

R404A Freezing Wall-mounted Integrated Frequency Conversion Condensing Unit Specification

Model: BYGY-010-QXD-RZDP

Model: BYGY-015-QXD-RZDP

Model: BYGY-020-QXD-RZDP

Model: BYGY-030-QXD-RZDP

Model: BYGY-040-QXD-RZDP

Customer Signature		
Design	Examine	Approve

Boyard Compressor Co., LTD

1. Summary

This product is designed in accordance with the national standards GB/T21363-2018 《Positive displacement refrigerant compressor condensing unit》, GB4706.1-2005 《Household and similar electric appliance-Safety》, and GB 44015-2024《Minimum allowable of energy efficiency and energy efficiency grades for cold store (box) and refrigerant compressor condensing unit》. The integrated condensing unit incorporates the four main components of the refrigeration system and includes control components such as a thermostat. The all-in-one unit mainly has two installation forms: wall-mounted installation and top-mounted installation, and features a high degree of integration, convenient installation and use, etc. This product is suitable for small cold storage using the friendly refrigerant R404A or equivalent products, with an ambient temperature ranging from -10°C to 43°C and an evaporation temperature ranging from -40°C to -5°C.

2.

Specifications and configurations of the unit

Technical Data of R404A Freezing Wall-mounted Integrated Frequency Conversion Condensing Unit									
Model	BYGY-010-QXD-RZDP	BYGY-015-QXD-RZDP	BYGY-020-QXD-RZDP	BYGY-030-QXD-RZDP	BYGY-040-QXD-RZDP				
Nominal Input (W) ①	1120	1465	2020	2610	3200				
Power Supply	220V 50/60 Hz								
Refrigerant	R404A or equivalent								
Max Running Current (A) ②	6.2	10.5	13.5	16.5	20.0				
Evap.Temp (°C)	-40~-5°C								
Ambient Temp (°C)	-10~43°C								
Basic configuration	Compressor (Model)		JXSD150Z312	KXSD203Z312	KXSD300Z312	TXSD456Z312			
	Condenser	Style		Copper tube fin condenser or microchannel condenser					
		Fam Motor	(mm) Diameter*Quantity	φ300*1	φ300*1	φ350*1	φ300*2	φ300*2	
			(m ³ /hr) Air Flow ③	1800/2000	1800/2000	2500/2800	3600/4000	3600/4000	
	Evaporator	Style		Copper tube fin evaporator					
		Fam Motor	(mm) Diameter*Quantity	φ250*1	φ300*1	φ300*1	φ300*2	φ300*2	
			风量(m ³ /hr) Air Flow ③	1100/1250	1800/2000	1800/2000	3600/4000	3600/4000	
	Pressure Controller (Mpa)		Diaphragm type high pressure switch Low pressure sensor						
	Accumulator		/	650cc	1L				
	Reservoir		2L (Bidirectional)						
	Sight Glass		3/8" (φ9.52)						
	Oil Extractor		TDW-4808S			BLR/A-W 55833			
	Filter Drier		083S (Bidirectional)						
	Check Valve		SR-06						
	Electronic Expanding Valve		DPF(TS1)1.0		DPF(TS1)1.3	DPF(TS1)1.65			
	Liquid Injection Valve		1/4" (φ6.35)						
	Four-way Valve ④		SHF7			SHF9			
	Defrosting Heating Element ④		500W						
	Defrosting Heating Belt ④		25W/m, 3m						
	Electric Control	Temperature Controller		EK-3030V					
AC Contactor		18/01							
Air Switch		2P NXB-63 D32							
Button Switch		Passive switch for unit operation (Function switches such as cold storage lamp and cold storage door heating wire can be added.)							
Variable Frequency Control		Compressor frequency control, Electronic expansion valve control, Condensing fan control, Evaporating fan control, Defrosting control, High and low pressure protection, Spray protection, Exhaust temperature protection, Current protection and Fault code output.							
Dimension (mm)	(mm) Length		525	685	855	875			
	(mm) Width		825	885	925	945			
	(mm) Height		705			730	760		
(R404A) Capacity (W)	(°C) Evap Temp		Ambient Temp:32°C		Sub-cooled Temp:0°C				
	-40		590	840	990	1365	1705		
	-35		720	1040	1260	1625	2115		
	-30		910	1250	1480	2060	2640		
	-25		1150	1500	1750	2485	3285		
	-20		1410	1890	2250	3100	4025		
	-15		1700	2240	2750	3550	4860		
	-10		2000	2650	3300	4525	5760		
-5		2320	2950	3930	5440	6790			

- ① Represents the test conditions for the nominal cooling capacity;
- ② Represents the current under the maximum operating test conditions;
- ③ Represents the air volume when the input power supply is 50Hz/60Hz;
- ④ When the unit is applied to the refrigeration conditions, the four-way valve hot gas defrosting is used, and the heating tube is used for auxiliary defrosting. The defrosting scheme can be selected as timed defrosting or defrosting as required.
- ⑤ The dimensions in the table are those of the all-in-one unit with a cold storage panel thickness of 100 mm.

(GB/T21363-2018) Test Condition

	TEST ATION	AMBIENT TEMP.	EVAP. TEMP.	TESTING POWER SUPPLY
①	STANDARD TEST CONDITIONS	32°C	-7°C	220V 50Hz
②	OVERLOAD RUNNING	43°C	0°C	198V 50Hz

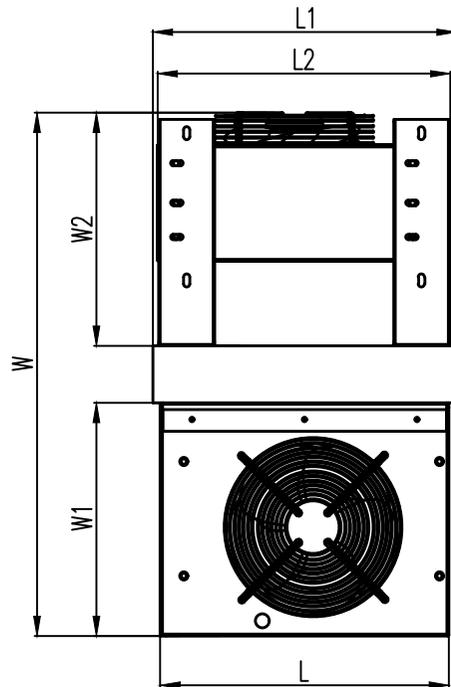
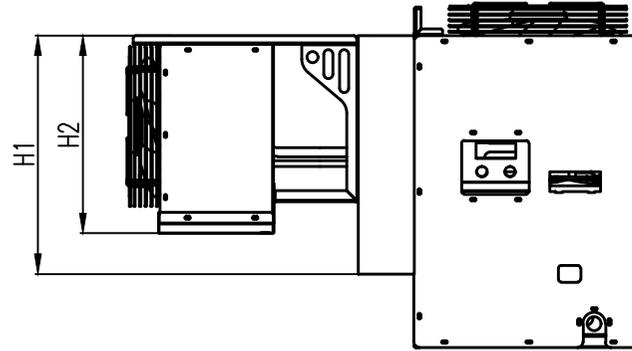
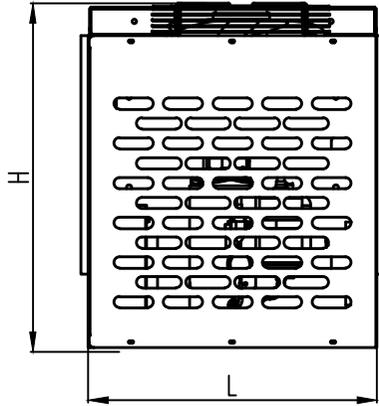
3. Attention:

- 1.The thickness of the installed storage panel must be not less than 75mm, and the gap between the unit and the storage panel must be filled with foaming agent;;
- 2.It is recommended to clean the condenser once a month. In the season with catkins or in harsh working environments, the cleaning frequency should be increased. When cleaning, you can use a long-haired brush to wipe it, or use compressed air to blow off the floating dust on the surface of the heat exchanger. Do not rinse it with tap water.

4.The Period of Validity

This document shall be effective after the date confirmed by your company.If any change is made it must be reconfirmed to take effect, and the previous specification will automatically become invalid.

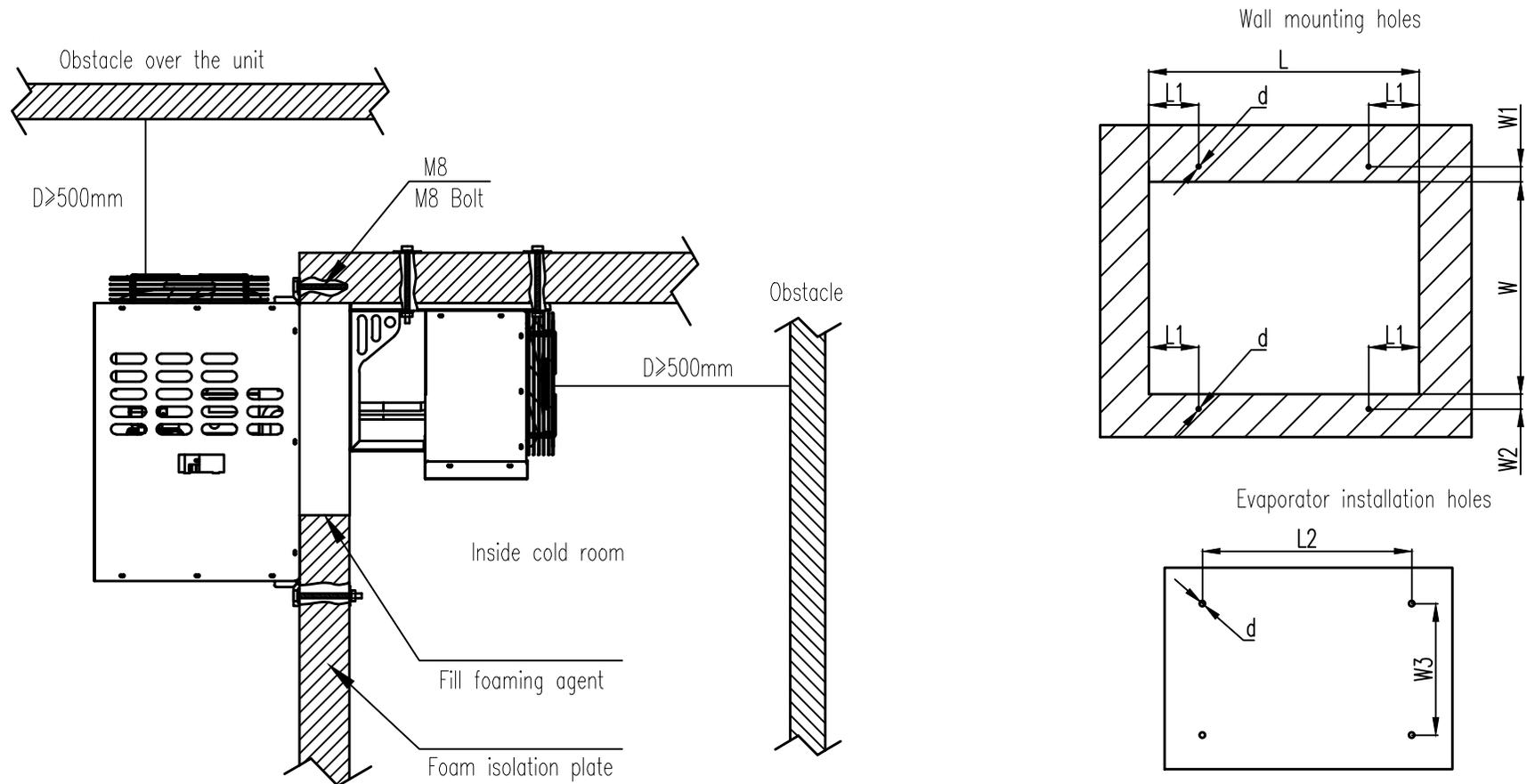
Outline drawing



Model	Overall dimension (mm)								
	L	W	H	L1	L2	W1	W2	H1	H2
BYGY-010-QXD-RZDP	525	825	705	540	520	340	385	420	320
BYGY-015-QXD-RZDP	525	825	705	540	520	340	385	550	445
BYGY-020-QXD-RZDP	685	885	705	700	680	400	385	550	445
BYGY-030-QXD-RZDP	855	925	730	870	850	415	410	550	445
BYGY-040-QXD-RZDP	875	945	760	870	865	415	430	550	515

Note: The default size in the table is 100mm thickness of the cold storage board, which can be changed according to customer needs.

Installation drawing



Note:

- 1.The thickness of the cold storage plate shall not be less than 75mm;
- 2.The gap between the unit and the cold storage board must be filled with blowing agent;

Model	Punch size (mm)							
	L	W	L1	L2	W1	W2	W3	d
BYGY-010-QXD-RZDP	540	420	100	418	25	260	310	8.5
BYGY-015-QXD-RZDP	540	550	100	418	25	260	180	8.5
BYGY-020-QXD-RZDP	700	550	100	578	25	260	180	8.5
BYGY-030-QXD-RZDP	870	550	100	748	25	285	205	8.5
BYGY-040-QXD-RZDP	870	550	100	763	25	285	235	8.5

