



烟台冰轮
YANTAI MOON

致力于人类生活质量的提高
Making a better life

YS系列满液式低温盐水机组

YS Series Flooded Low Temperature Brine Chiller Units

操作简单
Simple operation

稳定可靠
Stable and reliable

环保节能
Environment-friendly and energy-saving



烟台冰轮股份有限公司
YANTAI MOON CO.,LTD.



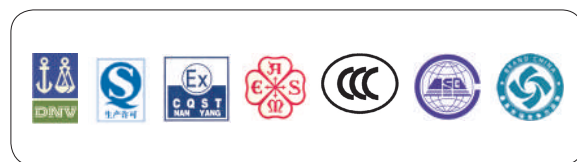
烟台冰轮集团创建于1956年，是以工商业制冷成套设备、中央空调、精密铸件、密封材料、电站设备、换热设备等为主导产业的跨行业，国际化经营的大型集团企业。

烟台冰轮股份有限公司（股票代码000811）是冰轮集团的核心企业，以制冷空调设备、气体压缩设备的研发、制造，制冷空调应用系统集成、制冷空调节能服务、工程成套服务为主业，是中国民族制冷空调行业的领军企业。

烟台冰轮拥有国家认定的企业技术中心，建有国内最先进的制冷性能实验室，掌握了以螺杆压缩机技术为代表的具有国际先进水平的核心技术，拥有发明专利28项，实用新型专利35项。是中国唯一拥有半封闭螺杆压缩机制造资质的企业，也是世界上唯一能够同时生产开启式、半封闭式和全封闭式螺杆压缩机的企业。烟台冰轮的活塞式压缩机1988年获得中国制冷产品最高质量奖—国家质量银质奖章，开启式螺杆压缩机的“理论技术及产品研发”2006年荣获中国制冷行业最高科技奖—国家科技进步二等奖。

烟台冰轮生产的8个系列，500多种制冷空调产品覆盖了食品冷冻冷藏、化工工艺制冷（冷却）、人工智能环境等领域。凭借先进的技术、可靠的品质和良好的服务为中国和全球超过65个国家的用户提供了“节能、环保、安全”的使用体验，帮助客户实现业务的成长。烟台冰轮全资子公司——具有综合甲级资质的鲁商冰轮建筑设计有限公司，可为用户提供专业的工程项目整体规划及系统综合设计服务。

烟台冰轮在中国各地拥有35个营销服务机构，在全球21个国家设有22个海外营销服务机构，在越南设有海外工厂，构建了比较完善的营销服务网络，可快速响应用户从技术咨询、项目规划、系统设计、设备采购、工程施工，到技术培训、维护保养、系统改造升级等全过程的服务需求，承诺为用户提供产品全生命周期的服务保障。





Yantai Moon Group was founded in 1956, which is a cross-industry and international operations of large enterprise groups with industrial and commercial refrigeration equipment, central air-conditioning systems, precision castings, sealing materials, power plant equipment, heat transfer equipment as its leading industries.

Yantai Moon Co., Ltd. (stock code of 000811) is the core business unit of Moon Group, with research and development and manufacturing of refrigeration conditioning equipment and gas compression equipment, integration of refrigeration air-conditioning application systems, refrigeration air-conditioning energy-saving services, engineering service packages as its main business, and it is an industry leader of China refrigeration conditioning industry.

Yantai Moon Group has a state-certified enterprise technology center, and build the most advanced refrigeration performance lab in China. The company mastered the international advanced core technology with the screw compressor technology as its representative, and hold 28 invention patents and 35 utility model patents. It is the only enterprise with manufacturing qualification of semi-hermetic screw compressor in China, and also is the world's only enterprise who can produce open-type, semi-hermetic type and hermetic type screw compressors. The reciprocating compressor manufactured by Yantai Moon Group achieved the highest quality award in China refrigeration products - National Quality Silver Medal in 1988 and the "theory and product research and development" of open-type screw compressor achieved the highest technology award in China Refrigeration

industry - Second-class National Science and Technology Progress Prize in 2006.

8 series, over 500 kinds of refrigeration & air-conditioning products from Yantai Moon Group have covered the food refrigeration, chemical process refrigeration (cooling), artificial intelligence environment and other fields. With advanced technology, reliable quality and good service, it has provided the user experiences of "energy-saving, environmental protection, safety" for customers in China and more than 65 countries around the world, and assisted customers to achieve the business growth. The wholly-owned subsidiary of Yantai Moon Group - Lushang Binglun Architectural Design Co., Ltd. with Class A integration qualification can provide customers with the professional overall project planning and system design services.

Yantai Moon Group owns 35 marketing services agencies in China and 22 overseas marketing services agencies in 21 countries, and has set up an overseas factory in Vietnam. It has built a comprehensive marketing and service network, which can make quick response to customers for the technical advisory, project planning, system design, equipment procurement, project construction, technical training, maintenance and repair, system upgrading and other services. The company is committed to provide customers with service support within the whole product life cycle.



产品介绍

烟台冰轮股份有限公司凭借五十多年来制冷空调设备的制造经验和持续的技术研发能力，并与西安交通大学、世界业内知名企业经过多年的技术合作与交流，对压缩机的热、动力性能的理论研究和实际工作过程、压力脉动、转子受力和油分布可视化等进行了创新试验研究，研制出拥有 10 余项自主知识产权和核心技术的新型 LG 系列高效螺杆压缩机。

YS 系列满液式低温盐水机组以新型 LG 系列高效螺杆压缩机为主机，采用 R22 为制冷剂，也可采用 R134a、R404a、R507 等工质；可使用乙二醇、氯化钙、甲醇、丙二醇、氯化钠等各种溶液做载冷剂，为化工、医药、食品加工等行业提供工艺冷却用低温盐水。

注：订货时请注明载冷剂名称，以便我公司优化机组配置。

Product introduction

Depending upon its manufacturing experience and sustainable technical R&D capability in refrigeration and air conditioning equipment for more than 50 years and through many years of technical cooperation and exchange with Xi'an Jiaotong University and the world well-known enterprises in the industry, Yantai Moon Co., Ltd. (hereinafter abbreviated to Yantai Moon) has conducted theoretical research on the thermal and dynamic performance of compressors and innovative experimental research on their actual working process, pressure fluctuation, rotor stress and oil distribution visualization and developed new LG series high-efficiency screw compressors with over 10 independent intellectual property rights and core technologies.

YS series flooded low temperature brine chiller units use LG series new high-efficiency screw compressors as principal machines and R22 as refrigerant and can also use the refrigerants including R134a, R404a, R507, etc. In addition, the series units can use various solutions including ethylene glycol, calcium chloride, methanol, propylene glycol and sodium chloride solutions etc. as secondary refrigerants to provide low temperature process cooling brine for the industries involving chemical industry, medicine, food processing, etc.

Note: When ordering, please specify the name of secondary refrigerants so that our company optimizes the unit configuration.

产品特点

- YS 系列低温盐水机组中的压缩机采用新型高效 LG 系列螺杆压缩机，噪音低，可靠性高。
- 冷凝器为水冷壳管式，采用高效换热管，体积小，重量轻。
- 蒸发器采用满液式结构。
- 机组回油采用引射回油，操作简捷方便，可靠性高。
- 油冷却器采用液冷油冷或水冷油冷，换热效果好，运行可靠。
- 机组液位控制采用国际最先进的 PMFL+SV 控制，可实现连续的自动调节，可靠性好。
- 小型机组为整机结构，大型机组采用撬装，安装现场总体组装，方便快捷。
- 整个机组运转平稳、振动小、安全可靠。



Product features

- The compressors in YS series low temperature brine units use LG series new high-efficiency screw compressors with low noise and high reliability.
- Condensers are water-cooled shell-and-tube condensers, use high efficiency heat exchange tubes and have small volume and small weight.
- The evaporators use a flooded structure.
- The injection oil return mode is used in unit oil return, thus realizing simple and convenient operation and high reliability.
- The oil coolers use liquid-cooled oil coolers or water-cooled ones with good heat exchange effect and high operation reliability.
- The unit uses the international most advanced PMFL+SV control mode in liquid level control, which can realize continuous automatic regulation and good reliability.
- A small unit is an integral structure and a large unit is skid-mounted. The unit can be generally assembled conveniently and quickly at installation site.
- Smooth and stable operation, small vibration and high safety and reliability of the whole unit

电气控制

Electrical control

YS 系列低温盐水机组分为远程自动型（A）、本地自动型（B）两种型式。

YS series low temperature brine chiller units include two types such as remote automatic type (A) and local automatic type (B).

远程自动型（A）

- 采用 PLC 作为控制核心，可靠性高，功能强大。采用进口控制元件，控制灵敏可靠。
- 自动检测冷水出水温度，通过 PLC 自动控制滑阀上卸载，降低能耗，控制出水温度精度高。
- PLC 采用闭环直接数字控制 (DDC)，可实现全过程、全自动电脑调节控制，使机组控制更精确、可靠。
- 能够根据用户的需求迅速调整 PLC 程序，控制程序灵活便捷，最大限度的满足用户的实际需求。
- 参照说明书便能很快掌握控制系统使用技巧，人机界面采用触摸屏，操作简捷、方便。
- 具有自诊断功能，在一些参数接近极限值时，会自动采取一定的保护措施，并发出警报，使机组不受损伤，尽量减少非计划停机。
- 自动记录保存机组故障的报警情况及发生时间，并发出故障处理提示。
- 可选配置：机组除具有上述功能外，还具有开放的网络通讯接口。
 - a. 可实现与楼宇自控系统或上位机系统双向通讯。
 - b. 可实现多台机组协调运行实现多机控制（群控）。
 - c. 通过电话网络或因特网，可实现在不同的城市或地域对单台或多台机组进行远程监控。



Remote automatic type (A)

- PLC is used as the control core, thus realizing high reliability and powerful function. Imported control components are used to realize sensitive and reliable control.
- Automatically monitor cold water outlet temperature; automatically control slide valve loading & unloading via the PLC, reduce energy consumption and control water outlet temperature with high accuracy.
- The closed-loop direct digital control (DDC) mode is used for PLC, which can thus realize fully automatic computerized regulation and control in the whole process as well as more accurate and reliable control of units.
- The PLC program can be adjusted rapidly as needed by users, and the control program is flexible and convenient, thus meeting the user's actual demand to the greatest extent possible.
- The use skill in the control system can be mastered very quickly by referring to the specification; the man-machine interface uses a touch screen to realize simple and convenient operation.
- The unit has self-diagnosis function; when some parameters approach their limit values, the unit will take certain protective measures and give an alarm to prevent the unit from being damaged and minimize nonscheduled downtime.
- Automatic recording and saving of fault alarming and occurrence time of units, giving a fault treatment prompt.
- Optional configuration: Units have open network communication interfaces in addition to the above functions.
 - a. Two-way communication with automatic building control system or upper machine system.
 - b. Coordinated operation of multiple units and multi-machine control (group control).
 - c. Remote monitoring of a single unit or multiple units can be realized in different cities or regions via telephone network or Internet.

本地自动型 (B)

- 采用国产知名品牌元件，可靠性高。
- 应用冰轮自主研发的节能控制器，机组运行过程中，自动监测冷媒水出水温度，调节压缩机载位。
- 控制台、控制柜故障保护齐全，性能稳定、质量可靠、操作方便。



Local automatic type (B)

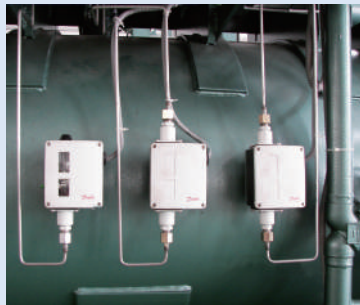
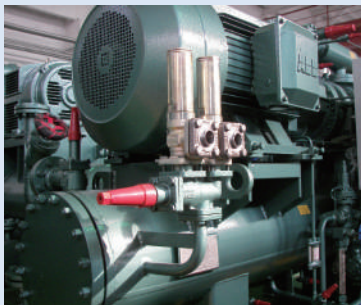
- The components of domestic well-known brands are used to realize high reliability.
- By using the energy saving controller independently developed by Yantai Moon, the chilled water outlet temperature is automatically monitored and the loading level of compressors is regulated during operation of units.
- Complete fault protection measures, stable performance, reliable quality and convenient operation of consoles and control cabinets

自动保护

- 排气压力高
- 吸气压力低
- 油温超高
- 油泵过载
- 油压低
- 蒸发器断水
- 主电机过载
- 超低温保护

Automatic protection

- High exhaust pressure
- Low air intake pressure
- Ultra-high oil temperature
- Oil pump overload
- Low oil pressure
- Evaporator water break
- Main motor overload
- Ultra-low temperature protection





满液式低温盐水机组型号释义

Interpretation of model marks of flooded low temperature brine chiller unit

X X X X X X

控制方式: A 表示远程自动型; B 表示本地自动型;
Control mode: A represents remote auto type; B represents the local auto-type;

冷凝器型式: S 表示壳管水冷; B 表示板换冷凝器; Z 表示蒸发式冷凝器;

Condenser Type: S represents shell and tube water-cooled type; B represents board-cooled condenser; Z represents evaporative condenser;

蒸发器型式: M 表示满液式; H 表示虹吸式; B 表示板换式; G 表示干式;
Evaporator Type: M represents flooded type; H represents siphon type; B represents board switched type; G represents dry-type;

工况: Z 表示中温, 出水温度为 -5°C ; N 表示出水温度为 -15°C ; D 表示出水温度 -25°C ; C 表示超低温, 出水温度为 -35°C ;
Conditions: Z represents the mediate temperature and the outer temperature is -5°C ; N represents the water temperature is -15°C ; D represents the water temperature is -25°C ; C represents the ultra-low temperature and the outer temperature is -35°C ;

压缩机类型及数量: 如开启单级 12M、16M、20M、20L、25M、25L、32M、32L、40M 等

Compressor type and quantity: such as Single-stage opening-type 12M, 16M, 20M, 20L, 25M, 25L, 32M, 32L, 40M, and etc.

机组基本代号: YS 表示盐水机组

Unit basic code: YS represents the brine chiller unit.

适用范围

Scope of application

项目 Item	载冷剂种类 Refrigerant varieties	范围 (单位℃) Range (unit °C)
冷媒水出口温度 Chilled water outlet temperature	乙二醇 Glycol	[0,-10]
	氯化钙 Calcium chloride	[0,-10]
		[-10,-20]
冷却水进口温度 Cooling water inlet temperature	水 Water	19 ~ 33

注意事项

- 冷媒水溶液的浓度根据冷媒水出水温度确定。
- 技术参数表中制冷量是标定工况下的制冷量，其余工况下的制冷量参照机组性能参数表。
- 技术参数表中的换热器水侧阻力降为设计工况流量下阻力降，如果运行高温工况需考虑水流量的增加，阻力降需要相应提高 10% ~ 30%。
- 换热器水侧流量最大偏差不得超过最高运行工况下流量的 10%。
- 若采用其它载冷剂或运行工况不在适用范围内，需非标设计。
- 为保证系统可靠运行，系统水泵选型时总扬程应该比计算总阻力大 10% ~ 20%。
- 常规配置油冷型式为制冷剂冷油冷，且不带经济器。

Attentions

- Chilled water solution concentration is determined according to chilled water outlet temperature.
- The refrigeration capacity in the table of specifications is the refrigeration capacity under the nominal working conditions. For the refrigeration capacity under other working conditions, refer to the table of performance parameters of units.
- The resistance drop on the heat exchanger water side in the table of specifications is the resistance drop at the flow rate under the designed working conditions; in case of high temperature working conditions, the increase in water flow rate shall be taken into account and the resistance drop shall be increased by 10%~30% accordingly.
- The maximum deviation of the flow rate on the heat exchanger water side doesn't exceed 10% of the flow rate under the maximum operating conditions.
- A nonstandard design is needed if other secondary refrigerants are used or operating conditions are not within the scope of application.
- The total head of the selected system water pump shall be 10%~20% larger than the calculated total resistance in order to ensure reliable operation of the system.
- The standard oil cooler type is refrigerant-cooled oil cooler without economizer.

YS 系列满液式低温盐水机组技术参数表

Technical parameters of YS series flooded low temperature brine chiller units

项目 Item		单位 Unit	YS12MZMSA(B)	YS16MZMSA(B)	YS20MZMSA(B)
制冷量 Refrigeration capacity		kw	168.2	367	704.4
冷媒水品种 Chilled water varieties			乙二醇、氯化钙水溶液 Ethylene glycol water solution and calcium chloride water solution		
能量调节范围 Capacity control range		%	15 ~ 100		
制冷剂 Refrigerant	品种 Varieties		R22		
	充注量 Charge	kg	~ 200/200	~ 330/330	~ 600/530
	标准 Standard		GB7373 《工业用二氟一氯甲烷 (F22)》 GB7373 Industrial CHClF2 (F22)		
冷冻机油 Refrigerant oil	牌号 Brand		M-K4001		
	充注量 Charge	l	~ 110	~ 160	~ 370
	标准 Standard		Q/YB00J08.21.1 《冷冻机油 (矿物型)》 Q/YB00J08.21.1 "Frozen oil (Mineral type)"		
压缩机型号 Compressor model			LG12M	LG16M	LG20M
电机额定功率 Rated power of motor		kw	65	132	250
使用电制 Electrical system			3P 380V 50HZ		
冷凝器 Condenser	型式 Type		壳管式 Shell-tube		
	进水温度 Water inlet temperature	°C	30		
	冷却水循环量 Cooling water circulation volume	m ³ /h	40	85	155
	冷却水进水管径 Cooling water inlet and outlet pipe diameter	mm	DN80	DN125	DN150
	冷却水侧设计压力 Cooling water-side design pressure	MPa	0.6		

项目 Item		单位 Unit	YS12MZMSA(B)	YS16MZMSA(B)	YS20MZMSA(B)
蒸发器 Evaporator	型式 Type		满液式 Flooded type		
	出水温度 Output water temperature	°C	-5		
	冷媒水循环量 Chilled water circulation volume	m ³ /h	35/36	70/75	135/140
	冷媒进出口通径 Drift diameter of chilled water inlet and outlet	mm	DN80	DN125	DN150
	冷媒水侧设计压力 Chilled water side design pressure	MPa	0.6		
冷媒水、冷却水污垢系数 Fouling factor of chilled water and cooling water	m ² .k/kw	0.086			
冷凝器、蒸发器水程阻力 Resistance of condenser and evaporator on water path	MPa	≤0.1			
冷却水水质标准 Cooling water quality standard		GB50050 《工业循环冷却水的处理规范》 GB50050 Code for Design of Industrial Recirculating Cooling Water Treatment			
外形尺寸 (长 * 宽 * 高) Outline dimension (L*W*H)	mm	~ 3049*1886*1912	~ 3178*2265*2217	~ 3836*2435*2398/ ~ 3763*2374*2302	
净重 Net weight	kg	~ 3750	~ 5000	~ 7000	

注:

- ①本表中的设计工况为：冷凝器冷却水进水温度 30℃，进出水温差 5℃；冷媒水出水温度 -5℃，进出水温差 5℃。
- ②本表中载冷剂流量以乙二醇水溶液 35% 质量浓度、氯化钙水溶液 20.9% 质量浓度计算。
- ③采用其它载冷剂时，冷媒水循环量应根据其物性参数重新计算。
- ④上述表格中，/ 前表示乙二醇机组，/ 后表示氯化钙机组。

Note:

- ① The designed working conditions in the table: the cooling water inlet temperature of the condenser is 30°C and the difference between the water inlet temperature and the water outlet temperature is 5 °C ; the chilled water outlet temperature is -5 °C and the difference between the water inlet temperature and the water outlet temperature is 5 °C .
- ② The secondary refrigerant flow rate in the table is calculated according to 35% mass concentration of ethylene glycol water solution and 20.9% mass concentration of calcium chloride water solution.
- ③ In case of using other secondary refrigerants, the circulation volume of chilled water shall be re-calculated according to its physical property parameters.
- ④ In the above tables, the item before / denotes an ethylene glycol unit and the item after / denotes a calcium chloride unit.

YS 系列满液式低温盐水机组技术参数表

Technical parameters of YS series flooded low temperature brine chiller units

项目 Item		单位 Unit	YS20LZMSA(B)	YS25MZMSA(B)	YS25LZMSA(B)
制冷量 Refrigeration capacity		kw	923.5	1449	1806
冷媒水品种 Chilled water varieties			乙二醇、氯化钙水溶液等 Ethylene glycol water solution, calcium chloride water solution, etc.		
能量调节范围 Capacity control range		%	15 ~ 100		
制冷剂 Refrigerant	品种 Varieties		R22		
	充注量 Charge	kg	~ 860/700	~ 1200/1000	~ 1450/1200
	标准 Standard		GB7373 《工业用二氟一氯甲烷 (F22)》 GB7373 Industrial CHClF2 (F22)		
冷冻机油 Refrigerant oil	牌号 Brand		M-K4001		
	充注量 Charge	l	~ 470	~ 760	~ 760
	标准 Standard		Q/YB00J08.21.1 《冷冻机油 (矿物型)》 Q/YB00J08.21.1 "Frozen oil (Mineral type)"		
压缩机型号 Compressor model			LG20L	LG25M	LG25L
电机额定功率 Rated power of motor		kw	315	500	630
使用电制 Electrical system			3P 10KV 50HZ		
冷凝器 Condenser	型式 Type		壳管式 Shell-tube		
	进水温度 Water inlet temperature	°C	30		
	冷却水循环量 Cooling water circulation volume	m ³ /h	205	320	395
	冷却水进出水管径 Cooling water inlet and outlet pipe diameter	mm	DN200	DN250	DN250
	冷却水侧设计压力 Cooling water-side design pressure	MPa	0.6		

项目 Item		单位 Unit	YS20LZMSA(B)	YS25MZMSA(B)	YS25LZMSA(B)
蒸发器 Evaporator	型式 Type		满液式 Flooded type		
	出水温度 Output water temperature	°C	-5		
	冷媒水循环量 Chilled water circulation volume	m ³ /h	175/185	275/285	345/355
	冷媒进出口通径 Drift diameter of chilled water inlet and outlet	mm	DN200	DN250	DN250
	冷媒水侧设计压力 Chilled water-side design pressure	MPa	0.6		
冷媒水、冷却水污垢系数 Fouling factor of chilled water and cooling water	m ² .k/kw	0.086			
冷凝器、蒸发器水程阻力 Resistance of condenser and evaporator on water path	MPa	≤0.1			
冷却水水质标准 Cooling water quality standard		GB50050 《工业循环冷却水的处理规范》 GB50050 Code for Design of Industrial Recirculating Cooling Water Treatment			
外形尺寸 (长 * 宽 * 高) Outline dimension (L * W * H)	mm	~ 3955*2795*2882/ ~ 3805*2685*2639	~ 5725*3280*3143/ ~ 4830*3280*3143	~ 5800*3380*3163/ ~ 4880*3380*3143	
净重 Net weight	kg	~ 10000/8800	~ 18000/17000	~ 20000/19000	

注:

- ①本表中的设计工况为: 冷凝器冷却水进水温度 30°C, 进出水温差 5°C; 冷媒水出水温度 -5°C, 进出水温差 5°C。
- ②本表中载冷剂流量以乙二醇水溶液 35% 质量浓度、氯化钙水溶液 20.9% 质量浓度计算。
- ③采用其它载冷剂时, 冷媒水循环量应根据其物性参数重新计算。
- ④上述表格中, / 前表示乙二醇机组, / 后表示氯化钙机组。

Note:

- ① The designed working conditions in the table: the cooling water inlet temperature of the condenser is 30°C and the difference between the water inlet temperature and the water outlet temperature is 5°C; the chilled water outlet temperature is -5°C and the difference between the water inlet temperature and the water outlet temperature is 5°C.
- ② The secondary refrigerant flow rate in the table is calculated according to 35% mass concentration of ethylene glycol water solution and 20.9% mass concentration of calcium chloride water solution.
- ③ In case of using other secondary refrigerants, the circulation volume of chilled water shall be re-calculated according to its physical property parameters.
- ④ In the above tables, the item before / denotes an ethylene glycol unit and the item after / denotes a calcium chloride unit.

YS 系列满液式低温盐水机组技术参数表

Technical parameters of YS series flooded low temperature brine chiller units

项目 Item		单位 Unit	YS32MZMSA(B)	YS32LZMSA(B)	YS40MZMSA(B)
制冷量 Refrigeration capacity		kw	2752	3289	4617
冷媒水品种 Chilled water varieties			乙二醇、氯化钙水溶液等 Ethylene glycol water solution, calcium chloride water solution, etc.		
能量调节范围 Capacity control range		%	15 ~ 100		
制冷剂 Refrigerant	品种 Varieties		R22		
	充注量 Charge	kg	~ 1950/1850	~ 2200/2050	~ 2700/2500
	标准 Standard		GB7373《工业用二氟一氯甲烷(F22)》 GB7373 Industrial CHClF ₂ (F22)		
冷冻机油 Refrigerant oil	牌号 Brand		M-K4001		
	充注量 Charge	l	~ 1200	~ 1200	~ 2000
	标准 Standard		Q/YB00J08.21.1《冷冻机油(矿物型)》 Q/YB00J08.21.1“Frozen oil (Mineral type)”		
压缩机型号 Compressor model			LG32M	LG32L	LG40M
电机额定功率 Rated power of motor		kw	900	1120	1800
使用电制 Electrical system			3P 10KV 50HZ		
冷凝器 Condenser	型式 Type		壳管式 Shell-tube		
	进水温度 Water inlet temperature	°C	30		
	冷却水循环量 Cooling water circulation volume	m ³ /h	605	720	1055
	冷却水进水管径 Cooling water inlet and outlet pipe diameter	mm	DN350	DN350	DN400
	冷却水侧设计压力 Cooling water-side design pressure	MPa	0.6		

项目 Item		单位 Unit	YS32MZMSA(B)	YS32LZMSA(B)	YS40MZMSA(B)
蒸发器 Evaporator	型式 Type		满液式 Flooded type		
	出水温度 Output water temperature	°C	-5		
	冷媒水循环量 Chilled water circulation volume	m ³ /h	525/545	625/650	877/910
	冷媒进出口口径 Drift diameter of chilled water inlet and outlet	mm	DN300	DN350	DN400
	冷媒水侧设计压力 Chilled water-side design pressure	MPa	0.6		
冷媒水、冷却水污垢系数 Fouling factor of chilled water and cooling water	m ² .k/kw	0.086			
冷凝器、蒸发器水程阻力 Resistance of condenser and evaporator on water path	MPa	≤0.1			
冷却水水质标准 Cooling water quality standard		GB50050 《工业循环冷却水的处理规范》 GB50050 Code for Design of Industrial Recirculating Cooling Water Treatment			
外形尺寸 (长 * 宽 * 高) Outline dimension (L * W * H)	mm	~ 7800*4050*3547	~ 7800*4150*3730	~ 9320*4940*4680	
净重 Net weight	kg	~ 32000	~ 37000	~ 52000	

注:

- ①本表中的设计工况为：冷凝器冷却水进水温度 30℃，进出水温差 5℃；冷媒水出水温度 -5℃，进出水温差 5℃。
- ②本表中载冷剂流量以乙二醇水溶液 35% 质量浓度、氯化钙水溶液 20.9% 质量浓度计算。
- ③采用其它载冷剂时，冷媒水循环量应根据其物性参数重新计算。
- ④上述表格中，/ 前表示乙二醇机组，/ 后表示氯化钙机组。

Note:

- ① The designed working conditions in the table: the cooling water inlet temperature of the condenser is 30℃ and the difference between the water inlet temperature and the water outlet temperature is 5℃; the chilled water outlet temperature is -5℃ and the difference between the water inlet temperature and the water outlet temperature is 5℃.
- ② The secondary refrigerant flow rate in the table is calculated according to 35% mass concentration of ethylene glycol water solution and 20.9% mass concentration of calcium chloride water solution.
- ③ In case of using other secondary refrigerants, the circulation volume of chilled water shall be re-calculated according to its physical property parameters.
- ④ In the above tables, the item before / denotes an ethylene glycol unit and the item after / denotes a calcium chloride unit.

YS 系列满液式低温盐水机组技术参数表

Technical parameters of YS series flooded low temperature brine chiller units

项目 Item		单位 Unit	YS12MNMSA(B)	YS16MNMSA(B)	YS20MNMSA(B)
制冷量 Refrigeration capacity		kw	111	245	472
冷媒水品种 Chilled water varieties			氯化钙水溶液 Calcium chloride water solution		
能量调节范围 Capacity control range		%	15 ~ 100		
制冷剂 Refrigerant	品种 Varieties		R22		
	充注量 Charge	kg	~ 240	~ 300	~ 650
	标准 Standard		GB7373《工业用二氟一氯甲烷(F22)》 GB7373 Industrial CHClF ₂ (F22)		
冷冻机油 Refrigerant oil	牌号 Brand		M-K4001		
	充注量 Charge	l	~ 110	~ 160	~ 370
	标准 Standard		Q/YB00J08.21.1《冷冻机油(矿物型)》 Q/YB00J08.21.1“Frozen oil (Mineral type)”		
压缩机型号 Compressor model			LG12M	LG16M	LG20M
电机额定功率 Rated power of motor		kw	55	110	220
使用电制 Electrical system			3P 380V 50HZ		
冷凝器 Condenser	型式 Type		壳管式 Shell-tube		
	进水温度 Water inlet temperature	°C	30		
	冷却水循环量 Cooling water circulation volume	m ³ /h	28	60	115
	冷却水进水管径 Cooling water inlet and outlet pipe diameter	mm	DN80	DN100	DN150
	冷却水侧设计压力 Cooling water-side design pressure	MPa	0.6		

项目 Item		单位 Unit	YS12MNMSA(B)	YS16MNMSA(B)	YS20MNMSA(B)
蒸发器 Evaporator	型式 Type		满液式 Flooded type		
	出水温度 Output water temperature	°C	-15		
	冷媒水循环量 Chilled water circulation volume	m ³ /h	25	50	95
	冷媒进出口口径 Drift diameter of chilled water inlet and outlet	mm	DN80	DN100	DN125
	冷媒水侧设计压力 Chilled water-side design pressure	MPa	0.6		
冷媒水、冷却水污垢系数 Fouling factor of chilled water and cooling water	m ² .k/kw	0.086			
冷凝器、蒸发器水程阻力 Resistance of condenser and evaporator on water path	MPa	≤0.1			
冷却水水质标准 Cooling water quality standard		GB50050 《工业循环冷却水的处理规范》 GB50050 Code for Design of Industrial Recirculating Cooling Water Treatment			
外形尺寸 (长 * 宽 * 高) Outline dimension (L*W*H)	mm	~ 3059*1886*1912	~ 3102*2088*2127	~ 3770*2390*2374	
净重 Net weight	kg	~ 4000	~ 5000	~ 7100	

注:

- ①本表中的设计工况为: 冷凝器冷却水进水温度 30°C, 进出水温差 5°C; 冷媒水出水温度 -15°C, 进出水温差 5°C。
- ②本表中载冷剂流量以氯化钙水溶液 25.7% 质量浓度计算。
- ③采用其它载冷剂时, 冷媒水循环量应根据其物性参数重新计算。

Note:

- ① The designed working conditions in the table: the cooling water inlet temperature of the condenser is 30°C and the difference between the water inlet temperature and the water outlet temperature is 5°C; the chilled water outlet temperature is -15°C and the difference between the water inlet temperature and the water outlet temperature is 5°C.
- ② The secondary refrigerant flow rate in the table is calculated according to 25.7% mass concentration of calcium chloride water solution.
- ③ In case of using other secondary refrigerants, the circulation volume of chilled water shall be re-calculated according to its physical property parameters.

YS 系列满液式低温盐水机组技术参数表

Technical parameters of YS series flooded low temperature brine chiller units

项目 Item		单位 Unit	YS20LNMSA(B)	YS25MNMSA(B)	YS25LNMSA(B)
制冷量 Refrigeration capacity		kw	620	972	1213
冷媒水品种 Chilled water varieties			氯化钙水溶液 Calcium chloride water solution		
能量调节范围 Capacity control range		%	15 ~ 100		
制冷剂 Refrigerant	品种 Varieties		R22		
	充注量 Charge	kg	~ 800	~ 1050	~ 1250
	标准 Standard		GB7373 《工业用二氟一氯甲烷 (F22)》 GB7373 Industrial CHClF ₂ (F22)		
冷冻机油 Refrigerant oil	牌号 Brand		M-K4001		
	充注量 Charge	l	~ 470	~ 760	~ 760
	标准 Standard		Q/YB00J08.21.1 《冷冻机油 (矿物型)》 Q/YB00J08.21.1 "Frozen oil (Mineral type)"		
压缩机型号 Compressor model			LG20L	LG25M	LG25L
电机额定功率 Rated power of motor		kw	315	450	560
使用电制 Electrical system			3P 10KV 50HZ		
冷凝器 Condenser	型式 Type		壳管式 Shell-tube		
	进水温度 Water inlet temperature	°C	30		
	冷却水循环量 Cooling water circulation volume	m ³ /h	150	235	290
	冷却水进水管径 Cooling water inlet and outlet pipe diameter	mm	DN150	DN200	DN250
	冷却水侧设计压力 Cooling water-side design pressure	MPa	0.6		

项目 Item		单位 Unit	YS20LNMSA(B)	YS25MNMSA(B)	YS25LNMSA(B)
蒸发器 Evaporator	型式 Type		满液式 Flooded type		
	出水温度 Output water temperature	°C	-15		
	冷媒水循环量 Refrigerant water circulation volume	m ³ /h	125	195	245
	冷媒进出口口径 Drift diameter of chilled water inlet and outlet	mm	DN150	DN200	DN250
	冷媒水侧设计压力 Chilled water-side design pressure	MPa	0.6		
冷媒水、冷却水污垢系数 Fouling factor of chilled water and cooling water	m ² .k/kw	0.086			
冷凝器、蒸发器水程阻力 Resistance of condenser and evaporator on water path	MPa	≤0.1			
冷却水水质标准 Cooling water quality standard		GB50050《工业循环冷却水的处理规范》 GB50050 Code for Design of Industrial Recirculating Cooling Water Treatment			
外形尺寸(长*宽*高) Outline dimension(L*W*H)	mm	~ 3865*2754*2734	~ 5624*3125*3143	~ 5692*3175*3143	
净重 Net weight	kg	~ 8300	~ 16000	~ 19000	

注:

①本表中的设计工况为: 冷凝器冷却水进水温度 30°C, 进出水温差 5°C; 冷媒水出水温度 -15°C, 进出水温差 5°C。

②本表中载冷剂流量以氯化钙水溶液 25.7% 质量浓度计算。

③采用其它载冷剂时, 冷媒水循环量应根据其物性参数重新计算。

Note:

① The designed working conditions in the table: the cooling water inlet temperature of the condenser is 30°C and the difference between the water inlet temperature and the water outlet temperature is 5°C; the chilled water outlet temperature is -15°C and the difference between the water inlet temperature and the water outlet temperature is 5°C.

② The secondary refrigerant flow rate in the table is calculated according to 25.7% mass concentration of calcium chloride water solution.

③ In case of using other secondary refrigerants, the circulation volume of chilled water shall be re-calculated according to its physical property parameters.

YS 系列满液式低温盐水机组技术参数表

Technical parameters of YS series flooded low temperature brine chiller units

项目 Item		单位 Unit	YS32MNMSA(B)	YS32LNMSA(B)	YS40MNMSA(B)
制冷量 Refrigeration capacity		kw	1847	2207	3117
冷媒水品种 Chilled water varieties			氯化钙水溶液 Calcium chloride water solution		
能量调节范围 Capacity control range		%	15 ~ 100		
制冷剂 Refrigerant	品种 Varieties		R22		
	充注量 Charge	kg	~ 1400	~ 1850	~ 2400
	标准 Standard		GB7373 《工业用二氟一氯甲烷 (F22)》 GB7373 Industrial CHClF2 (F22)		
冷冻机油 Refrigerant oil	牌号 Brand		M-K4001		
	充注量 Charge	l	~ 1200	~ 1200	~ 2000
	标准 Standard		Q/YB00J08.21.1 《冷冻机油 (矿物型)》 Q/YB00J08.21.1 "Frozen oil (Mineral type)"		
压缩机型号 Compressor model			LG32M	LG32L	LG40M
电机额定功率 Rated power of motor		kw	800	1000	1600
使用电制 Electrical system			3P 10KV 50HZ		
冷凝器 Condenser	型式 Type		壳管式 Shell-tube		
	进水温度 Water inlet temperature	°C	30		
	冷却水循环量 Cooling water circulation volume	m ³ /h	440	525	760
	冷却水进出水管径 Cooling water inlet and outlet pipe diameter	mm	DN300	DN300	DN400
	冷却水侧设计压力 Cooling water-side design pressure	MPa	0.6		

项目 Item		单位 Unit	YS32MNMSA(B)	YS32LNMSA(B)	YS40MNMSA(B)
蒸发器 Evaporator	型式 Type		满液式 Flooded type		
	出水温度 Output water temperature	°C	-15		
	冷媒水循环量 Chilled water circulation volume	m ³ /h	370	445	625
	冷媒进出口口径 Drift diameter of refrigerant inlet and outlet	mm	DN250	DN300	DN350
	冷媒水侧设计压力 Chilled water-side design pressure	MPa	0.6		
冷媒水、冷却水污垢系数 Fouling factor of chilled water and cooling water	m ² .k/kw	0.086			
冷凝器、蒸发器水程阻力 Resistance of condenser and evaporator on water path	MPa	≤0.1			
冷却水水质标准 Cooling water quality standard		GB50050 《工业循环冷却水的处理规范》 GB50050 Code for Design of Industrial Recirculating Cooling Water Treatment			
外形尺寸 (长 * 宽 * 高) Outline dimension (L * W * H)	mm	~ 7500*4020*3547	~ 7500*4020*3547	~ 9320*4890*4680	
净重 Net weight	kg	~ 29000	~ 32000	~ 46000	

注:

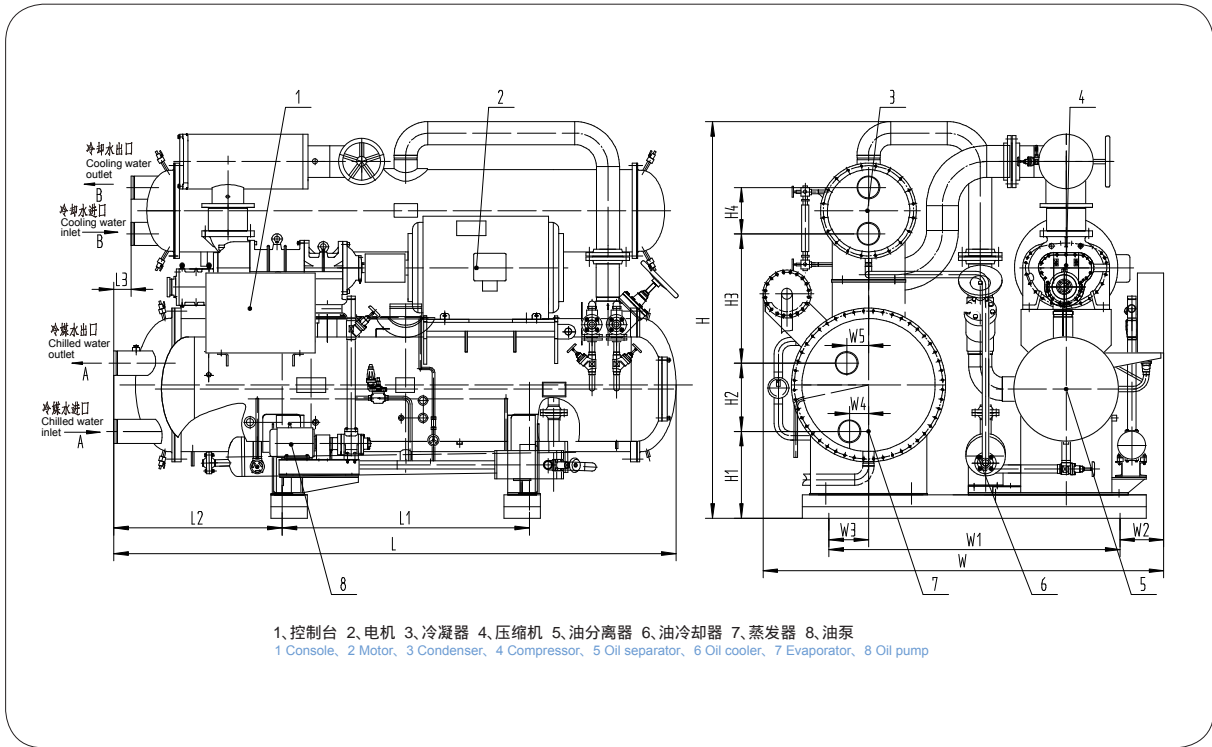
- ①本表中的设计工况为: 冷凝器冷却水进水温度 30°C, 进出水温差 5°C; 冷媒水出水温度 -15°C, 进出水温差 5°C。
- ②本表中载冷剂流量以氯化钙水溶液 25.7% 质量浓度计算。
- ③采用其它载冷剂时, 冷媒水循环量应根据其物性参数重新计算。

Note:

- ① The designed working conditions in the table: the cooling water inlet temperature of the condenser is 30°C and the difference between the water inlet temperature and the water outlet temperature is 5°C; the chilled water outlet temperature is -15°C and the difference between the water inlet temperature and the water outlet temperature is 5°C.
- ② The secondary refrigerant flow rate in the table is calculated according to 25.7% mass concentration of calcium chloride water solution.
- ③ In case of using other secondary refrigerants, the circulation volume of chilled water shall be re-calculated according to its physical property parameters.

YS 系列满液式低温盐水机组外形图

Outline drawing of YS series flooded low temperature screw brine chiller units



项目 Item	L	L1	L2	L3	W	W1	W2	W3	W4	W5	H	H1	H2	H3	H4	A	B
YS12MZMSA(B)* YS12MZMSA(B)	3049	1180	1007	96	1886	1100	386	85	60	100	1912	447	200	679	180	DN80	DN80
YS16MZMSA(B)* YS16MZMSA(B)	3178	1250	1042	90	2265	1450	322	180	-90	-90	2217	577	320	736	260	DN125	DN125
YS20MZMSA(B)*	3836	1600	1208	141	2435	1900	212	242	100	150	2398	543	425	763	306	DN150	DN150
YS20MZMSA(B)	3763	1600	1159	92	2374	1900	178	345	0	0	2302	607	340	688	306	DN150	DN150
YS20LZMSA(B)*	3955	1600	1272	143	2795	1900	252	322	150	150	2882	652	470	941	350	DN200	DN200
YS20LZMSA(B)	3805	1600	1189	60	2685	1900	252	322	0	0	2639	623	370	816	350	DN200	DN200
YS12MNMSA(B)	3059	1180	1007	100	1886	1100	386	85	60	100	1912	432	215	678	200	DN80	DN80
YS16MNMSA(B)	3102	1250	989	17	2088	1450	277	138	75	75	2127	438	250	742	220	DN100	DN100
YS20MNMSA(B)	3770	1600	1160	55	2390	1900	184	334	94	150	2374	497	400	738	306	DN125	DN150
YS20LNMSA(B)	3865	1600	1207	118	2754	1900	251	322	130	150	2734	598	470	891	320	DN150	DN150

注：1、尺寸仅供参考，实际尺寸以合同签订后提供为准。

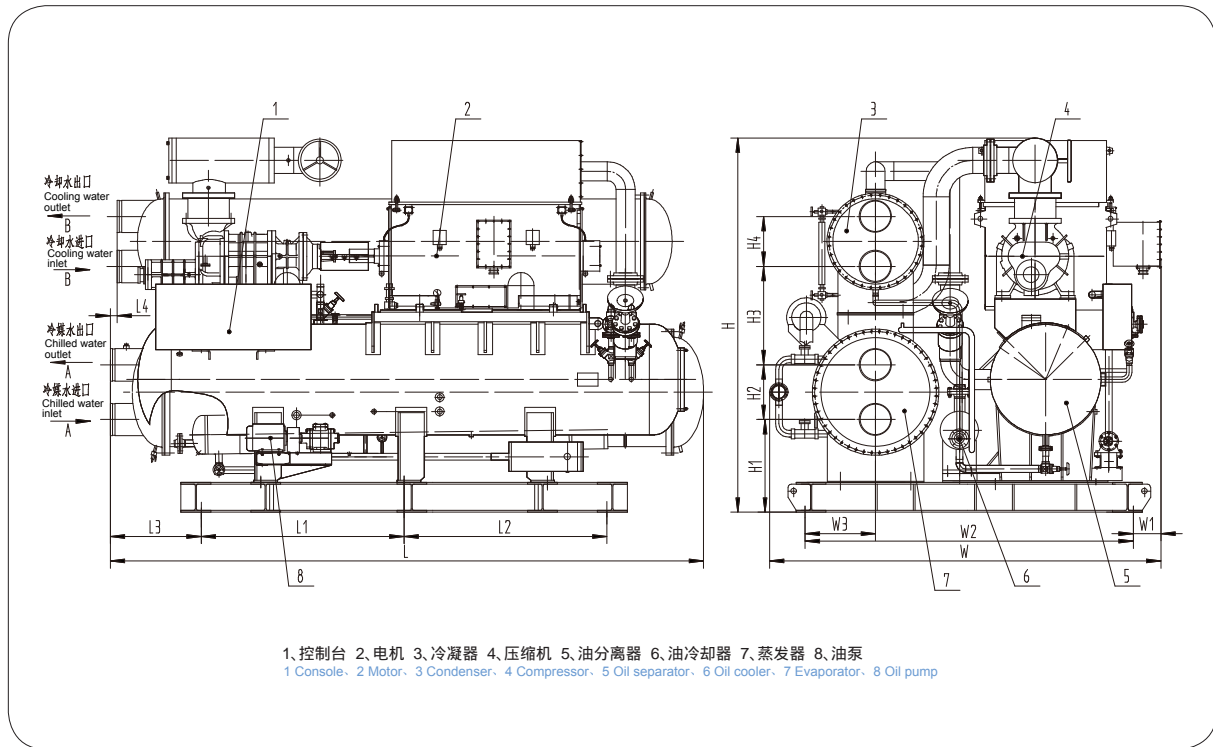
2、带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组外形图

Outline drawing of YS series flooded low temperature screw brine chiller units



项目 Item	L	L1	L2	L3	L4	W	W1	W2	W3	H	H1	H2	H3	H4	A	B
YS25MZMSA(B)*	5725	1500	1500	1455	1033	3480	230	3000	640	3143	778	460	826	420	DN250	DN250
YS25MZMSA(B)	4830	1500	1500	961	56	3480	230	3000	640	3143	778	460	876	420	DN250	DN250
YS25LZMSA(B)*	5800	1500	1500	1510	1086	3580	230	3000	590	3163	758	450	981	420	DN250	DN250
YS25LZMSA(B)	4880	1500	1500	1011	109	3580	230	3000	590	3143	758	450	981	420	DN250	DN250
YS25MNMSA(B)	5624	1500	1500	1402	1043	3275	230	2800	535	3143	713	370	866	350	DN200	DN200
YS25LNMSA(B)	5692	1500	1500	1452	1030	3325	230	2800	535	3143	738	440	836	420	DN250	DN250

注：1、尺寸仅供参考，实际尺寸以合同签订后提供为准。

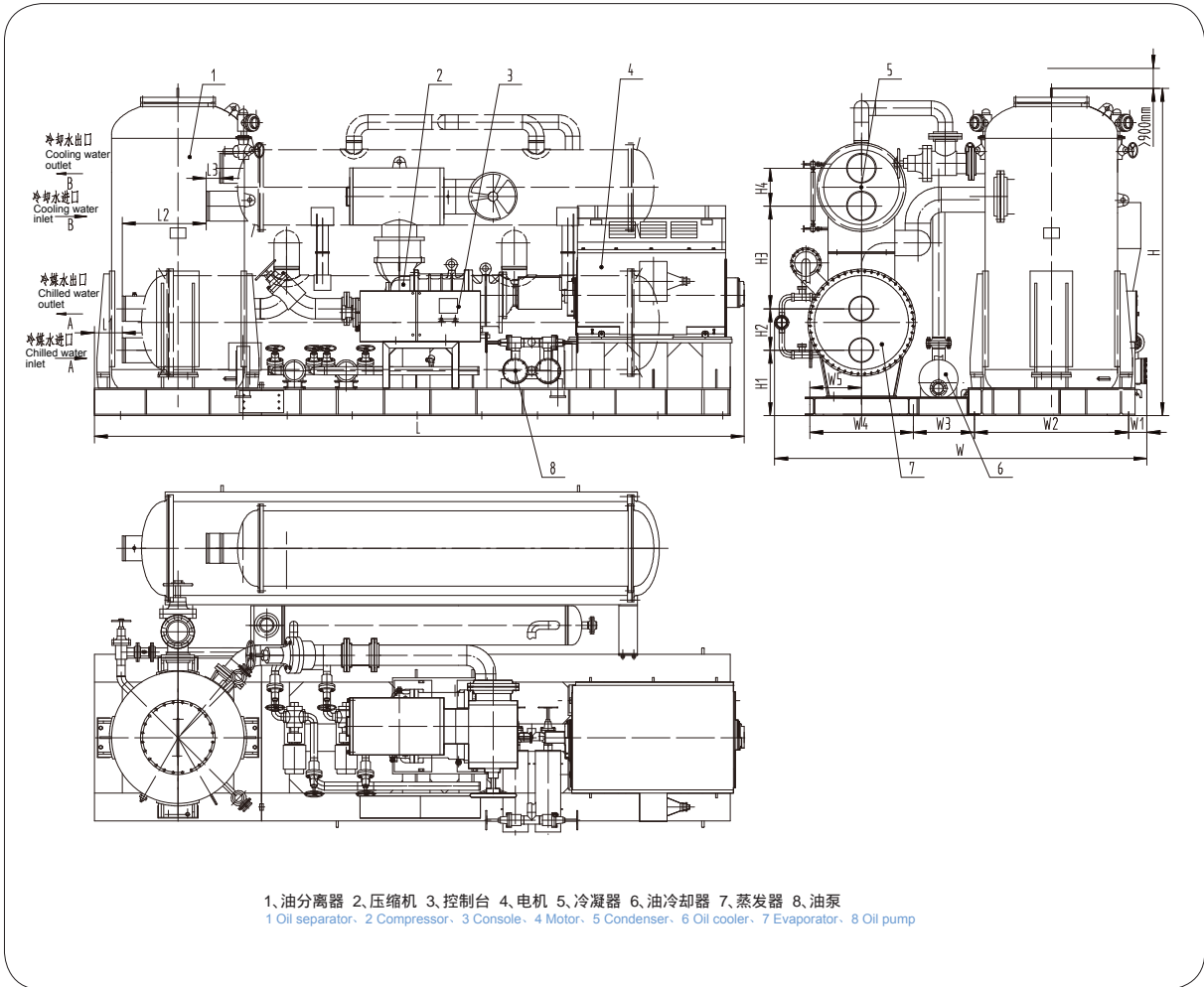
2、带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组外形图

Outline drawing of YS series flooded low temperature screw brine chiller units



项目 Item	L	L1	L2	L3	W	W1	W2	W3	W4	W5	H	H1	H2	H3	H4	A	B
YS32MZMSA(B)* YS32MZMSA(B)	7800	250	932	150	4050	200	1664	658	1200	600	3547	860	500	1140	460	DN300	DN350
YS32LZMSA(B)* YS32LZMSA(B)	7800	220	962	0	4150	200	1664	658	1200	600	3730	890	570	1170	500	DN350	DN350
YS32MNMSA(B)	7500	300	905	150	4020	200	1664	658	1120	560	3547	758	450	1111	410	DN250	DN300
YS32LNMSA(B)	7500	250	932	150	4020	200	1664	658	1120	560	3547	810	500	1165	410	DN300	DN300

注：1、尺寸仅供参考，实际尺寸以合同签订后提供为准。

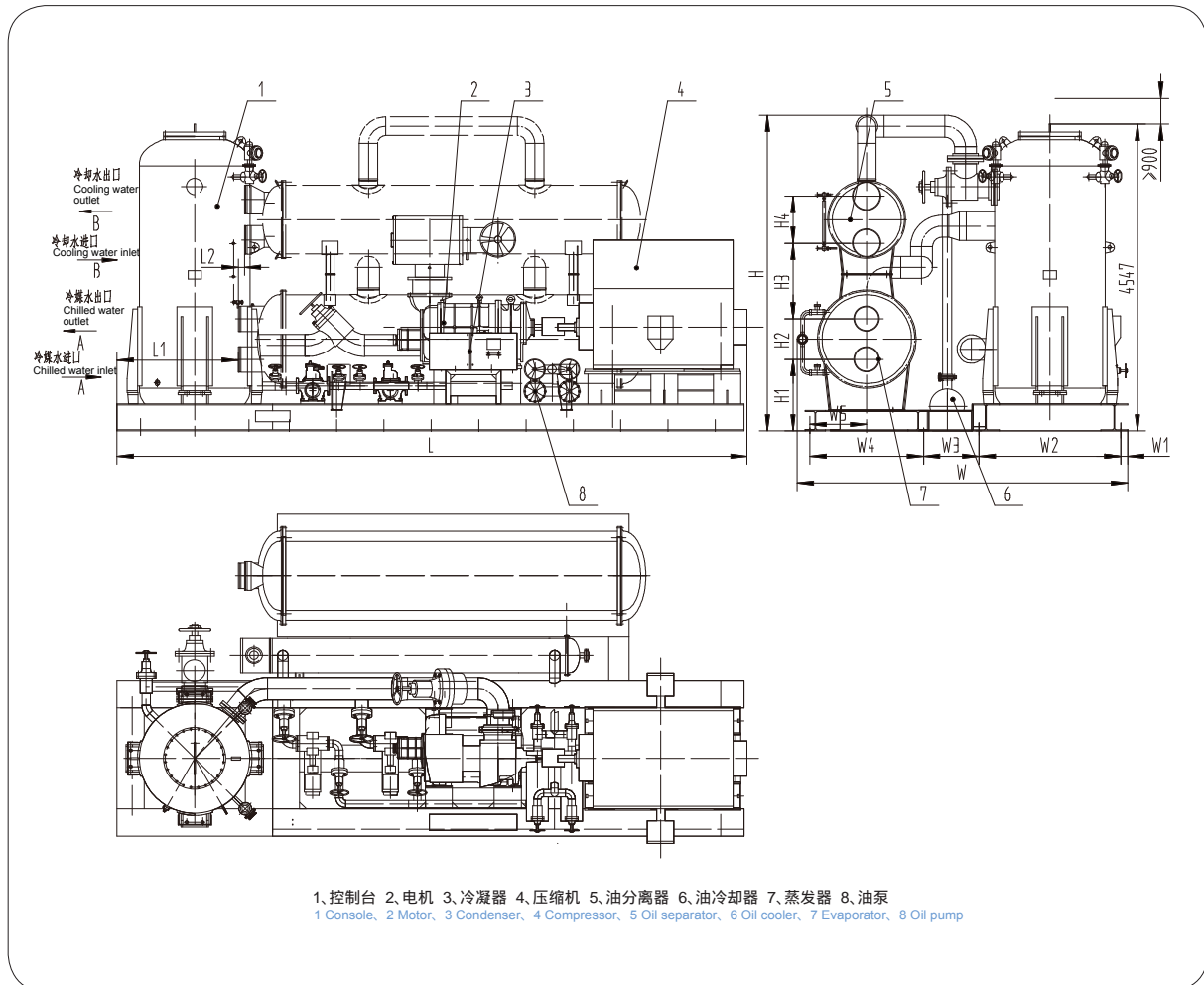
2、带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组外形图

Outline drawing of YS series flooded low temperature screw brine chiller units



项目 Item	L	L1	L2	W	W1	W2	W3	W4	W5	H	H1	H2	H3	H4	A	B
YS40MZMSA(B)* YS40MZMSA(B)	9320	1765	130	4940	100	2100	820	1680	840	4680	1060	700	1260	620	DN400	DN400
YS40MNMSA(B)	9320	1795	90	4890	100	2100	820	1680	840	4680	1060	600	1120	700	DN350	DN400

注：1、尺寸仅供参考，实际尺寸以合同签订后提供为准。

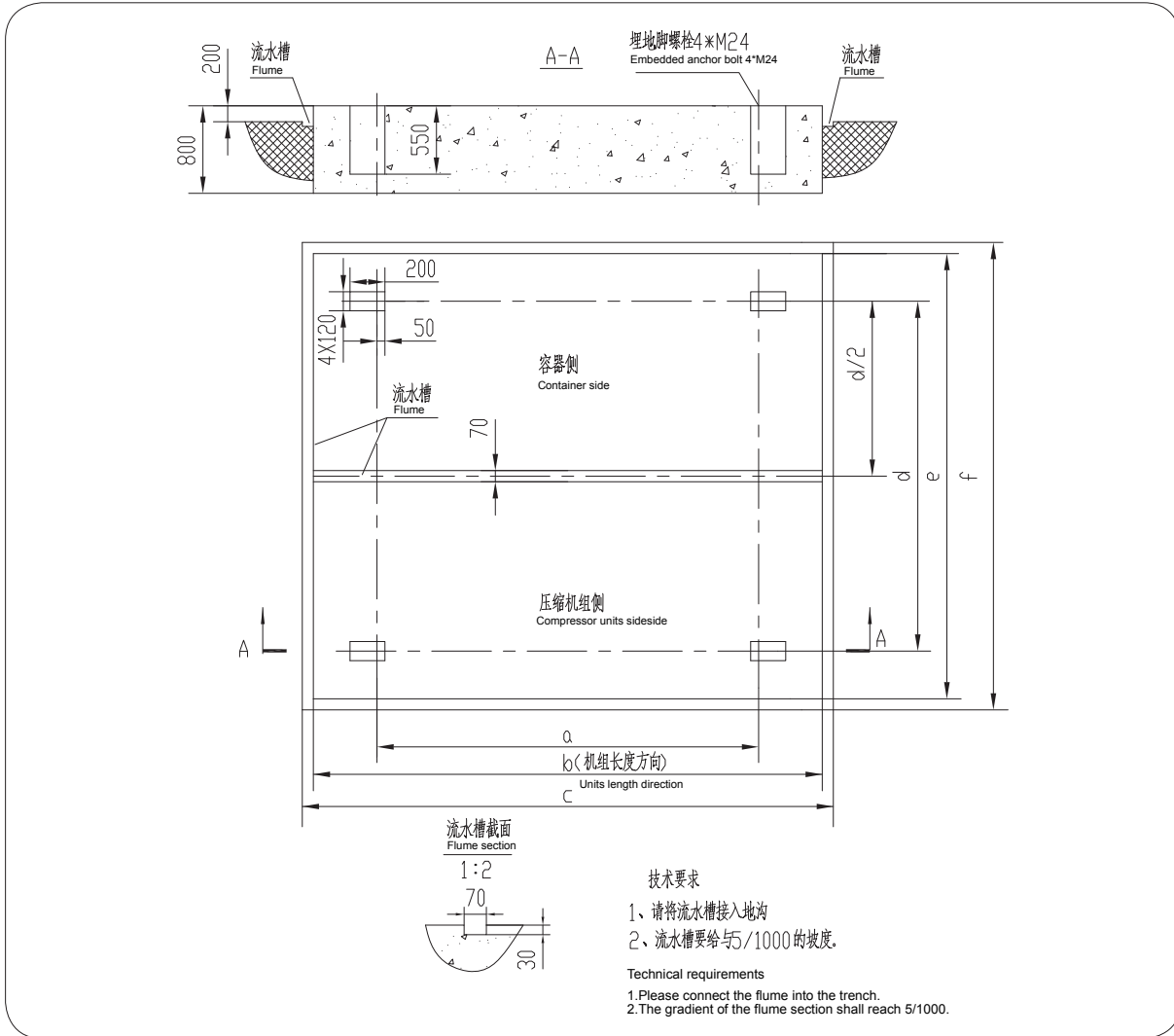
2、带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组基础图

Foundation drawing of YS series flooded low temperature brine chiller units



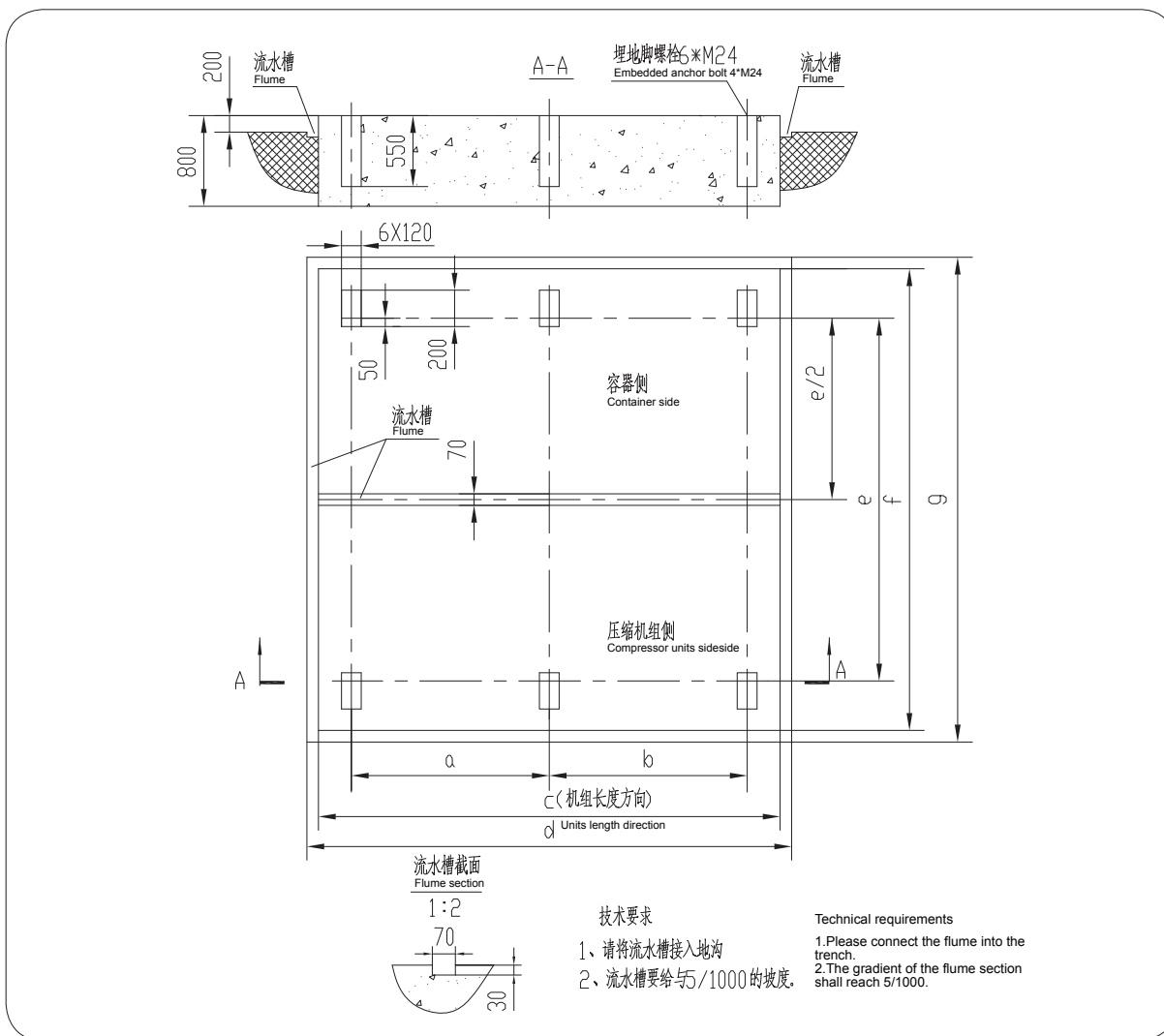
机组型号 Unit model	a	b	c	d	e	f
YS12MZMSA(B)*	1180	2600	2740	1100	1800	1940
YS12MZMSA(B)	1180	2600	2740	1100	1800	1940
YS16MZMSA(B)*	1250	2600	2740	1450	2100	2240
YS16MZMSA(B)	1250	2600	2740	1450	2100	2240
YS20MZMSA(B)*	1600	3000	3140	1900	2500	2640
YS20MZMSA(B)	1600	3000	3140	1900	2500	2640
YS20LZMSA(B)*	1600	3000	3140	1900	2500	2640
YS20LZMSA(B)	1600	3000	3140	1900	2500	2640
YS12MNMSA(B)	1180	2600	2740	1100	1800	1940
YS16MNMSA(B)	1250	2600	2740	1450	2100	2240
YS20MNMSA(B)	1600	3000	3140	1900	2500	2640
YS20LNMSA(B)	1600	3000	3140	1900	2500	2640

注：带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组基础图

Foundation drawing of YS series flooded low temperature brine chiller units



机组型号 Unit model	a	b	c	d	e	f	g
YS25MZMSA(B)*	1500	1500	4000	4140	3000	3400	3540
YS25MZMSA(B)	1500	1500	4000	4140	3000	3400	3540
YS25LZMSA(B)*	1500	1500	4000	4140	3000	3400	3540
YS25LZMSA(B)	1500	1500	4000	4140	3000	3400	3540
YS25MNMSA(B)	1500	1500	4000	4140	2800	3250	3390
YS25LNMSA(B)	1500	1500	4000	4140	2800	3250	3390

注：1、尺寸仅供参考，实际尺寸以合同签订后提供为准。

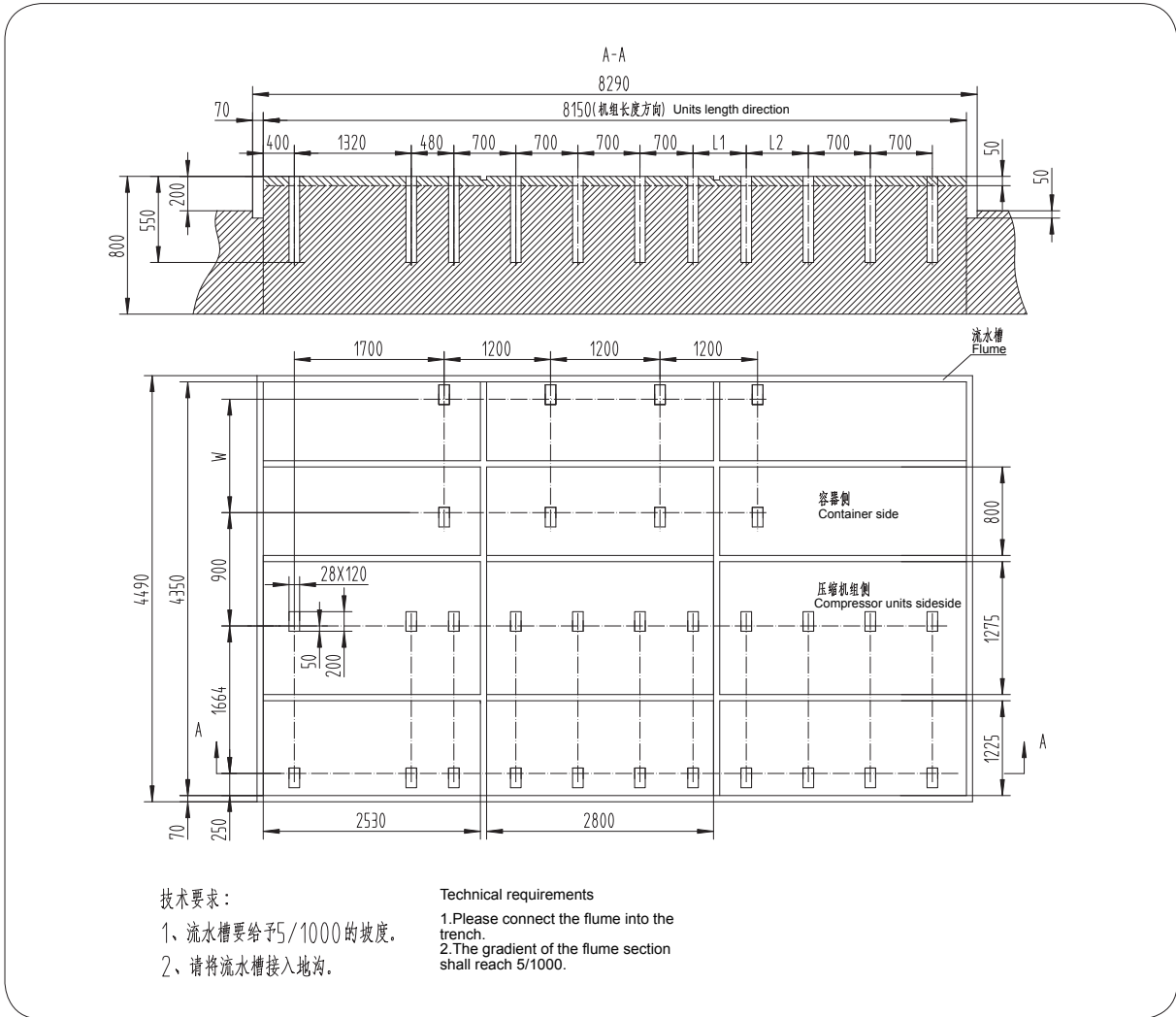
2、带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组基础图

Foundation drawing of YS series flooded low temperature brine chiller units



机组型号 Unit model	W
YS32MZMSA(B)*	1200
YS32MZMSA(B)	1200
YS32LZMSA(B)F*	1200
YS32LZMSA(B)	1200
YS32MNMSA(B)	1120
YS32LNMSA(B)	1120

电机机座号 Motor base No.	L1	L2
450	600	600
500	700	700

注：1、尺寸仅供参考，实际尺寸以合同签订后提供为准。

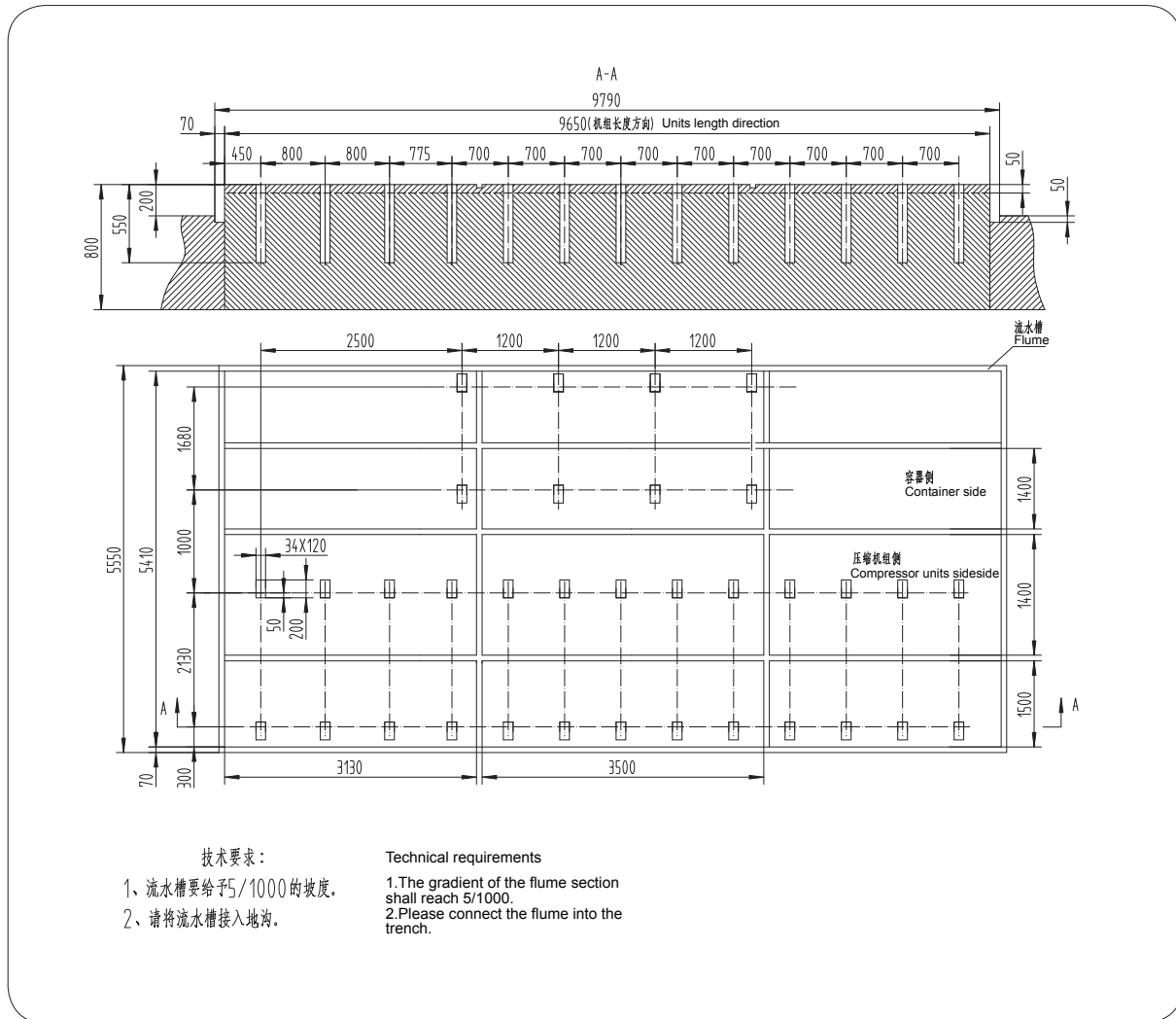
2、带“*”的机组载冷剂为乙二醇水溶液，其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组基础图

Foundation drawing of YS series flooded low temperature brine chiller units



注: 1、尺寸仅供参考, 实际尺寸以合同签订后提供为准。

2、本基础图适用于 YS40M1MSA(B)*、YS40M1MSA(B)、YS40MNMSA(B) 机组。

3、带“*”的机组载冷剂为乙二醇水溶液, 其余机组载冷剂为氯化钙水溶液。

Note: 1. The sizes are provided for reference only, and the actual sizes should be provided with the requirements in the contract.

2. The basic applies to YS40MNMSA(B)*, YS40M1MSA(B), YS40MNMSA(B) units.

3. The unit refrigerant with a "*" is the glycol solution, the other unit refrigerant is calcium chloride solution.

YS 系列满液式低温盐水机组性能参数表 (-5°C出水) Performance parameters of YS series flooded low temperature brine chiller units(-5°C water outlet)

型号 Model	YS12MZMSA(B)						YS16MZMSA(B)						YS20MZMSA(B)					
	制冷量		轴功率		制冷量		轴功率		制冷量		轴功率		制冷量		轴功率			
	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power				
T2	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27		
T1	192.05	198	203.94	55.249	53.039	50.917	421.92	435	448.05	117.19	112.5	108	808.44	833.5	858.51	221.09	211.8	202.9
0	157.99	163.2	168.42	55.019	52.653	50.389	347.73	359.2	370.69	116.61	111.6	106.8	667.18	689.2	710.57	219.98	210.3	201.05
-10	129.08	133.6	138.14	52.908	50.527	48.253	284.83	294.8	304.82	112.15	107.1	102.28	547.68	566.3	584.99	211.32	201.6	192.33

型号 Model	YS20LZMSA(B)						YS25MZMSA(B)						YS25LZMSA(B)					
	制冷量		轴功率		制冷量		轴功率		制冷量		轴功率		制冷量		轴功率			
	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power				
T2	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27		
T1	1059.9	1092.8	1125.6	289.87	277.7	266.04	1665	1715	1764.7	444.53	426.3	408.82	2074.8	2137	2199	552.03	529.4	507.69
0	874.64	903.5	931.51	288.39	275.7	263.57	1376.3	1419	1460.2	442.89	423.4	405.19	1715.8	1769	1820.3	549.9	525.7	503.09
-10	717.99	742.4	766.9	277.04	264.3	252.14	1125.4	1167	1200.8	425.26	405.7	387.04	1403.1	1455	1497.2	528.09	503.8	480.63

型号 Model	YS32MZMSA(B)						YS32LZMSA(B)						YS40MZMSA(B)					
	制冷量		轴功率		制冷量		轴功率		制冷量		轴功率		制冷量		轴功率			
	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power	Refrigeration capacity	Shaft power				
T2	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27	+33	+27		
T1	3152	3256	3356.9	857.98	806.5	758.11	3767.7	3892	4012.7	1025.5	963.98	906.14	5268.7	5447.8	5622.1	1853.1	1741.9	1637.4
0	2611.4	2695	2775.9	837.76	800.9	765.66	3121.1	3221	3317.6	1001.2	957.12	915.01	4373.5	4530.9	4680.4	1695.5	1593.8	1498.2
-10	2146.2	2217	2285.7	804.61	767.6	732.29	2565.3	2650	2732.2	961.64	917.4	875.2	3599.9	3736.7	3871.2	1559.6	1464.5	1375.2

注：1、T1 为蒸发器出水温度，T2 为冷凝器进水温度。

Note: Note:T1 is the water outlet temperature of the evaporator and T2 is the water inlet temperature of the condenser.

YS 系列满液式螺杆低温盐水机组性能参数表 (-15°C出水)

Performance parameters of YS series flooded low temperature brine chiller units(-15°C water outlet)

型号 Model	YS12MNMMSA(B)						YS16MNMMSA(B)						YS20MNMMSA(B)					
	制冷量 Refrigeration capacity			轴功率 Shaft power			制冷量 Refrigeration capacity			轴功率 Shaft power			制冷量 Refrigeration capacity			轴功率 Shaft power		
	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27
0	128.83	133.6	138.01	52.908	50.527	48.152	284.83	294.8	285.38	112.26	107.1	102.28	547.68	566.3	584.42	211.1	201.6	192.53
-5	104.43	108.4	112.41	50.789	48.402	46.127	231.24	239.8	231.47	107.77	102.6	97.778	445.37	461.4	477.09	202.73	193.2	184.12
-10	82.889	86.37	89.652	47.503	45.793	44.099	184.7	191.9	185.05	100.73	97.1	93.507	356.55	370.1	383.42	192.11	182.7	173.75

型号 Model	YS20LMNMMSA(B)						YS25MNMMSA(B)						YS25LMNMMSA(B)					
	制冷量 Refrigeration capacity			轴功率 Shaft power			制冷量 Refrigeration capacity			轴功率 Shaft power			制冷量 Refrigeration capacity			轴功率 Shaft power		
	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27
0	718.68	742.4	766.16	276.75	264.3	252.41	1123.2	1167	1209	428.41	405.7	384.6	1408.5	1455	1501.6	528.09	503.8	481.13
-5	584.54	605	624.97	265.69	253.2	241.3	913.53	951.9	989.02	411.53	388.9	367.51	1147.8	1188	1227.2	507.25	482.9	460.2
-10	467.89	485.2	502.18	248.7	239.5	230.88	732.47	764.7	796.05	384.22	367.7	352.26	919.46	954.4	987.8	480.23	456.7	434.32

型号 Model	YS32MNMMSA(B)						YS32LMNMMSA(B)						YS40MNMMSA(B)					
	制冷量 Refrigeration capacity			轴功率 Shaft power			制冷量 Refrigeration capacity			轴功率 Shaft power			制冷量 Refrigeration capacity			轴功率 Shaft power		
	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27	+33	+30	+27
0	2144.1	2217	2287.9	804.61	767.6	733.06	2562.9	2650	2734.8	961.64	917.4	876.12	3613.8	3736.7	3856.3	1535.1	1464.5	1398.6
-5	1747.8	1809	1868.7	772.58	735.5	700.93	2086.9	2162	2233.3	923.45	879.12	837.8	2943.8	3052.7	3156.5	1420.3	1352.1	1287.2
-10	1400.8	1454	1504.9	731.55	695.7	661.61	1674.4	1738	1798.8	874.28	831.44	790.7	2376.9	2467.2	2553.6	1303.5	1255.3	1210.1

注：1、T1 为蒸发器出水温度，T2 为冷凝器进水温度。

Note: Note: T1 is the water outlet temperature of the evaporator and T2 is the water inlet temperature of the condenser.

机组订货代号表
Table of units order code

产品型号 Product model	订货代号 Order code	出水温度℃ Water outlet temperature℃	压缩机型号 Compressor code	载冷剂 Secondary refrigeration	控制方式 Control mode
YS12MZMSA	013501010000	-5	LG12M	乙二醇水溶液 Glycol solution	远程自动 Remote auto type
YS12MZMSB	013501040000				本地自动 local auto-type
YS12MZMSA	013501010001			氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS12MZMSB	013501040001				本地自动 local auto-type
YS16MZMSA	013502130000		LG16M	乙二醇水溶液 Glycol solution	远程自动 Remote auto type
YS16MZMSB	013502140000				本地自动 local auto-type
YS16MZMSA	013502130001			氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS16MZMSB	013502140001				本地自动 local auto-type
YS20MZMSA	013503140000		LG20M	乙二醇水溶液 Glycol solution	远程自动 Remote auto type
YS20MZMSB	013503150000				本地自动 local auto-type
YS20MZMSA	013503140001			氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS20MZMSB	013503150001				本地自动 local auto-type
YS20LZMSA	013503250000		LG20L	乙二醇水溶液 Glycol solution	远程自动 Remote auto type
YS20LZMSB	013503260000				本地自动 local auto-type
YS20LZMSA	013503250001			氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS20LZMSB	013503260001				本地自动 local auto-type
YS25MZMSA	013504140000		LG25M	乙二醇水溶液 Glycol solution	远程自动 Remote auto type
YS25MZMSB	013504150000				本地自动 local auto-type
YS25MZMSA	013504140001			氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS25MZMSB	013504150001				本地自动 local auto-type
YS25LZMSA	013504250000		LG25L	乙二醇水溶液 Glycol solution	远程自动 Remote auto type
YS25LZMSB	013504260000				本地自动 local auto-type
YS25LZMSA	013504250001			氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS25LZMSB	013504260001				本地自动 local auto-type
YS32MZMSA	013505140000	LG32M	乙二醇水溶液 Glycol solution	远程自动 Remote auto type	
YS32MZMSB	013505150000			本地自动 local auto-type	
YS32MZMSA	013505140001		氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type	
YS32MZMSB	013505150001			本地自动 local auto-type	
YS32LZMSA	013505260000	LG32L	乙二醇水溶液 Glycol solution	远程自动 Remote auto type	
YS32LZMSB	013505050001			本地自动 local auto-type	
YS32LZMSA	013505260001		氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type	
YS32LZMSB	013505050002			本地自动 local auto-type	
YS40MZMSA	013506130000	LG40M	乙二醇水溶液 Glycol solution	远程自动 Remote auto type	
YS40MZMSB	013506140000			本地自动 local auto-type	
YS40MZMSA	013506130001		氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type	
YS40MZMSB	013506140001			本地自动 local auto-type	
YS12MNMSA	013501020002	-15	LG12M	氯化钙水溶液 Calcium chloride solution	远程自动 Remote auto type
YS12MNMSB	013501060000		本地自动 local auto-type		
YS16MNMSA	013502160000		LG16M		远程自动 Remote auto type
YS16MNMSB	013502170000		本地自动 local auto-type		
YS20MNMSA	013503010001		LG20M		远程自动 Remote auto type
YS20MNMSB	013503170000		本地自动 local auto-type		
YS20LNMSA	013503280000		LG20L		远程自动 Remote auto type
YS20LNMSB	013503290000		本地自动 local auto-type		
YS25MNMSA	013504020002		LG25M		远程自动 Remote auto type
YS25MNMSB	013504170000		本地自动 local auto-type		
YS25LNMSA	013504280000		LG25L		远程自动 Remote auto type
YS25LNMSB	013504290000		本地自动 local auto-type		
YS32MNMSA	013505170000		LG32M		远程自动 Remote auto type
YS32MNMSB	013505180000		本地自动 local auto-type		
YS32LNMSA	013505280000		LG32L		远程自动 Remote auto type
YS32LNMSB	013505290000		本地自动 local auto-type		
YS40MNMSA	013506160000		LG40M		远程自动 Remote auto type
YS40MNMSB	013506170000		本地自动 local auto-type		

螺杆制冷机组系列产品 Series products of refrigeration unit



LG 系列螺杆式制冷压缩机组
LG Series Screw Refrigeration Compressor
Units



LG 系列双级撬块螺杆制冷压缩机组
LG Series Skid-mounted Two-stage Screw
Refrigeration Compressor Units



YS 系列满液式低温盐水机组
YS Series Flooded Low Temperature Brine
Chiller Units



YS 系列虹吸式低温盐水机组
YS Series Siphon Low Temperature Brine
Chiller Units



LS 系列螺杆冷水机组
LS Series Screw Water Chiller Units



开启式氟利昂螺杆压缩冷凝机组
LG Series Open Type Screw Compressor
Condensing Units

中国大陆营销服务机构

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