

室外型变频机组规格书

Outdoor Condensing Unit

Specification

型号(Model): BYGF-020-QXD-SZDP

型号(Model): BYGF-030-QXD-SZDP

型号(Model): BYGF-040-TXD-SZDP

型号(Model): BYGF-060-HIL-SZDP

客户确认			
Customer Signature			
设计	审核	批准	
Design	Examine	Approve	

浙江博阳压缩机有限公司

Zhejiang Boyang Compressor Co., LTD

变更履历 Change History

[illegible]

1. 概述

本产品设计按照国家标准 GB/T 21363-2018《容积式制冷压缩冷凝机组》、GB4706.1-2005《家用和类似用途电器的安全》。适用于冷冻冷藏柜、超市岛柜、中低温实验设备、专用设备等。应用于使用环保制冷剂 R404A、R449A 或等同品，使用环境温度为-15~48℃，冷凝温度 30~60℃，蒸发温度-40~-5℃的制冷设备。

1. Summary

The condensing unit designed by China national standard GB/T21363-2008《Positive displacement refrigerant compressor condensing unit》,GB4706.1-2005《Household and similar electric appliance-Safety》. It is suitable for refrigerating cabinets, supermarket island cabinets, medium and low temperature experimental equipment, special equipment, etc. It is applied to the refrigeration equipment with with environmental protection refrigerant R404A、R449A or equivalent, and the ambient temperature is -15~48℃, condensing temperature 30~60℃, evaporation temperature of -40~-5℃。

2-6HP变频室外机组技术数据						
Technical data of 2-6HP inverter outdoor unit						
机组型号 Model		BYGF-020-QXD-SZDP	BYGF-030-QXD-SZDP	BYGF-040-TXD-SZDP	BYGF-060-HIL-SZDP	备注
电源 Power Supply		1PH 220V 50/60 Hz		3PH 380V 50/60 Hz		
变频控制方案 Inverter control scheme		根据低压压力变频控制 Frequency conversion control according to low pressure frequency conversion control				
马力 Horsepower		2 HP	3 HP	4 HP	6HP	
冷媒 Refrigerant		R404A或R449A R404A or R449A				
蒸发温度范围 Evap.Temp(℃)		-40~-5				
基础配置 Basic configuration	压缩机(型号) Compressor (Model)	KXSD203Z312	KXSD300Z312	TXSD456Z312	LS400DHD-64DBG	
	压力控制器 Pressure Controller(Mpa)	膜片式高压压力开关 Diaphragm type high pressure switch 低压压力传感器 Low Pressure Sensor				
	储液器Reservoir	2. 5L			6L	
	油分离器Oil separator	BLR/A-W 55833			55824	
	气液分离器Accumulator	650cc		1. 1L	2. 8L	
	视液镜sight glass	3/8			1/2	可取消 Cancelable
	油压表Oil pressure gauge	高压压力油压表+低压压力油压表 High pressure oil pressure gauge+Low pressure oil pressure gauge				可取消 Cancelable
	曲轴加热带Crankshaft heating belt	27W		35W	40W	
	变频控制功能 Variable frequency control function	压缩机变频控制、电子膨胀阀控制、冷凝风机控制、化霜控制、高低压力保护、喷液保护、排气温度保护、电流保护和故障代码输出。 Compressor frequency control, electronic expansion valve control, condensing fan control, defrosting control, high and low pressure protection, spray protection, exhaust temperature				
接管(mm) Pipe	吸气口(直径) Gas Inlet Diam OD	5/8" (15.88)		3/4" (19.05)	7/8" (22.22)	
	液体出口(直径) Liquid Outlet OD	3/8" (9.53)			1/2 (12.7)	
产品尺寸 Product size(mm)		1015*420*850		1180*490*860	1180*490*1280	
安装尺寸 Installation dimension(mm)		580*385		640*440	640*440	
	蒸发温度(℃) Evap Temp	测试工况Test conditions: GB/T 21363-2018 环境温度 Ambient Temp:32℃ 过冷度 Sub-cooling 0℃ 吸气温度Suction temperature 18℃				
R449A 制冷量 (W) Capacity	压缩机转速 Compressor speed	4200rpm	4500rpm	4200rpm	3900rpm	
	-40	865	1280	1860	2820	
	-35	1080	1525	2310	3450	
	-30	1270	1935	2885	4230	
	-25	1550	2335	3590	5170	
	-20	1975	2915	4400	6345	
	-15	2310	3340	5310	7755	
	-10	2745	4250	6300	9400	
	-5	3055	5110	7425	11560	

R404A 制冷量 (W) Capacity	压缩机转速 Compressor speed	4200rpm	4500rpm	4200rpm	3900rpm	
	-40	920	1365	1980	3000	
	-35	1150	1625	2460	3670	
	-30	1350	2060	3070	4500	
	-25	1650	2485	3820	5500	
	-20	2100	3100	4680	6750	
	-15	2460	3550	5650	8250	
	-10	2920	4525	6700	10000	
	-5	3250	5440	7900	12300	
R134a 制冷量 (W) Capacity	压缩机转速 Compressor speed	4200rpm	4500rpm	4200rpm	3900rpm	R134a冷媒参考冷量 R134a refrigerant reference cooling capacity
	-25	975	1465	2255	3245	
	-20	1240	1830	2760	3980	
	-15	1450	2095	3330	4870	
	-10	1720	2670	3955	5900	
	-5	1920	3210	4660	7260	

3、室外机使用要求:

- 1、使用双压表抽真空前打开高低压截止阀，应抽至真空度 20Pa 以内（建议抽至 5Pa 以下），低压端保压压力不能超过 1.5Mpa（表压）；
- 2、压缩机每小时开停次数不能超过 6 次，每次间隔时间为 5 分钟以上；
- 3、机组初次加注制冷剂（从高压端充注），必须等待高低压力平衡后，才能开机调试；
- 4、冷凝器清理建议每月一次，当有柳絮季节或工作恶劣场所，加大清理频次。清洗时可用长毛刷刷拭，或用压缩空气吹净室外换热器表面浮尘；
- 5、管路直径不小于机组的气管/液管截止阀尺寸，外部系统管径需要根据工况需求进行设计；
- 6、具体使用要求详见：《博阳室外机调试说明书》和《博阳室外机使用说明书》。

4、Attention:

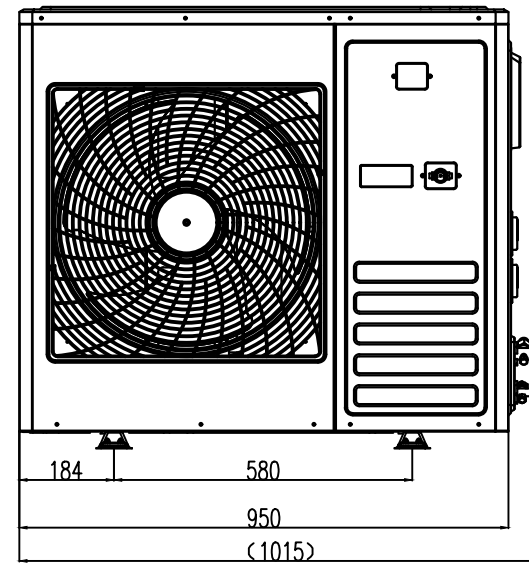
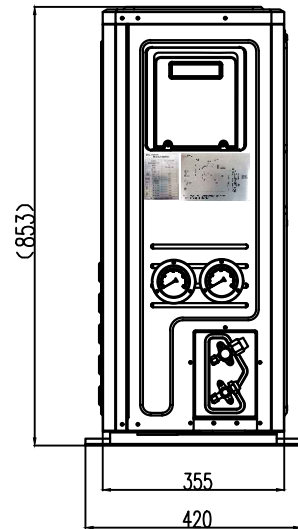
1. Open the high and low pressure stop valve before using the double pressure gauge to vacuum, and pump to a vacuum degree of less than 20Pa (less than 5Pa is recommended), and the Low pressure shall not exceed 1.5mPa (gauge pressure);
2. The compressor shall not on and off more than 6 times per hour, with an interval of more than 5 minutes;
- 3:When the unit is charged with refrigerant for the first time (charge from the high-pressure end),it must wait for the balance of high and low pressure before starting and debugging;
- 4.It is recommended to clean the condenser once a month. When there is catkins season or in a bad working place, increase the cleaning frequency. When cleaning, it can be brushed with a long hair brush, or with compressed air to clean the dust on the surface of the outdoor heat exchanger;
- 5.The pipe diameter is not less than the size of the gas pipe/liquid pipe stop valve of the unit, and the pipe diameter of the external system needs to be designed according to the working conditions;
6. Please refer to Boyang Outdoor Unit Debugging Instruction Manual and Boyang Outdoor Unit Operation Instruction Manual for detailed usage requirements.

4、规格书有效期 The Period of Validity

本规格书经贵公司确认之日后即生效。若更改须重新确认生效，以前的规格书自动失效。

This document will take effect after the confirmation of your company with the authorized signature when design modification is approved by the customer, the current document is unavailable.

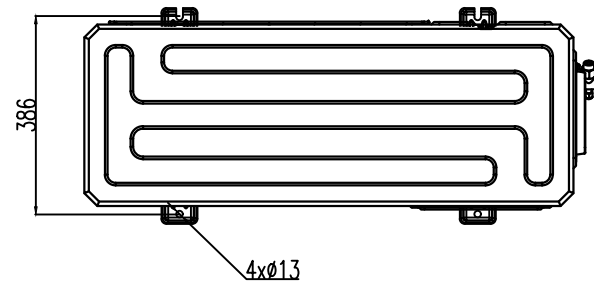
外形图 | Outline drawing |



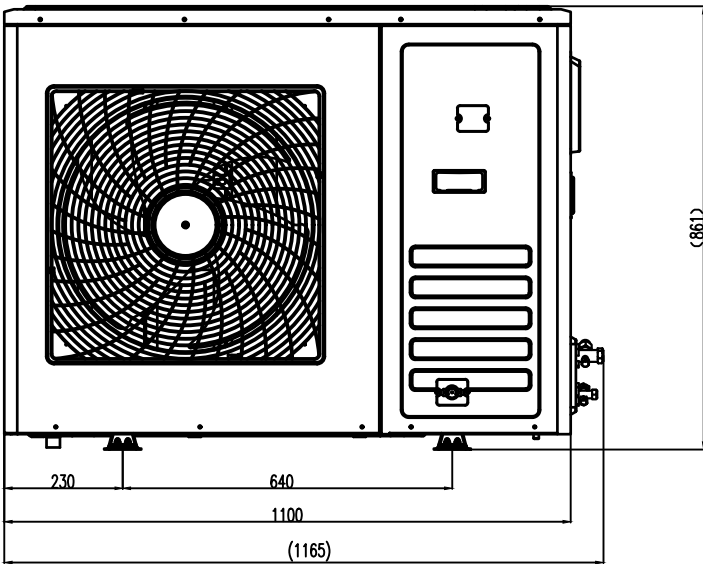
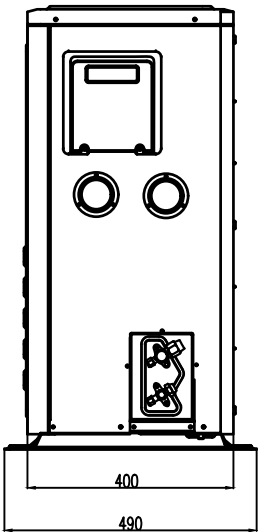
型号 model	出口尺寸 outlet size	进口尺寸 inlet size
2P、3P	3/8	5/8

说明：室外机角阀标配为螺纹接口，可选择焊接口。

Note: The Angle valve of outdoor unit is equipped with threaded interface, and can be welded.

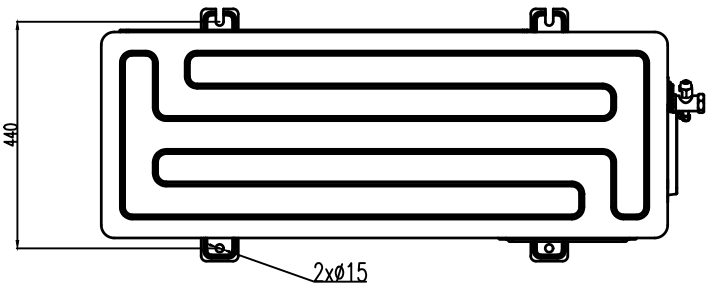


外形图 II Outline drawing II

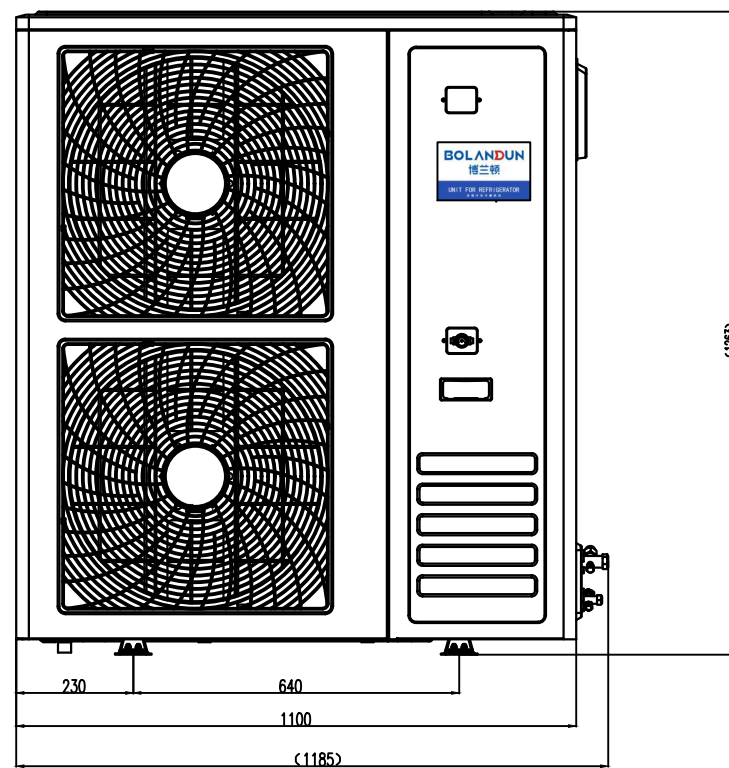
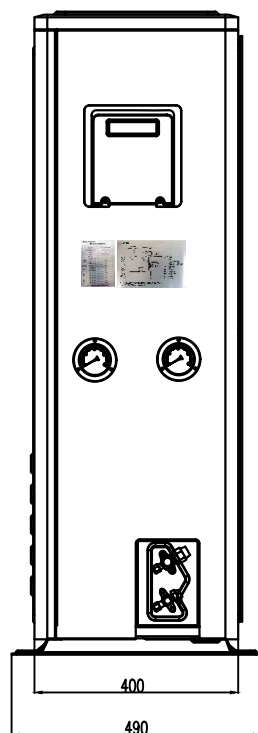


型号 model	出口尺寸 outlet size	进口尺寸 inlet size
4P	3/8	3/4

说明：1、室外机角阀标配为螺纹接口，可选择焊接接口。
Note:1、The Angle valve of outdoor unit is equipped with threaded interface, and can be welded.



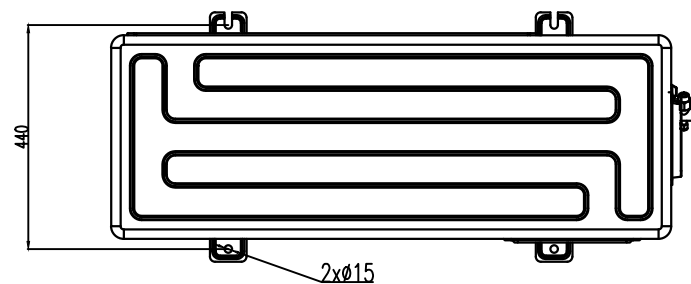
外形图 III Outline drawing III



型号 model	出口尺寸 outlet size	进口尺寸 inlet size
6P	1/2	7/8

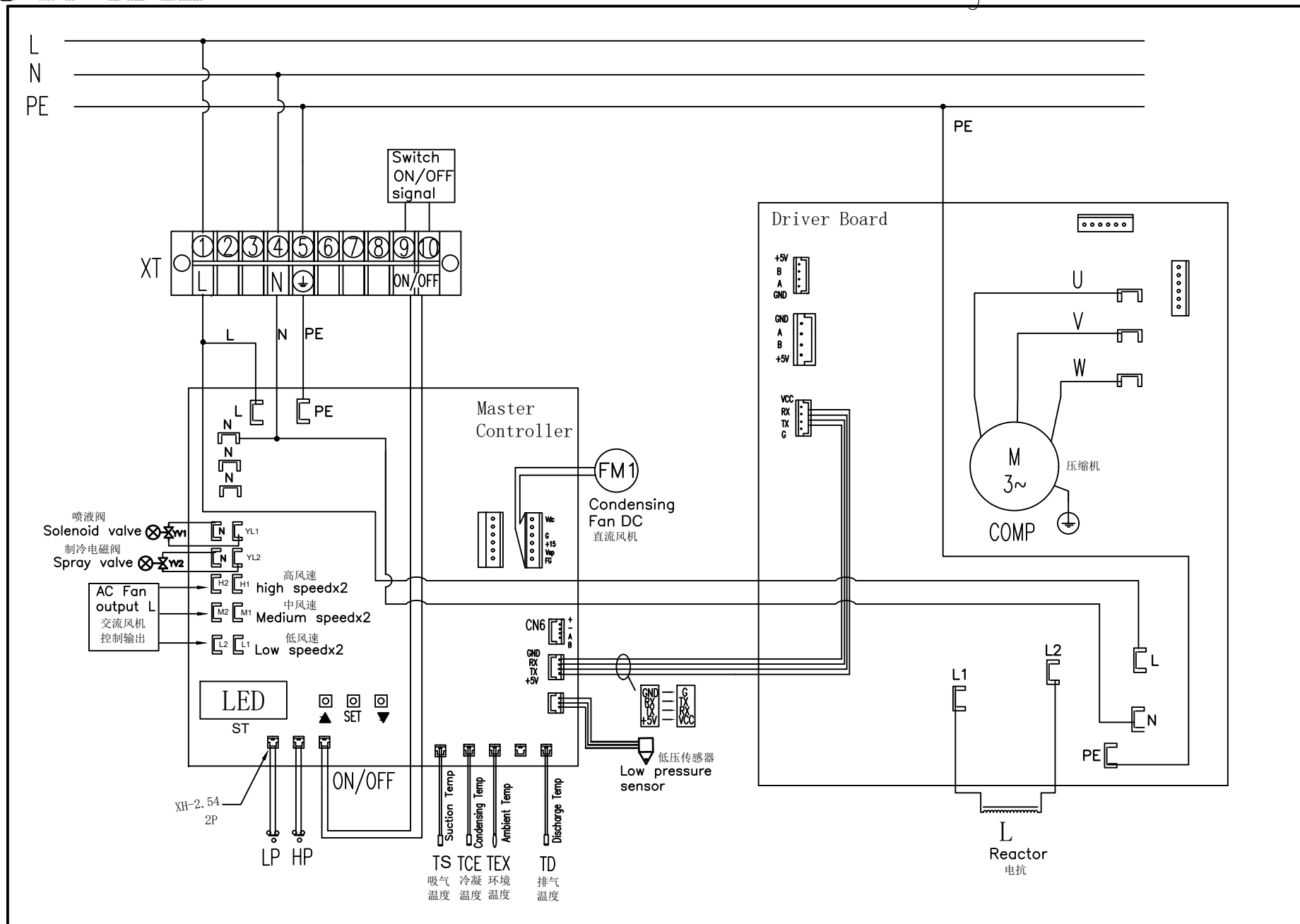
说明：1、室外机角阀标配为螺纹接口，可选择焊接接口。

Note: 1. The Angle valve of outdoor unit is equipped with threaded interface, and can be welded.



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电气原理图 Electrical Schematic Diagram



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