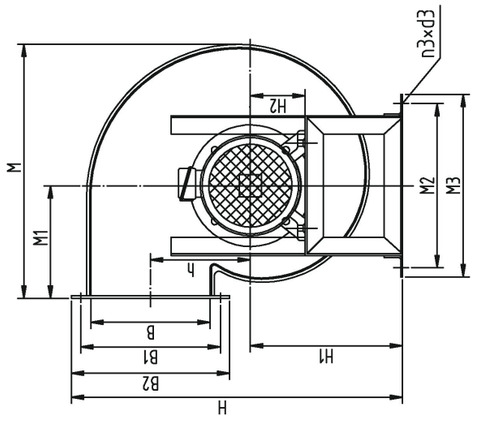
05 主要性能及外形安装尺寸 Performance and outline mounting dimensions



CLHG-20~36



CLHG-40~80



型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	噪声 noise db(A)	电动机 Motor 频率 freq HZ	电动机 Motor 功率 Power KW	电动机 Motor 型号 Model	外形尺寸 Outline dimension A	B	A1	A2	B1	B2	φD0	φD1	φD2	n1-d1	n2-d2	n3-d3	M1	M2	M3	L1	L2	L3	L4	L5	h	H1	H2	M	H	L	重量 Weight kg
CLHG-20-2	400	540	525	2900	72	50	0.37	A02-7112-H	120	150	76*2	175	60*3	203	170	200	224	10-φ8	8-φ8	4-φ8	157	112	145	105		112	90		105	141	71	318	348	398	20
	600	470	425		71																													
	800	395	300		73																													
	635	715	665	3500	76	60																												
	800	630	540		76																													
	1000	590	440		77																													
CLHG-25-2	800	780	740	2900	76	50	0.55	A02-7112-H	155	185	93*2	210	72*3	238	210	240	264	10-φ8	8-φ8	4-φ8	182	112	145	125		129	90		124	170	71	375	412	436	25
	1100	670	600		77																													
	1500	580	460		77																													
	1000	1090	1040	3500	78	60																												
	1400	950	840		79																													
	1800	820	650		80																													
CLHG-28-2	750	930	915	2900	75	50	0.75	Y801-2-H	180	215	116*2	235	82*3	268	240	270	294	10-φ8	8-φ8	4-φ10	202	125	160	138		146	100		140	193	80	422	466	477	38
	1000	9050	875		76																													
	1600	710	630		80																													
CLHG-32-2	1600	1390	1345	2900	82	50	1.1	Y802-2-H	210	245	127*2	276	94*3	309	270	305	335	10-φ10	8-φ10	4-φ10	225	125	160	160		163	100		159	218	80	476	532	515	48
	2200	1290	1200		82																													
	3000	990	840		85																													

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	噪声 noise db(A)	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	B	A1	A2	B1	B2	φD0	φD1	φD2	n1-d1	n2-d2	n3-d3	M1	M2	M3	L1	L2	L3	L4	L5	h	H1	H2	M	H	L	重量 Weight kg
CLHG-32-4	900	330	310	1450	70	50	0.55	Y80I-4-H	210	245	124*2	276	94*3	309	270	305	335	10-φ10	8-φ10	4-φ10	225	125	160	160		163	100		159	218	80	476	532	515	48
	1200	290	260		70																													
	1500	230	190		71																													
	1000	470	450	1750	73	60																												
	1400	420	390		73																													
	1800	340	280		74																													
CLHG-36-2	2400	1650	1600	2900	80	50	2.2	Y90L-2-H	230	280	134*2	296	105*3	344	320	355	385	10-φ10	8-φ10	4-φ10	252	140	176	170		179	125		176	249	90	534	595	596	60
	3300	1550	1400		79																													
	4200	1300	1100		80																													
CLHG-36-4	1750	410	375	1450	70	50	1.1	Y90S-4-H														140	180	170		173	100		176	249	90	534	595	565	57
	2150	365	315		71																													
	2600	300	230		72																													
	1900	620	580	1750	75	60																												
	2400	540	470		75																													
	2850	480	395		75																													
CLHG-40-2	3900	1855	1740	2900	89	50	4	Y112M-2-H	255	310	146*2	321	115*3	374	360	395	425	10-φ10	8-φ10	6-φ12	282	310	344	182	100	175	190	580	191	302	112	594	680	660	100
	5400	1525	1300		91																													
	7650	1060	620		93																													
CLHG-40-4	2000	530	500	1450	76	50	0.75	Y80Z-4-H																											
	2800	470	410		76																													
	3500	370	280		77																													
	2400	760	725	1750	80	60	1.1	Y90S-4-H																			120	500			90			580	75
	3200	700	620		80																													
	4200	540	410		81																													
CLHG-45-2	5000	2950	2840	2900	96	50	7.5	Y132S2-2-H	290	345	109*3	356	127*3	409	400	435	465	12-φ10	12-φ10	6-φ12	310	350	384	200	110	200	200	660	214	334	132	658	752	740	141
	7000	2550	2350		97																													
	9000	1940	1550		98																													
CLHG-45-4	2400	750	720	1450	79	50	1.1	Y90S-4-H																											
	3600	610	540		79																													
	5000	400	280		80																													
	3000	1050	1000	1750	83	60	1.5	Y90L-4-H																			120	550			90			621	90
	4500	870	770		83																													
	6000	590	420		84																													
CLHG-50-2	8000	3300	3100	2900	98	50	1.5	Y160M2-2-H	320	390	119*3	386	142*3	455	450	485	515	12-φ10	12-φ10	6-φ15	338	254	330	215	125	277	210	660	240	345	160	729	837	880	221
	10000	3030	2740		99																													
	12000	2450	2040		99																													
CLHG-50-4	3000	920	895	1450	81	50	2.2	Y100L1-4-H												6-φ12		390	429	215		220	130	600		370	100			681	110
	5100	740	660		81																													
	8200	410	215		83																													
	4250	1200	1150	1750	81	60	2.2	Y100L1-4-H																											
	6000	1075	970		83																													
	9800	585	300		86																													

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	噪声 noise db(A)	电动机 Motor 频率 freq HZ	功率 Power KW	型号 Model	外形尺寸 Outline dimension A	B	A1	A2	B1	B2	φD1	φD2	φD3	n1-d1	n2-d2	n3-d3	M1	M2	M3	L1	L2	L3	L4	L5	h	H1	H2	M	H	L	重量 Weight kg
CLHG-55-4	4500	1000	950	1450	84	50	2.2	Y100L1-4-H	355	425	131*3	423	154*3	491	490	532	566	12-φ10	12-φ10	6-φ12	367	416	456	240	140	240	160	670	260	400	100	792	905	742	180
	6400	880	800		84																													
	8400	680	540		85																													
	5400	1450	1390	1750	85	60	4	Y112M-4-H																							112			760	184
	7800	1250	1130		85																													
	10500	930	710		90																													
CLHG-55-6	3400	420	400	960	76	50	0.75	Y90S-6-H																											
	4200	390	350		76																													
	5400	320	260		78																													
	4000	610	580	1160	80	60	1.1	Y90L-6-H																			120	620			90			740	175
	5000	560	510		80																													
	6000	450	380		81																													
CLHG-60-4	5400	1180	1130	1450	86	50	3	Y100L2-4-H	380	460	142*3	458	167*3	536	530	572	606	12-φ12	16-φ10	6-φ15	390	462	506	254	155	250	170	710	280	427	100	847	975	768	270
	7600	1050	960		86																													
	9500	790	650		86																													
	6500	1690	1620	1750	92	60	5.5	Y132S-4-H																							132			840	274
	9000	1540	1410		91																													
	12000	1040	820		92																													
CLHG-60-6	4500	450	440	960	77	50	1.1	Y90L-6-H																							90			756	261
	5600	400	350		78																													
	6500	300	240		79																													
	4500	700	680	1160	82	60	1.5	Y100L1-6-H																			140	680			100			768	259
	6000	640	580		82																													
	7800	430	340		83																													
CLHG-70-4	9000	1730	1670	1450	92	50	11	Y160M-4-H	450	545	165*3	528	147*4	621	620	662	696	14-φ12	16-φ12	6-φ15	465	542	586	290	190	290	280	930	327	507	160	1007	1114	1126	330
	14000	1570	1420		93																													
	17000	1320	1100		94																													
CLHG-70-6	7000	750	710	960	83	50	3	Y132S-6-H																										1010	
	9000	700	640		83																													
	11000	600	500		84																													
	8000	1090	1040	1160	85	60	4	Y132M1-6-H																			210	830			132			1072	251
	10000	1030	950		85																													
	13000	850	720		86																													
CLHG-80-4	14000	2030	1940	1450	98	50	15	Y160L-4-H	510	620	139*4	588	166*4	696	700	742	776	16-φ12	16-φ12	6-φ19	509	590	644	320	210	320	300	980	370	564	160	1120	1282	1126	362
	21000	1640	1430		99																													
	24000	1320	1060		100																													
CLHG-80-6	9000	920	880	960	87	50	4	Y132M1-6-H																			240	930			132			1010	300
	12500	830	760		87																													
	16000	590	470		88																													
	900	1330	1290	1160	91	60	7.5	Y160M-6-H																			300	980			160			1072	362
	15000	1190	1080		92																													
	19000	850	690		92																													

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CLHB系列舰船用防爆（无火花）离心通风机
CLHB series marine explosion-proof (spark free) centrifugal fans

01 概述 General

● CLHB系列舰船用防爆（无火花）离心通风机（以下简称“无火花通风机”），是根据CLHG系列舰船用通风机发展出的一种舰船用防爆产品。它是按照《舰船用防爆通风机》、《爆炸性环境用防爆电气设计》和国内外船舶规范的有关规定设计制造的

CLHB series marine explosion-proof (spark free) centrifugal fan (hereinafter referred to as "spark free fan") is a marine explosion-proof product developed on CLHG series marine fan. It is designed and manufactured in accordance with the "explosion-proof marine fan", "Explosion-proof Electrical Design for Explosive Environment" and the relevant provisions of ship codes at home and abroad.

● 无火花通风机适用于船舶上各种含有易燃、易爆气体舱室的通风换气，也适用于其他相适应的场合。

The spark free fan is suitable for ventilation of various cabins containing flammable and explosive gases on ships, and is also suitable for other suitable applications.

● 本系列通风机经中华人民共和国防爆检验单位检验合格，取得了防爆合格证。同时也取得了中华人民共和国船舶检验局的认可。

This series of explosion-proof fan has passed the inspection of the explosion-proof Electrical Products Quality Supervision and Inspection Center of the People's Republic of China and obtained the explosion-proof certificate. It has also passed the inspection of Register of Shipping of the People's Republic of China and obtained the ship inspection certificate of the products.

02 特点 Features

● 本系列无火花通风机具有效率高、噪声低、电动机不会超载、耐蚀性好、抗摇摆、抗震动、抗冲击、运转平稳和安全可靠等特点。

This series of spark free fan has the characteristics of high efficiency, low noise, no-overload, good corrosion resistance, and anti-swing, vibration, shock, as well as stable running, safe and reliable.

03 结构型式 Structure

● 防爆通风机制成Ⅰ型（直联式）和Ⅱ型（隔舱式）两种结构。整机结构均为无火花型结构

The explosion-proof fan assembly is non-spark structure, and can be two kinds of structures: type I (direct driven type) and type II (compartment-type)

● Ⅰ型（直联式）防爆通风机制成防爆电动机直联传动结构，叶轮直接装在电动机轴上，机壳固定在防爆电机法兰上。

The type I (direct driven type) explosion-proof fan is directly driven by an explosion-proof motor, the impeller is installed on the motor shaft, and the casing is fixed on the explosion-proof motor flange.

● Ⅱ型（隔舱式）为防爆通风机和电机分隔舱结构，由风机、传动组、弹性联轴器、电动机等组成；传动组由轴承体、轴承、铜环、密封填料函等组成，能测温加油。一端直联防爆通风机，一端直联隔舱壁。

Type II (compartment type) is the arrangement that explosion-proof fan body and motor are compartmental mounting , which is composed of fan, transmission group, elastic coupling, motor, etc.. The transmission group is composed of bearing housing, bearing, shaft, copper ring, sealing stuffing box, etc., which will be accessible to temperature measurement and greasing. One end of transmission group is directly connected to the explosion-proof fan body, and the other end is directly connected to the bulkhead.

● 防爆通风机为卧式、单级、单吸入和气密式结构，也可制成立式结构。

The explosion-proof fan is horizontal mounting, single stage, single inlet and air-tight. Vertical structure is available.

04 型号说明 Model description

- C 舰船用 Marine application
- L 离心风机 Centrifugal fan
- H 后向叶片 Backward blade
- B 防爆 Explosion-proof
- 40 叶轮直径为40cm Impeller diameter 40 cm
- 4 4极电动机 4-pole motor
- II 隔舱式 Compartment type

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor					重量 Weight kg	
					频率 freq Hz	功率Power kW		型号Model			
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLHB-20-2	300	565	550	2900	50	0.75	1.5	YB801-2-H	YB90S-2-H	45	73
	600	476	425								
	800	395	300								
	520	755	715	3500	60						
	800	633	540								
	1000	590	445								
CLHB-25-2	800	780	740	2900	50	0.75	1.5	YB801-2-H	YB90S-2-H	47	75
	1100	673	605								
	1500	585	460								
	1000	1096	1040	3500	60						
	1400	950	840								
	1800	825	650								
CLHB-28-2	1000	780	740	2900	50	0.75	1.5	YB801-2-H	YB90S-2-H	50	78
	1600	673	605								
	2200	585	460								
CLHB-32-2	1600	1270	1230	2900	50	1.1	1.5	YB802-2-H	YB90S-2-H	58	86
	2200	1170	1080								
	3000	890	740								

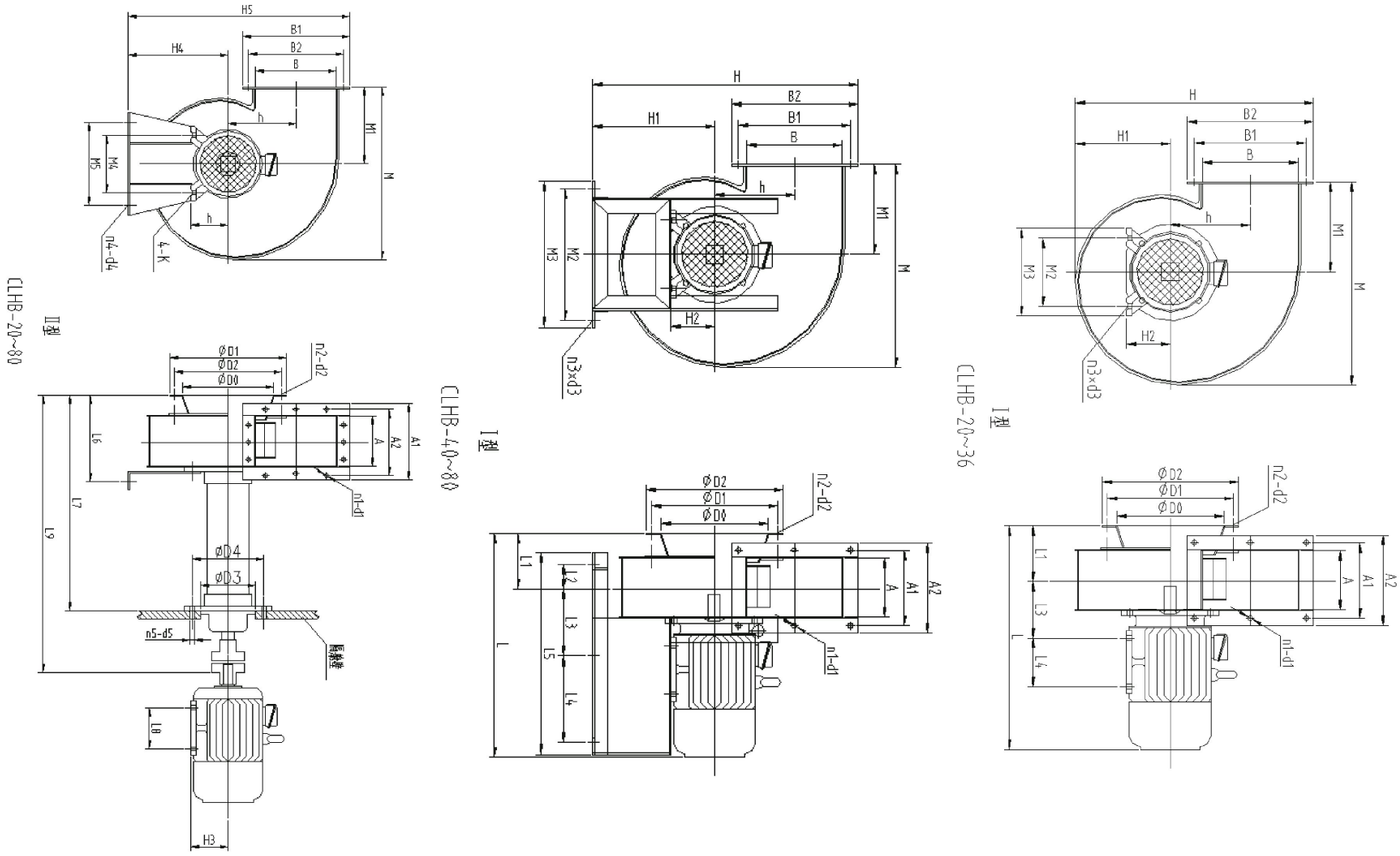
型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor					重量 Weight kg	
					频率 freq Hz	功率Power kW		型号Model			
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLHB-32-4	900	310	290	1450	50	0.55	1.1	YB801-4-H	YB90S-4-H	58	86
	1200	270	240								
	1500	220	180								
	1000	440	430	1750	60						
	1400	390	360								
	1800	320	260								
CLHB-36-2	2400	1690	1620	2900	50	2.2	2.2	YB90L-2-H	YB90L-2-H	64	91
	3300	1550	1430								
	4200	1320	1130								
CLHB-36-4	1400	445	425	1450	50	0.55	1.1	YB801-4-H	YB90S-4-H	61	88
	1750	410	375								
	2150	365	315								
	1400	640	635	1750	60						
	1900	620	580								
	2850	480	395								
CLHB-40-2	2800	2066	2015	2900	50	4	4	YB112M-2-H	YB112M-2-H	123	146
	5400	1525	1305								
	7685	1060	620								
CLHB-40-4	2000	530	500	1450	50	0.75	1.1	YB802-4-H	YB90S-4-H	88	115
	2800	470	410								
	3500	370	280								
	2400	760	725	1750	60	1.1		YB90S-4-H		101	
	3200	700	620								
	4200	540	410								
CLHB-45-2	5000	2960	2840	2900	50	7.5	7.5	YB132S2-2-H	YB132S2-2-H	185	191
	7000	2580	2350								
	9000	1940	1570								
CLHB-45-4	2400	750	720	1450	50	1.1	1.5	YB90S-4-H	YB90L-4-H	104	132
	3600	610	540								
	5000	400	280								
	3000	1060	1020	1750	60	1.5		YB90L-4-H		108	
	4500	870	770								
	6000	590	420								
CLHB-50-2	8000	3300	3130	2900	50	15	15	YB160M2-2-H	YB160M2-2-H	239	284
	10000	3030	2740								
	12000	2450	2040								
CLHB-50-4	4000	790	750	1450	50	1.5	2.2	YB90L-4-H	YB100L1-4-H	125	156
	5000	720	650								
	6000	580	470								
	4250	1200	1150	1750	60	2.2		YB100L1-4-H		133	
	6000	1075	970								
	9850	585	300								
CLHB-55-4	4500	1000	950	1450	50	2.2	2.2	YB100L1-4-H	YB100L1-4-H	149	174
	6400	880	800								
	8400	680	540								

型号 Model	流量 flow m3/h	全压 T-pressure Pa	静压 S-pressure Pa	转速 Speed r/min	电动机Motor					重量 Weight kg	
					频率 freq Hz	功率Power kW		型号Model			
						Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ
CLHB-55-4	5400	1450	1390	1750	60	4	4	YB112M-4-H	YB112M-4-H	162	187
	7800	1250	1130								
	10500	930	710								
CLHB-55-6	3400	420	400	960	50	0.75	1.1	YB90S-6-H	YB90L-6-H	137	162
	4200	390	350								
	5400	320	260								
	4000	610	580	1160	60	1.1		YB90L-6-H		142	
	5000	560	510								
	6400	450	380								
CLHB-60-4	5400	1180	1130	1450	50	3	3	YB100L2-4-H	YB100L2-4-H	290	315
	7600	1050	960								
	9500	790	650								
	6500	1690	1620	1750	60	5.5	5.5	YB132S-4-H	YB132S-4-H	323	348
	9000	1540	1410								
	12000	1040	820								
CLHB-60-6	4500	450	440	960	50	1.1	1.5	YB90L-6-H	YB100L-6-H	281	312
	5600	400	350								
	6500	300	240								
	4500	700	680	1160	60	1.5		YB100L-6-H		289	
	6000	640	580								
	7800	430	340								
CLHB-70-4	9000	1730	1670	1450	50	11	11	YB160M-4-H	YB160M-4-H	355	400
	14000	1570	1420								
	17000	1320	1100								
CLHB-70-6	7000	750	700	960	50	3	4	YB132S-6-H	YB132M1-6-H	276	319
	9000	700	640								
	11000	600	500								
	8000	1090	1040	1160	60	4		YB132M1-6-H		286	
	10000	1030	950								
	13000	850	720								
CLHB-80-4	14000	2030	1940	1450	50	15	15	YB160L-4-H	YB160L-4-H	389	443
	21000	1640	1430								
	24000	1320	1060								
CLHB-80-6	9000	920	880	960	50	4	4	YB132M1-6-H	YB132M1-6-H	313	346
	12500	830	760								
	16000	590	470								
	9000	1330	1250	1160	60	7.5	7.5	YB160M-6-H	YB160M-6-H	348	402
	15000	1150	1050								
	19000	850	650								

05

主要性能及外形安装尺寸

Performance and outline mounting dimensions



型号 Model	电动机Motor		外形尺寸 Outline dimension																				
	型号Model		A	A1	A2	ϕD0	n1-d1	n3-d3	M1	L1	L3	H1	H2	H4	ΦD3	M4	n4-d4	L6	L8	M	H	H5	L
	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	B	B1	B2	ϕD1	n2-d2	ϕD2	M2	M3	L4	h	H3	4-k	ΦD4	M5	n5-d5	L7	L9				
CLHB-20-2	YB801-2-H	YB90S-2-H	120	76*2	175	170	10-ϕ8	4-ϕ10	157	105	117	141	80	250	140	140	2-ϕ15	215	100	318	348	457	462
			150	60*3	203	200	8-ϕ8	224	125	165	100	105	90	ϕ10	165	200	4-ϕ12	403	558				
CLHB-25-2	YB801-2-H	YB90S-2-H	155	93*2	210	210	10-ϕ8	4-ϕ10	182	125	134	170	80	280	140	140	2-ϕ15	252	100	375	412	523	500
			185	72*3	238	240	8-ϕ8	264	125	165	100	124	90	ϕ10	165	250	4-ϕ12	440	595				
CLHB-28-2	YB801-2-H	YB90S-2-H	180	106*2	235	240	10-ϕ8	4-ϕ10	201.5	138	146	193	80	310	140	140	2-ϕ15	278	100	422	466	584	525
			215	82*3	268	270	8-ϕ8	294	125	165	100	140	90	ϕ10	165	250	4-ϕ12	466	621				
CLHB-32-2	YB802-2-H	YB90S-2-H	210	124*2	276	270	10-ϕ10	4-ϕ10	225	160	163	218	80	350	140	140	2-ϕ15	315	100	476	532	663	564
CLHB-32-4	YB801-4-H	YB90S-4-H	245	94*3	309	305	8-ϕ8	335	125	165	100	159	90	ϕ10	165	250	4-ϕ12	503	658				
CLHB-36-2	YB90L-2-H	YB90L-2-H	230	134*2	296	320	10-ϕ10	4-ϕ10	252	170	179	249	90	380	190	140	2-ϕ15	355	125	534	595	728	628
									140	180	125												
CLHB-36-4	YB801-4-H	YB90S-4-H	280	105*3	344	355	8-ϕ8	385	252	170	173	176	80	ϕ10	215	340	4-ϕ12	550	725				583
									125	165	100												

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型号 Model	电动机Motor		外形尺寸 Outline dimension																				
	型号Model		A	A1	A2	φD0	n1-d1	n3-d3	M1	L1	L3	H1	H2	H4	ΦD3	M4	n4-d4	L6	L8	M	H	H5	L
	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	B	B1	B2	φD1	n2-d2	φD2	M2	M3	L4	h	H3	4-k	ΦD4	M5	n5-d5	L7	L9				
CLHB-40-2	YB112M-2-H	YB112M-2-H	255	146*2	321	360	10-φ10	6-φ12	282	182	100	302 191	112 112	410 φ12	190	190 340	2-φ15	360	140 750	594	680	788	719
CLHB-40-4	YB802-4-H YB90S-4-H	YB90S-4-H	310	115*3	374	395	8-φ10	425	310	344	175	302 191	80 90	450 φ10	215	140 340	4-φ15	575	100 750				609 629
CLHB-45-2	YB132S2-2-H	YB132S2-2-H	290	109*3	356	400	12-φ10	6-φ12	310	200	110	334 214	132 132	450 φ12	240	216 450	2-φ15	395	140 846	658	752	868	784
CLHB-45-4	YB90S-4-H YB90L-4-H	YB90L-4-H	345	127*3	409	435	12-φ10	465	350	384	200	334 214	90 90	450 φ10	265	140 450	4-φ15	628	125 846				664 689
CLHB-50-2	YB160M2-2-H	YB160M2-2-H	320	119*3	386	450	12-φ10	4-φ12 515	338 254	215 330	277 277	345 240	160 160	500 φ15	240	254 450	2-φ15	425	210 876	729	837	967	930
CLHB-50-4	YB90L-4-H YB100L1-4-H	YB100L1-4-H	390	142*3	455	485	12-φ10	6-φ12 515	338 390	215 429	125 220	370 240	90 160 100 100	500 φ12	265	160 450	4-φ15	658	140 876		837		719 754
CLHB-55-4	YB100L1-4-H YB112M-4-H	YB100L1-4-H YB112M-4-H	355	131*3	423	490	12-φ10	6-φ12	367	240	140	400 260	100 100 112 112	540 φ12	240	160 450	2-φ19	470	140 921	792	905	1045	797 827
CLHB-55-6	YB90S-6-H YB90L-4-H	YB90L-6-H	425	154*3	491	532	12-φ10	566	416	456	240	400 260	90 90 90 90	540 φ12	265	160 450	4-φ15	703	125 921	792	905	1045	737 762

型号 Model	电动机Motor		外形尺寸 Outline dimension																				
	型号Model		A	A1	A2	φD0	n1-d1	n3-d3	M1	L1	L3	H1	H2	H4	ΦD3	M4	n4-d4	L6	L8	M	H	H5	L
	Ⅰ型 Type Ⅰ	Ⅱ型 Type Ⅱ	B	B1	B2	φD1	n2-d2	φD2	M2	M3	L4	h	H3	4-k	ΦD4	M5	n5-d5	L7	L9				
CLHB-60-4	YB100L2-4-H YB132S-4-H	YB100L2-4-H YB132S-4-H	380	142*3	458	530	12-φ12	6-φ15	390	254	155	427 280	100 100 132 132	585 φ12	260	160 600	2-φ19	500	140 1044	847	975	1133	824 884
CLHB-60-6	YB90L-6-H YB100L-6-H	YB100L-6-H	460	167*3	536	572	16-φ10	606	462	506	250	427 280	90 100 100 100	585 φ12	300	160 600	4-φ15	760	140 1044	847	975	1133	789 824
CLHB-70-4	YB160M-4-H	YB160M-4-H	450	165*3	528	620	14-φ12	6-φ15	465	290	190	507 327	160 160	675 φ15	260	254 600	2-φ19	571	210 1115	1007	1114	1312	1071
CLHB-70-6	YB132S-6H YB132M1-6-H	YB132M1-4-H	545	147*4	621	662	16-φ12	696	542	586	290	507 327	132 132 132 132	675 φ12	300	216 600	4-φ15	831	178 1115				995 995
CLHB-80-4	YB160L-4-H	YB160L-4-H	510	139*4	588	700	16-φ12	6-φ19	509	320	210	564 370	160 160	755 φ15	260	254 600	2-φ19	631	254 1175	1120	1282	1473	1171
CLHB-80-6	YB132M1-6H YB160M-6-H	YB132M1-6H YB160M-6-H	620	166*4	696	742	16-φ12	776	590	644	320	564 370 564 370	132 132 160 160	755 φ12 755 φ15	300	216 600 254 600	4-φ15	891	178 1175 210 1175				1056 1131

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