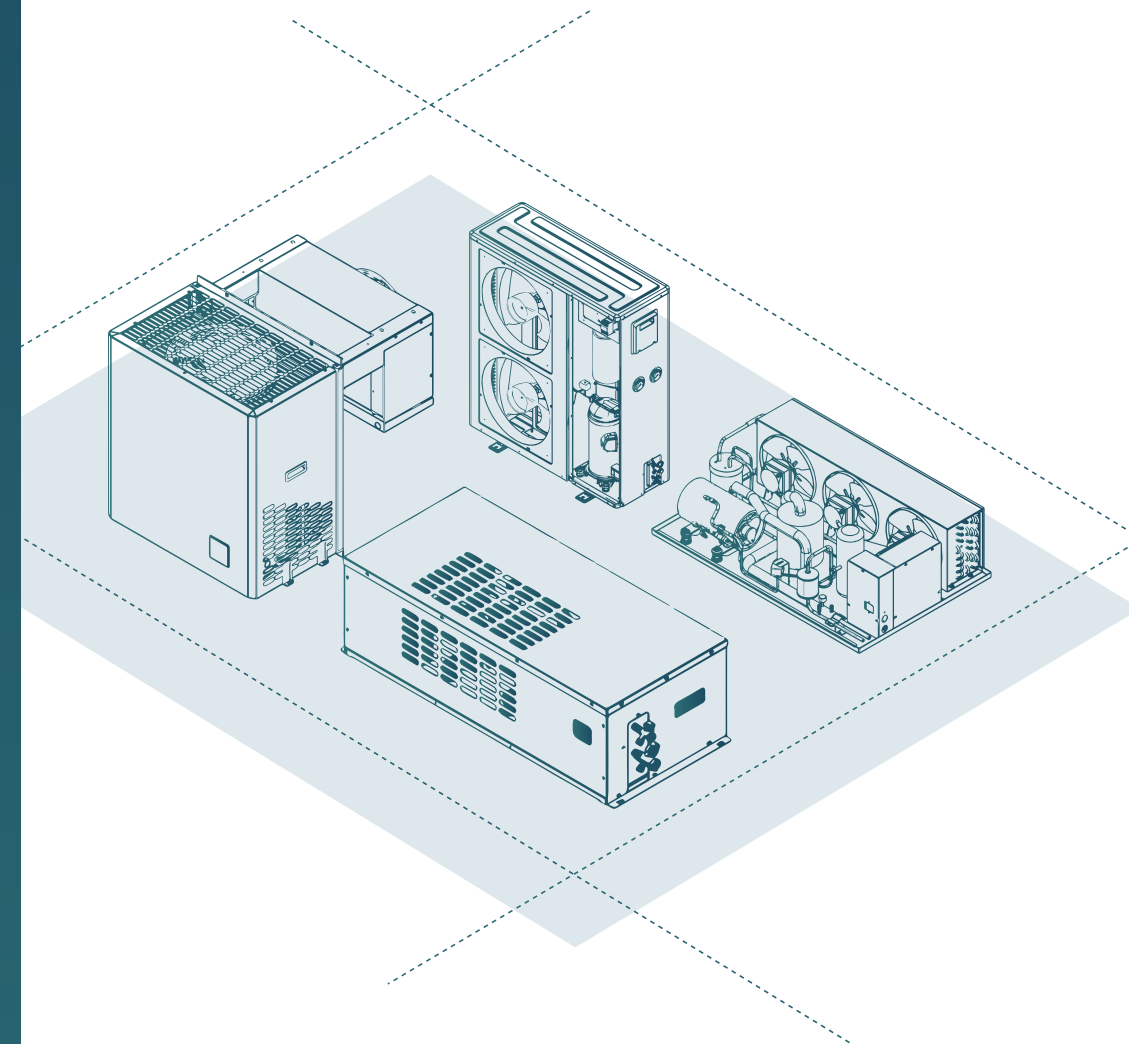


BOYARD SYSTEMS CATALOG

Trusted By

XINGX 星星 **Haier**  
HUSSMANN® **Panasonic**



BOYARD

BOYARD SYSTEMS CO., LTD.

Web: www.boyard.com Email: sales@boyard.com

BOYARD

BOYARD SYSTEMS CO., LTD.
www.boyard.com

CON- TENTS

BOYARD



01

About Us

Figure of Boyard / 03
About Us / 04

02

Milestones

Milestones / 05

03

Nomenclature

Naming Method / 07

04

Product Features

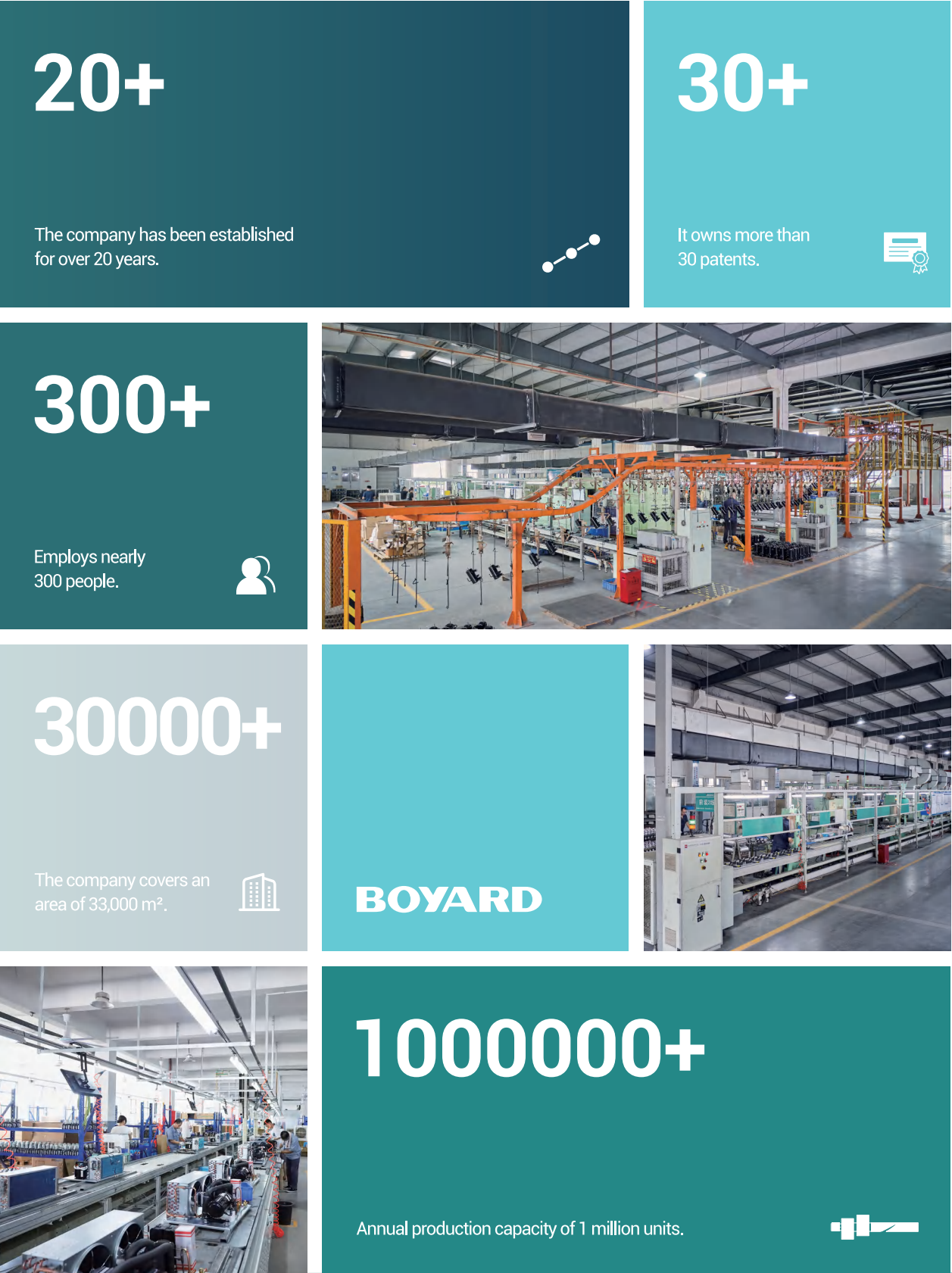
Inverter Unit / 10
On-Off Units / 11
Water-Loop Condensing Unit / 12
Outdoor Condensing Unit / 13
Monoblock / 14

05

Specifications

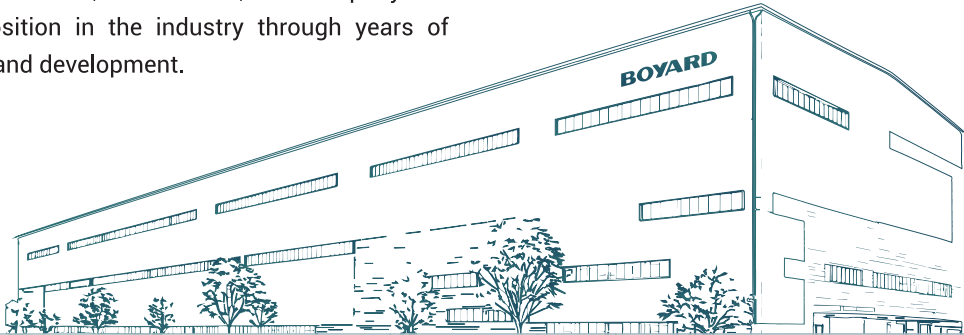
Inverter Unit / 15
On-Off Units / 17
Water-Loop Condensing Unit / 20
Outdoor Condensing Unit / 22
Monoblock / 26

/ FIGURE OF BOYARD



About us

Boyard Compressor Co., Ltd., established in 2001, is a national high-tech enterprise specializing in the R&D, production, manufacturing, sales, and service of refrigeration compressors for trucks, new energy vehicles, RVs, mobile cold chain transport vehicles, as well as medium-low temperature compressors and condensing units. Adhering to the core corporate values of "integrity, dedication, innovation, and win-win," the company has achieved a leading position in the industry through years of continuous innovation and development.



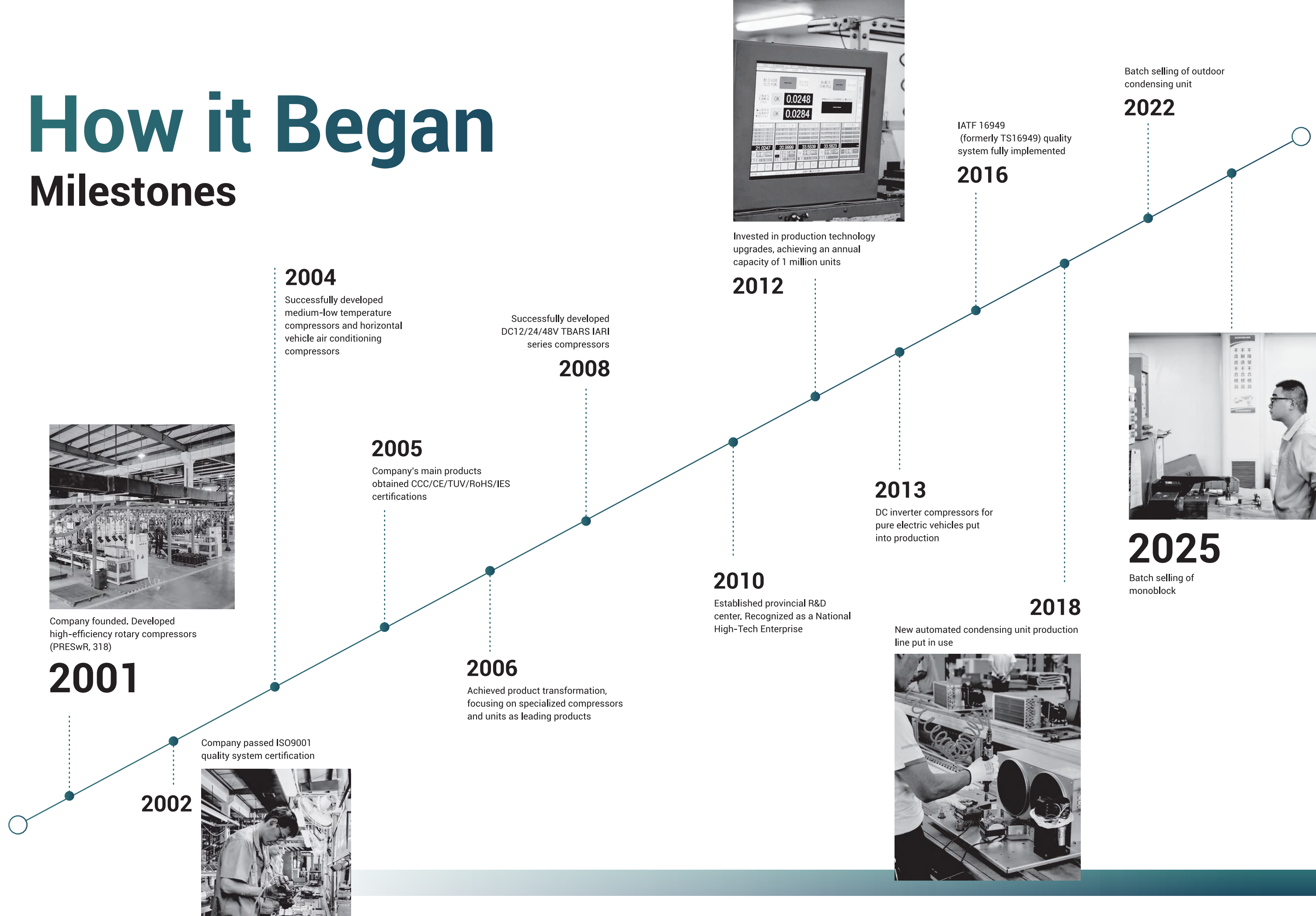
Rooted in technological innovation and advocating green environmental protection, the company's products have been honored as Zhejiang Famous Brand Products. It operates as a provincial-level high-tech enterprise R&D center and serves as a drafting unit for cold chain compressor standards under the National Household Appliance Standardization Technical Committee. The company was also invited to participate in drafting the "Industry Standard for Liquid-Injected Rotary Compressors for Refrigeration and Freezing." With a strong emphasis on independent innovation, the company has been granted 34 patents by the National Patent Office, including 7 invention patents and 29 utility model patents.

The company covers an area of 33,000 m² with a building area of 21,000 m² and employs nearly 300 people. Equipped with modern standard workshops, a technical R&D center, and advanced testing facilities, it holds an industrial product production license and has an annual production capacity of 1 million rotary compressors. The company has established a comprehensive product quality assurance system and an environmental management system, certified with IATF 16949 quality system certification, ISO 14001 environmental management system certification, as well as CCC, CE, UL, RoHS, REACH, and other certifications.

Adhering to the principle of "quality first, reputation first," the company leverages scientific management and strong technical capabilities to continuously deepen reforms, innovate mechanisms, adapt to the market, and achieve comprehensive development. It continually expands the application fields of compressors, which are widely used in commercial refrigerated counters, logistics cold chains, cold storage, dehumidification and drying equipment, liquid cooling, battery thermal management, new energy vehicles, trucks, ships, and other diverse areas. With excellent product cost-effectiveness and a comprehensive after-sales service system, the company has established strong cooperative relationships with numerous domestic and international clients, exporting products to the EU, North America, Australia, the Middle East, Southeast Asia, South Africa, South America, and other regions and countries.

How it Began

Milestones



Nomenclature

Naming Method 1 ODU030LKDV_BY

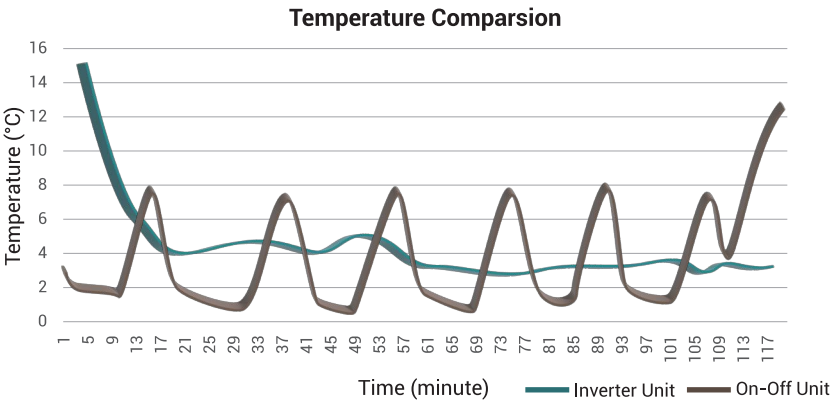
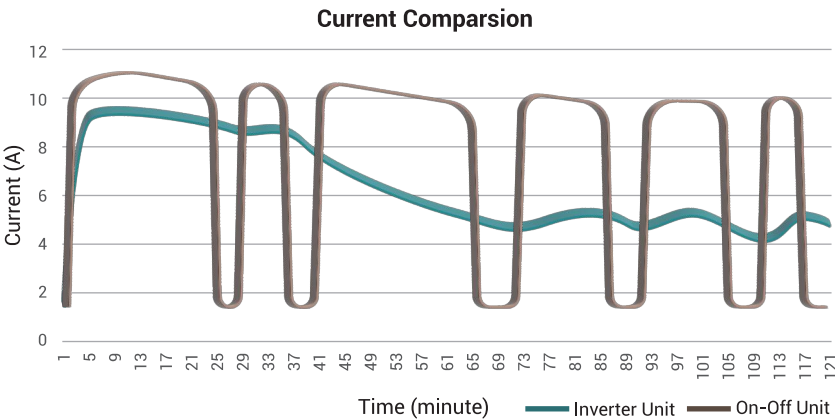
ref	DESCRIPTION	ODU	030	L	K	D	V	-	BY	**
		1	2	3	4	5	6	-	7	8
1	Product Series	ODU=Outdoor Condenser Unit; MON=Monoblock; CDU=Indoor Condenser Unit; DRY=Dry Cooler; WCU=Water-Cooled unit;								
2	Horsepower	030=3 HP								
3	Application	M=MBP; L=LBP; H=HBP								
4	Power Supply	E= (1PH) 220V/50Hz; Y= (1PH) 220V/60Hz; T= (1PH) 115V/60Hz; K= (1PH) 220-240 /50Hz; M= 3PH 50/60Hz(Voltage include 200V,220V,380V,460V); Z=DC								
5	Refrigerant	A=R410A; B=R134a/R1234yf/R513A; C=R744; D=R449A/R448A/A2L/R404A; P=R290/R1270								
6	Control Type	V=Variable Speed; F=Fixed Speed								
7	Compressor	BY=BOYARD; CP=COPELAND; HT=HITACHI; BS=Bsonyo; EB=Embraco; HY=Cubigel; SC=SECOP								
8	Suffix	The suffix distinguishes special content and customized content, and is not displayed in the brochure.								

Naming Method 2 BYGF-025-QXL-SEDP

ref	DESCRIPTION	BYGF	025	QX	L	S	E	D	P
		1	2	3	4	5	6	7	8
1	Unit 1 Serial Number	BYGF-Split Box Type, BYGL-Lateral Integration, BYGD-Top Mounted Integrated							
2	Nominal Power of Compressor	025-2.5HP							
3	Compressor Type	QX-BOYARD QX Series, QH-BOYARD QH Series, TH-BOYARD TH Series, ZB-EMERSON ZB Series, ML-Danfoss ML Series, SX-Panasonic Compressor							
4	Applicable Evaporation Temperature Range	H-High Temperature 0~10℃, M-Middle Temperature -15~0℃, D-Low Temperature -15~-35℃, L-Middle and Low Temperature							
5	Condenser Structure	R-Air-Cooled Ejection Wind, S-Air-Cooling Side Ventilation, T-Water Cooling, Evaporative Cooling, N-Non Condenser							
6	Power Supply	E-220V/50Hz, Y-220V/60Hz, M-380V/50Hz, T-115V/60Hz, Z-Variable Frequency							
7	Refrigerant	A-R410A, B-R134a, C-R407C, D-R404A, R-R290, L-R22							
8	Control	Default-Only high and low pressure protection, no electric control. C-Only Master Control, P-With Master Control and Related Control							

Due to the horizontal low profile feature, Boyard system can be easily integrated into the bottom or top of the freezer, without occupying the main storage or display space inside the cabinet. For commercial display cabinets, this allows for the design of larger transparent glass panels or wider access openings, enabling customers to view the products inside more intuitively, thereby enhancing the display effect and sales potential.

COMMERCIAL REFRIGERATION PLUG-IN CABINET



Inverter units achieve precise matching between cooling output and real-time thermal load through stepless speed adjustment, eliminating losses from frequent start-stop cycling. Also, by making minute speed adjustments to compensate for minor heat infiltration, it can maintain chamber or process temperatures within a range of $\pm 1^{\circ}\text{C}$.

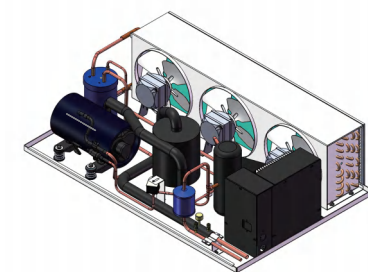
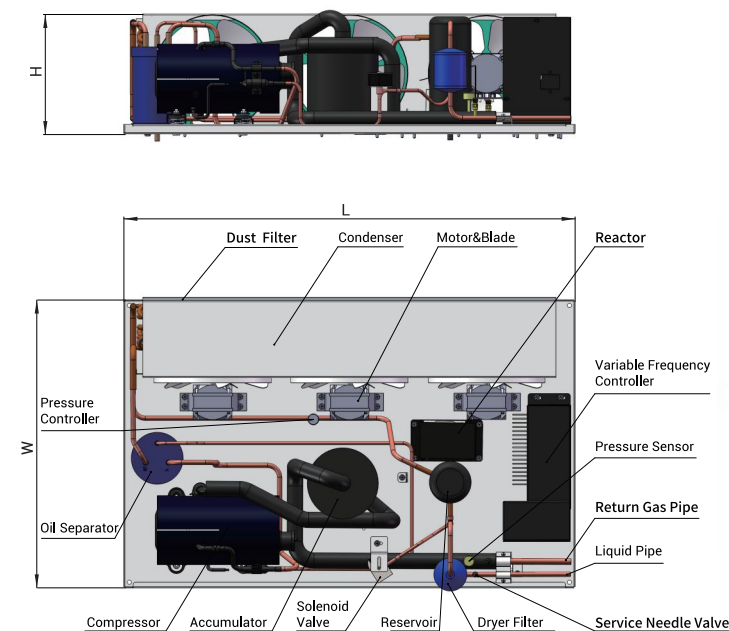


Product Features



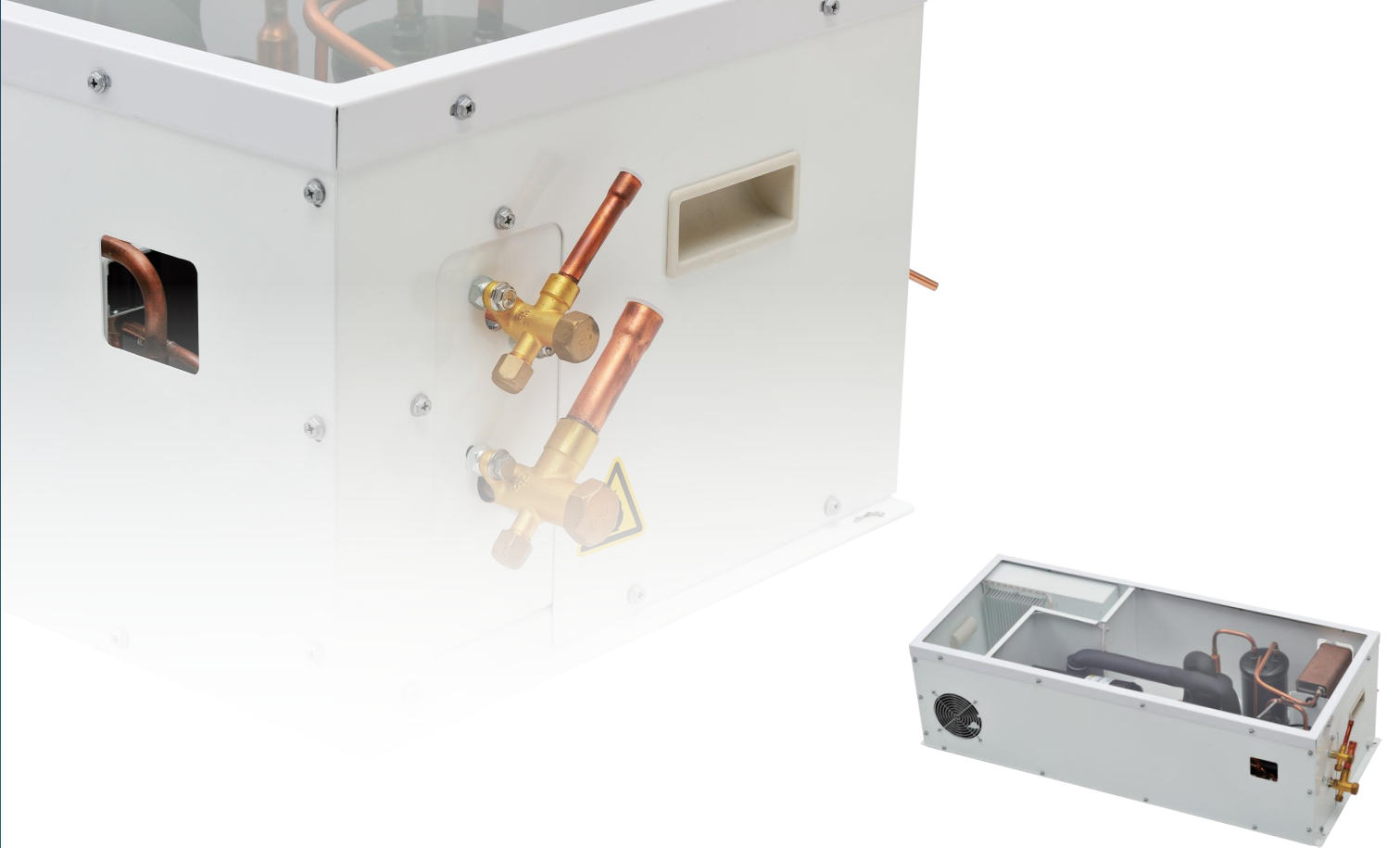
Inverter Unit

- The compressor adjusts its operating frequency based on suction pressure or refrigerated cabinet temperature to reduce the number of start-stop cycles.
- Precise temperature control minimizes suction pressure fluctuations, stabilizes evaporation temperature, and reduces product dehydration.
- Suitable for multiple refrigerated cabinets or cold storage rooms, with quick response to refrigeration load changes.
- Capable of operating within an evaporation temperature range of -40°C to $+5^{\circ}\text{C}$.
- Configurable control schemes allow selection between target temperature control or suction pressure-based regulation of compressor frequency.



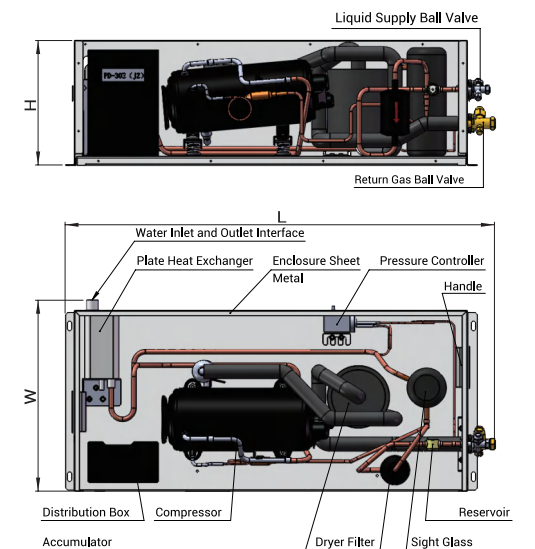
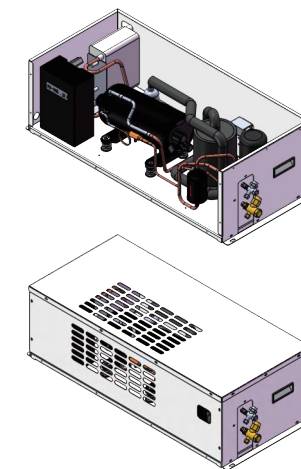
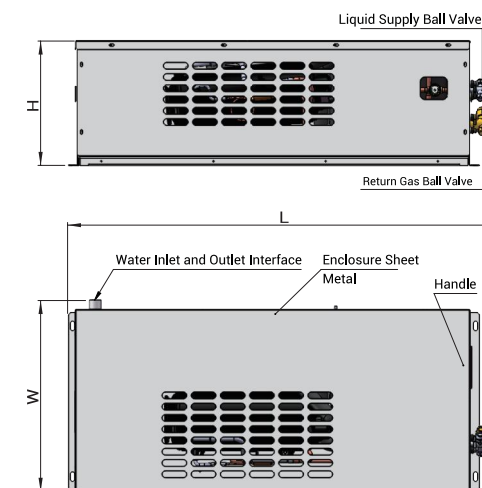
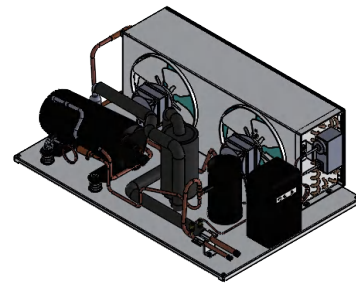
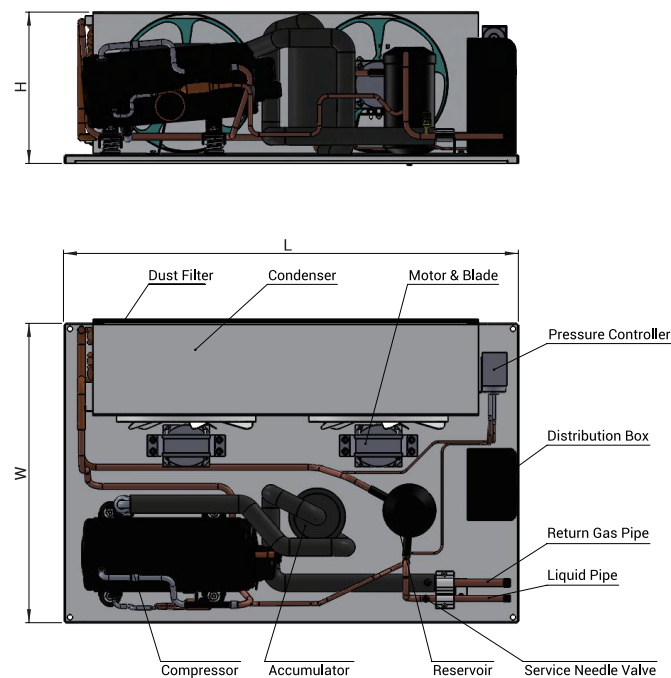
On-Off Units

- Suitable for medium to low temperature operating conditions, capable of operating within an evaporation temperature range of -40°C to 5°C.
- Compatible with various power supply specifications, such as 220V~50Hz, 220V~60Hz, and 115V~60Hz.
- Able to meet different horsepower requirements, covering 0.75–3.0 HP.
- Features a compact structure, simple installation, and supports differentiated customization, with an installation height as low as 200mm.



Water-Loop Condensing Unit

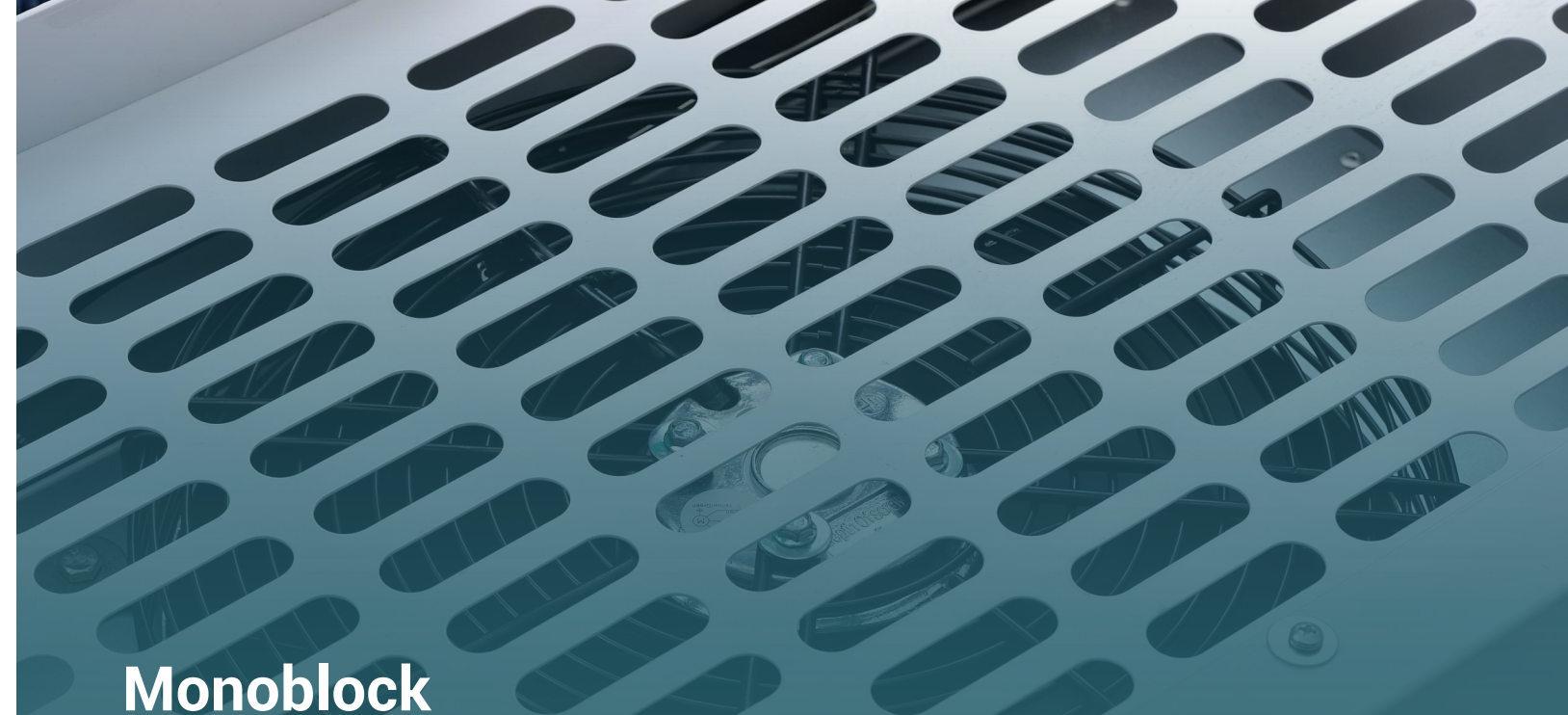
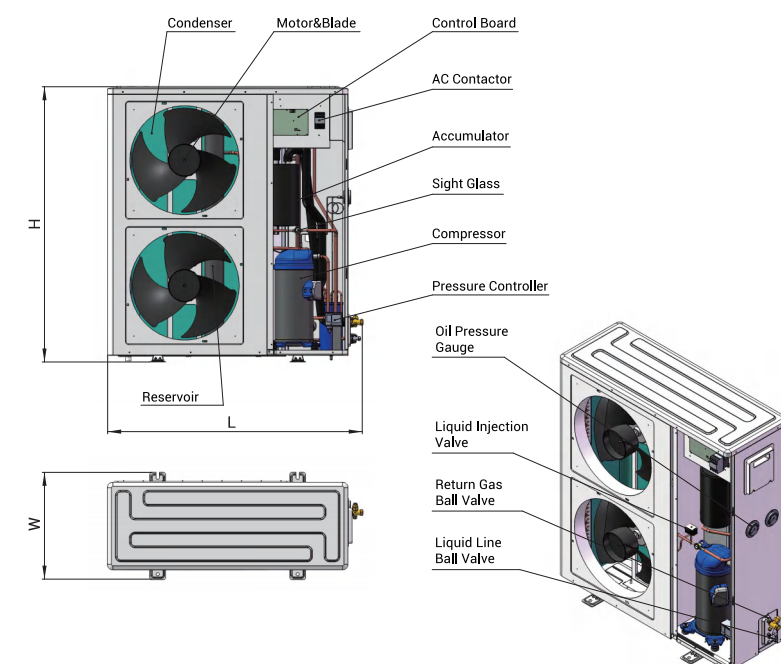
- 60% reduction in refrigerant charge with whisper-quiet operation.
- Optional closed-circuit dry cooler (featuring 1+1 backup pump system) minimizes water loop maintenance.
- Heat exchanger: plate or coaxial.
- Variable speed, energy saving up to 30%.
- Applicable to multi-split system, compact design, small footprint, easy installation.





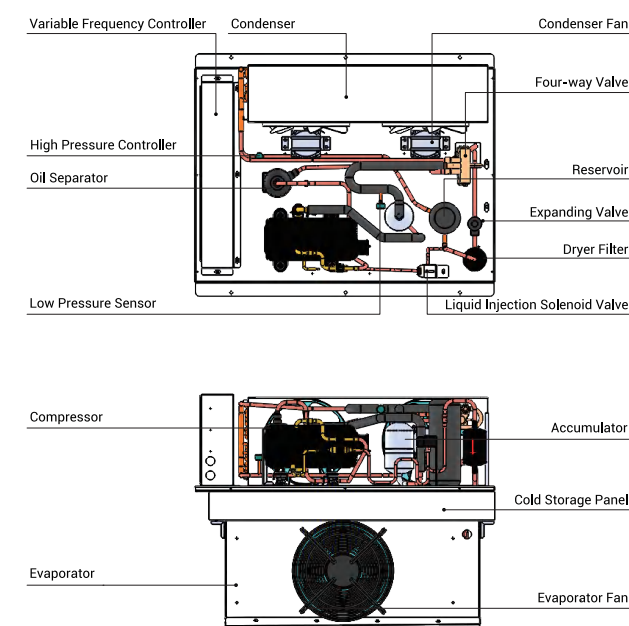
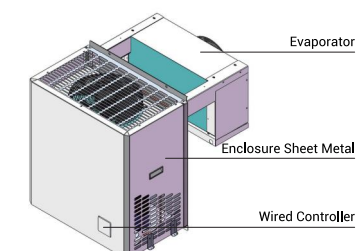
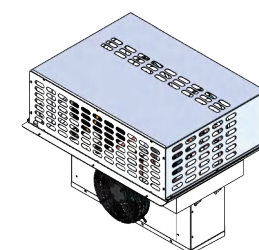
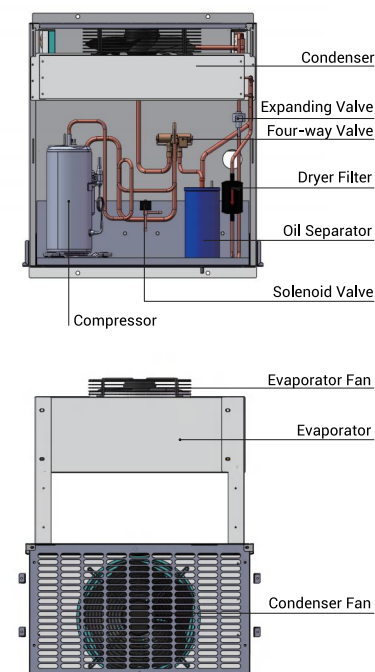
Outdoor Condensing Unit

- The product line includes both fixed-frequency and inverter units, with a horsepower range from 1 to 12 HP.
- Compatible with compressors from multiple brands.
- Features an optimized and upgraded condenser that reduces refrigerant charge requirements while increasing heat exchange surface area by over 20% compared to similar products, enabling reliable operation in ambient temperatures up to 48°C.
- High energy efficiency, with inverter series delivering over 25% energy savings.
- Standard equipment includes a microprocessor control board and sight glass for convenient field debugging.
- Flexible control strategies: frequency can be regulated based on target temperature or low-pressure setpoints. The controller offers open access to internal parameters, allowing manufacturers to perform custom configurations.
- Customized solutions are available to meet specific requirements.

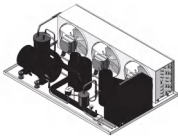


Monoblock

- The product line includes fixed-frequency and inverter monoblock,, with horsepower ranging from 1 to 3 HP.
- The inverter monoblock enables rapid cooling and precise temperature control of the cold storage within $\pm 0.5^{\circ}\text{C}$.
- Compatible with refrigerants including R290, R404A, R448A, R449A, and R454C.
- Operational within an evaporating temperature range of -40°C to $+5^{\circ}\text{C}$.
- Simple installation with plug-and-play functionality; no on-site welding or refrigerant charging required.
- Utilizes electronic expansion valves for throttling control.
- Employs a four-way valve for hot gas defrosting, with defrost modes selectable between timed defrost or on-demand defrost.
- Supports self-evaporation of condensate water.

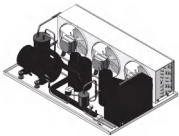


R448A/R449A/R454C
Horizontal Inverter Unit



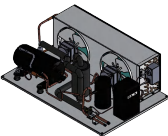
Model			CDU012LKDV_BY	CDU020LKDV_BY	CDU025LKDV_BY	CDU030LKDV_BY	CDU035LKDV_BY
Previous Model			HQSD-210KBI41	HQSD-285KBI40	HQSD-360KBI40	HQSD-460KBI40	HQSD-540KBI40
Nominal Input(W)			1200	1550	1950	2550	2890
Power Supply			1PH 220V 50/60 Hz(380V 50/60Hz 200V 50/60Hz 220V 50/60Hz)				
Refrigerant			R448A / R449A / R454C / R455A / R404A				
Max Refrigerant Charging(kg)			1.8	2.5	3.5	3.5	4.5
Max Running Current(A)			6	10.5	13.5	16.5	20.0
Evap.Temp.(°C)			-40~-5				
Ambient Temp.(°C)			10~43				
Compressor Model			JHSD150Z312	KHSD203Z312	KHSD300Z312	KHSD300Z312	THSD456Z312
Condenser	Style		Copper tube fin condenser or microchannel condenser				
	Fan Motor	Diameter*Quantity(mm)	φ230*2	φ230*3	φ230*3	φ230*4	φ254*4
		Air Flow(m³/hr)	730*2	730*3	730*3	730*4	840*4
Pipe(mm)	Gas Inlet OD		φ12.7(1/2")			φ15.88(5/8")	
	Liquid Outlet OD		φ9.53(3/8")				
Product Dimension(mm)	Length(mm)		790	940	1145	1350	1350
	Width(mm)		600	620	600	600	600
	Height(mm)		251				300
Weight(kg)			33.5	47	53	62	62
Cooling Capacity(W)	Evap.Temp.(°C)		Ambient Temp.: 32°C Subcooling Temp.: 0°C				
	-40		495	705	830	1105	1260
	-35		600	870	1055	1315	1510
	-30		760	1050	1240	1680	1930
	-25		965	1260	1470	1980	2275
	-20		1325	1775	2115	2780	3210
	-15		1595	2105	2585	3005	3475
	-10		1880	2490	3100	4040	4870
	-5		2180	2770	3690	4745	5495
Wiring Capacity	Residual Current Device	Rated Current(A)	15	20	20	20	20
		Leakage Current(mA)	30	30	30	30	30
	Wire Diameter(mm²)	≤10m	2.0	4.0	4.0	4.0	4.0
		10<L≤20m	2.5	6.0	6.0	6.0	6.0
		20<L≤30m	2.5	6.0	6.0	6.0	6.0

R290
Horizontal Inverter Unit



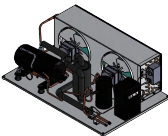
Model			CDU010LKPV_BY	CDU015LKPV_BY	CDU020LKPV_BY	CDU025LKPV_BY
Previous Model			HQSP-210KBI40	HQSP-260KBI41	HQSP-330KBI40	HQSP-400KBI41
Nominal Input (W)			950	1270	1400	1710
Power Supply			1PH 220V 50/60 Hz			
Refrigerant			R290			
Max Refrigerant Charging (g)			350	400	500	500
Max Running Current(A)			5.5	7.5	9.5	10.5
Evap.Temp (°C)			-40~-5			
Ambient Temp (°C)			5~43			
Compressor Model			JHSP150Z312	KHSP203Z312	KHSP300Z312	KHSP300Z312
Condenser	Style		Copper tube fin condenser or microchannel condenser			
	Fan Motor	Diameter*Quantity (mm)	φ230*2(EC)	φ230*2(EC)	φ230*3(EC)	φ230*4
		Air Flow (m³/hr)	820*2	820*2	820*3	820*3
Standard Configuration	Pressure Controller (Mpa)		Diaphragm type high pressure switch Low Pressure Sensor or Low Pressure Switch			
	Reservoir		/	0.6L		
	Oil Separator		4808S	BLR/A-W 55833		
	Accumulator		650CC			1L
	Dryer filter		052S		083S	
	Liquid Injection Valve		1/4'			
	Variable Frequency Control Function		Compressor frequency control, electronic expansion valve control, condensing fan control, defrosting control, high and low pressure protection, spray control, exhaust temperature protection, current protection and fault code output.			
Pipe (mm)	Gas Inlet OD		φ12.7(1/2")			φ15.88(5/8")
	Liquid Outlet OD		φ6.35(1/4")		φ9.53(3/8")	
Product Dimension (mm)	Length (mm)		680	790	940	1145
	Width (mm)		600	600	600	600
	Height (mm)		263		275	
Weight (kg)			33	40	50	53
R290 Cooling Capacity (W)	Evap.Temp (°C)		Ambient Temp.: 32°C Subcooling Temp.: 0°C			
	-40		640	790	860	1040
	-35		805	960	1100	1330
	-30		970	1100	1320	1600
	-25		1150	1320	1500	1810
	-20		1340	1700	1950	2350
	-15		1790	2080	2400	2900
	-10		2240	2420	2800	3380
	-5		2430	2700	3200	3750
Wiring Capacity	Residual Current Device	Rated Current (A)	16	20	20	20
		Leakage Current (mA)	30	30	30	30
	Wire Diameter (mm²)	L≤10m	2.5	2.5	4.0	4.0
		10<L≤20m	2.5	2.5	6.0	6.0
		20<L≤30m	2.5	2.5	6.0	6.0

R448A/R449A/R454C
Horizontal 50Hz On-Off Unit



Model			CDU008 LKDF_BY	CDU010 LKDF_BY	CDU012 LKDF_BY	CDU015 LKDF_BY	CDU020 LKDF_BY	CDU022 LKDF_BY	CDU025 LKDF_BY	CDU030 LKDF_BY	
Previous Model			HQHD-13KBP	HQHD-16KBP	HQSD-203KBP	HQHD-23KBP	HQHD-30KBP	HQSD-329KBP20	HQHD-36KBP	HQSD-456KBP	
Nominal Input (W)			820	1000	1175	1540	1910	2010	2130	2800	
Power Supply			1PH 220 ~ 240V 50Hz								
Refrigerant			R448A / R449A / R454C / R455A / R404A								
Max Refrigerant Charging (kg)			1.2	1.5	2.0	2.0	3.0	3.0	3.0	3.5	
Start-Up Current (A)			20	27	30	38	42	38	50	65	
Max Running Current (A)			5.0	6.2	8.0	9.2	11	12.0	12.5	16.0	
Evap.Temp (°C)			-40~-5								
Ambient Temp (°C)			0 ~ 43								
Compressor Model			QHD-13K	QHD-16K	KHSD203KS	QHD-23K	QHD-30K	THSD329KS	QHD-36K	THSD456KS	
Condenser	Style		Copper tube fin condenser or microchannel condenser								
	Fan Motor	Diameter*Quantity (mm)	φ230*2 (10W*2)	φ230*2 (16W*2)	φ230*2 (16W*2)	φ230*2 (16W*2)	φ230*3 (16W*3)	φ230*3 (16W*3)	φ230*3 (16W*3)	φ230*4 (16W*4)	
		Air Flow (m³/hr)	630*2	730*2	730*2	730*2	730*3	730*3	730*3	730*4	
Pipe(mm)	Gas Inlet OD		φ12.7(1/2")								φ15.88(5/8")
	Liquid Outlet OD		φ9.53(3/8")								
Product Dimension (mm)	Length (mm)		680		790		940	1145		1350	
	Width (mm)		485		520					540	
	Heigh t(mm)		263								
Weight (kg)			29	31	35.5	37.5	47	53.5	50.5	60	
R449A Cooling Capacity (W)	Evap.Temp (°C)		Ambient Temp.: 32°C Subcooling Temp.: 0°C								
	-40		325	430	485	550	720	770	810	1145	
	-35		445	560	595	715	890	960	1040	1365	
	-30		550	650	745	805	1085	1165	1260	1730	
	-25		615	775	945	1015	1275	1350	1550	2055	
	-20		870	1110	1320	1390	1825	1960	2090	2895	
	-15		1045	1420	1575	1650	2170	2315	2555	3150	
	-10		1315	1590	1850	2090	2570	2755	3060	4225	
	-5		1565	1810	2165	2405	2875	3275	3655	4940	
Wiring Capacity	Residual Current Device	Rated Current (A)	16	16	20	20	20	20	20	25	
		Leakage Current (mA)	30	30	30	30	30	30	30	30	
	Wire Diameter (mm²)	L≤10m	2.5	2.5	2.5	2.5	4.0	4.0	4.0	4.0	
		10<L≤20m	2.5	2.5	2.5	2.5	6.0	6.0	6.0	6.0	
		20<L≤30m	2.5	2.5	2.5	2.5	6.0	6.0	6.0	6.0	

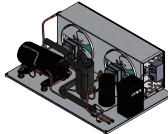
R448A/R449A/R454C
Horizontal 60Hz On-Off Unit



Model			CDU010LYDF _BY	CDU012LYDF _BY	CDU020LYDF _BY	CDU025LYDF _BY	CDU030LYDF _BY	CDU010LTDF _BY	CDU012LTDF _BY
Previous Model			HQHD-135YBI01	HQHD-164YBI01	HQHD-236YBI01	HQHD-307YBI01	HQHD-357YBI01	HQHD-135TBI	HQSD-203TBI
Nominal Input (W)			1020	1130	1740	2100	2640	1020	1500
Power Supply			1PH 220V 60Hz					1PH 115V 60Hz	
Refrigerant			R448A / R449A / R454C / R455A / R404A						
Max Refrigerant Charging (kg)			1.5	2.0	2.5	3.0	3.0	1.5	2.5
Start-Up Current (A)			26	30	40	52	60	53	68
Max Running Current (A)			5.5	6.5	9.5	12	14.5	10.5	15
Evap.Temp (°C)			-40~-5						
Ambient Temp (°C)			0~43						
Compressor Model			KHD135YS	KHD164YS	SHD236YS	THD307YS	THD357YS	KHD135TS	KHSD203TS
Condenser	Style		Copper tube fin condenser or microchannel condenser						
	Fan Motor	Diameter*Quantity (mm)	φ230*2 (16W*2)	φ230*2 (16W*2)	φ230*3 (16W*3)	φ230*3 (16W*3)	φ230*4 (16W*4)	φ230*2 (18W*2)	φ230*2 (18W*2)
		Air Flow (m³/hr)	750*2	750*2	750*3	750*3	750*4	750*2	750*2
Pipe(mm)	Gas Inlet OD		φ12.7(1/2")						
	Liquid Outlet OD		φ9.53(3/8")						
Product Dimension (mm)	Length (mm)		680	790	940	1145	1350	680	790
	Width (mm)		520				540	520	
	Height (mm)		251						
Weight (kg)			32	34	42	53	60	32	38
R449A Cooling Capacity (W)	Evap.Temp (°C)		Ambient Temp.: 32°C Subcooling Temp.: 0°C						
	-40		420	470	665	840	1040	420	570
	-35		545	720	825	1075	1240	545	710
	-30		630	715	1005	1260	1575	630	865
	-25		755	905	1175	1485	1890	755	1005
	-20		1065	1250	1670	2140	2610	1065	1435
	-15		1360	1500	1970	2630	2820	1360	1690
	-10		1525	1755	2350	3145	3805	1525	2020
	-5		1735	2115	2820	3760	4465	1735	2425
Wiring Capacity	Residual Current Device	Rated Current (A)	16	16	20	20	20	20	20
		Leakage Current (mA)	30	30	30	30	30	30	30
	Wire Diameter (mm²)	L≤10m	2.5	2.5	2.5	2.5	4.0	2.5	2.5
		10<L≤20m	2.5	2.5	2.5	2.5	6.0	2.5	2.5
		20<L≤30m	2.5	2.5	2.5	2.5	6.0	2.5	2.5

R290

Horizontal On-Off Uint



Model			CDU003 MKPF_BY	CDU006 LKPF_BY	CDU008 LKPF_BY	CDU008 LKPF_BY	CDU010 LKPF_BY	CDU012 LKPF_BY	CDU020 LKPF_BY
Previous Model			HQHP-06KBI01	HQSP-12KBI01	HQHP-16KBI01	HQSP-18KBI01	HQSP-20KBI01	HQHP-23KBI01	HQHP-33KBI01
Power Supply			1PH 220 ~ 240V 50/60 Hz						
Refrigerant			R290						
Max Refrigerant Charging (g)			150	150	150	350	400	400	500
Start-Up Current (A)			8.8	12	21	21	29	29	50
Max Running Current (A)			2.1	3.5	4.5	5.5	6	8	10
Evap.Temp (°C)			-40~-5						
Ambient Temp (°C)			10~43						
Compressor Model			JHP058K	JHSP116KS	KHP164KS	KHSP176KS	KHSP203KS	SHP236KS	THSP329KS
Condenser	Style		Copper tube fin condenser or microchannel condenser						
	Fan Motor	Diameter*Quantity (mm)	φ230*1 (15W*1)	φ230*1 (15W*1)	φ230*2 (15W*2)			φ230*3 (15W*3)	
		Air Flow (m³/hr)	730			730*2			730*3
Pipe (mm)	Gas Inlet OD		φ9.53 (3/8")				φ12.7(1/2")		
	Liquid Outlet OD		6.35 (1/4")						φ9.53 (3/8")
Product Dimension (mm)	Length (mm)		460		680		790		940
	Width (mm)		500		485		520		520
	Height (mm)		263						275
R290 Cooling Capacity (W)	Evap.Temp (°C)		Ambient Temp.: 32°C Subcooling Temp.: 0°C						
	-40		160	300	440	465	500	570	790
	-35		210	395	570	605	645	740	980
	-30		245	455	660	700	725	830	1200
	-25		290	540	785	830	910	1040	1380
	-20		365	685	995	1055	1150	1260	1780
	-15		470	880	1270	1345	1315	1500	2100
	-10		525	980	1420	1505	1665	1900	2500
	-5		605	1125	1630	1730	1930	2200	3000
Wiring Capacity	Residual Current Device	Rated Curren t(A)	16	16	16	16	20	20	20
		Leakage Current (mA)	30	30	30	30	30	30	30
	Wire Diameter (mm²)	L≤10m	1.5	1.5	2.5	2.5	2.5	2.5	4.0
		10<L≤20m	1.5	1.5	2.5	2.5	2.5	2.5	6.0
		20<L≤30m	1.5	1.5	2.5	2.5	2.5	2.5	6.0

2-8HP MBP/LBP Variable Frequency

Water-Loop Condensing Unit



Model		WCU010LKD(P)V_BY	WCU020LKD(P)V_BY	WCU030LKD(P)V_BY	WCU040LKDV_BY	WCU060LMDV_HT	WCU080LMDV_HT
Previous Model		BYGF-010-QHL-TZDP(TZPP)	BYGF-020-QHL-TZDP(TZPP)	BYGF-030-QHL-TZDP(TZPP)	BYGF-040-QHL-TZDP	BYGF-060-HIL-TZDP	BYGF-080-HIL-TZDP
Power Supply		1PH 220V 50/60 Hz (3PH 220V 50/60 Hz)			3PH 380V 50/60 Hz		
Inverter Control Scheme		Frequency control based on the thermostat or low-pressure signal.					
HP Compressor		1 HP	2 HP	3 HP	4 HP	6 HP	8 HP
Refrigerant		R404A/R448A/R449A/A2L R290					
Evap. Temp(°C)		-40~-5					
Standard Configuration	Pressure Controller (Mpa)	Diaphragm type high pressure switch					
	Reservoir	1.1L			2L	6L	
	Dryer Filter	083S				084S	165S
	Sight Glass	3/8				1/2"	5/8"
	Oil Separator	BLR/A-W 55833				BLR/A-W 55824	
	Accumulator	1L				3.5L	
	Liquid Injection Valve	Liquid injection solenoid valve or electronic expansion valve					
Electric Control	Circuit Breaker	D63					
	Variable Frequency Control Function	Compressor inverter control, electronic expansion valve control, condenser fan control, defrost control, high and low pressure protection, liquid injection control, discharge temperature protection, current protection, and fault code output.					
Pipe(mm)	Gas Inlet OD	1/2"(12.7)	5/8"(15.88)		3/4"(19.05)	7/8"(22.22)	
	Liquid Outlet OD	3/8"(9.53)				1/2"(12.7)	5/8"(15.88)
Water Inlet and Outlet Interface Dimension		DN20		DN32			DN40
Product Dimension (mm)		990*420*280			1150*440*280	800*500*660	
Installation Dimension (mm)		950*335			1100*335	750*335	
Personalization Options	Solenoid Valve	3/8"(9.53)				1/2"(12.7)	5/8"(15.88)
	Crankshaft Heating Belt	25W			28W	40W	
R449A Cooling Capacity(W)	Evap. Temp (°C)	Test conditions: GB/T 21363-2018 Inlet Water Temperature:30°C Outlet Water Temperature:35°C Subcooling Temp:0°C Suction Temp:18°C					
	-40	540	770	1145	1455	2520	3820
	-35	665	965	1365	1805	3080	4550
	-30	820	1130	1730	2210	3780	5415
	-25	1075	1410	2125	2730	4700	6565
	-20	1540	2065	3055	3810	6670	9020
	-15	1850	2440	3525	4660	8225	10810
	-10	2190	2910	4555	5615	10055	13160
	-5	2585	3290	5495	6935	12500	14910
R290 Cooling Capacity(W)	Evap. Temp (°C)	Test conditions: GB/T 21363-2018 Inlet Water Temperature:30°C Outlet Water Temperature:35°C Subcooling Temp:0°C Suction Temp:18°C					
	-40	545	780	1160	/	/	/
	-35	675	975	1380	/	/	/
	-30	830	1145	1750	/	/	/
	-25	1090	1425	2150	/	/	/
	-20	1390	1870	2760	/	/	/
	-15	1670	2210	3185	/	/	/
	-10	1980	2635	4120	/	/	/
	-5	2335	2975	4970	/	/	/

Technical
Data of Dry-Cooler Unit

Model			DRY040K	DRY070K	DRY100M	DRY120M	DRY150M	DRY200M
Previous Model			BYGF-040-TEP-03	BYGF-070-TEP-03	BYGF-100-TMP-03	BYGF-120-TMP-03	BYGF-150-TMP-03	BYGF-200-TMP-03
Power Supply			1HP 220V 50Hz (1HP 220V 60Hz Optional)		3HP 380V 50Hz （3HP 380V 60Hz Optional）			
Heat Transferring Medium			Pure Water or Glycol mixture					
Ambient Temp (°C)			-20~43					
Water Discharge (m³/h)			2.5	3.5	5.0	6.0	8.0	10.0
Heat Exchange Amount (KW)			Ambient Temp.:31.5℃ Inlet Water Temp.:37℃ Outlet Water Temp.:32℃					
			11	19	28	32	40	56
Standard Configuration	Water pump		Nanfeng Pumps / Grundfos Pumps (One for backup and one for use)					
	Dry-Cooler		Copper tube fin dry-Cooler					
	Fan Motor	Diameter*Quantity (mm)	φ450*1	φ450*2	φ500*2	φ500*2	φ600*2	φ630*2
		Air Flow (m³/hr)	5300	7600	12200	12200	21000	21000
	Flow Switch		Piston flow switch					
	Swell can		5L		8L		12L	19L
	Vent Valve		Automatic exhaust valve					
	Function Valve		Check valve / Water pump maintenance valve / Water inlet valve / Outlet interface valve / Fill water valve / Outfall valve					
	Filter		DN32		DN40		DN50	DN63
Personalization Options	Function Gage		Pressure Gage / Thermometer / Water Flow Indicator					
	Control Box ③		Phase sequence protection, Water shortage protection, Motor thermal protection, Condenser fan speed regulation, Fault code output, Automatic timed pump switching or manual pmp Switching, pump overheating protection, Pump operation fault alarm.and other functions.					
Electric Control	AC Contactor		18/01					
	Control board		Phase sequence protection, Water shortage protection, Motor thermal protection, Condensing fan speed regulation, Fault code output and other functions.					
Interface Size	Water Inter Size		DN32		DN40		DN50	DN63
	Water Outlet Size		DN32		DN40		DN50	DN63
	Fill Wate Sizer		DN25					
	Length (mm)		DN25					
Dimension (mm)	Outfall Size		1250		1550		2150	2200
	Width (mm)		650	750			1150	1500
	Height (mm)		1200	1580		1950	1130	1200
Installation Dimension (mm)	Length*Width (mm)		580*610		680*610		1500*1120	1500*1470
Packaging Dimension (mm)	Length*Width*Height (mm)		1350*720*1380	1350*820*1760	1650*820*1760	1650*820*2130	2250*1250*1200	2300*1600*1380

1-3HP MBP/LBP Fixed Frequency
Outdoor Condensing Unit



Model		ODU010LKDF_BY	ODU015LKDF_BY	ODU020LKDF_BY	ODU025LKDF_BY	ODU030LKDF_BY	ODU030LMDF_EB
Previous Model		BYGF-010-QXD-SEDP	BYGF-015-QXD-SEDP	BYGF-020-QXD-SEDP	BYGF-025-QXD-SEDP	BYGF-030-QXD-SEDP	BYGF-030-XED-SMDP
Power Supply		1PH 220V/50Hz					3PH 380V 50Hz
HP Compressor		1 HP	1.5 HP	2HP	2.5 HP	3 HP	3 HP
Refrigerant		R448A / R449A / R454C / R455A /R404A					
Max Refrigerant Charging (kg)		1.5	2.0	2.5	3.0	3.5	3.5
Evap.Temp (°C)		-40~-5					
Ambient Temp (°C)		-15~46				-15~46	
Standard Configuration	Compressor Model	QXD-16K	QXD-23K	QXD-30K	QXD-36K	TXSD456KS	XFV25B
	Pressure Controller (Mpa)	Diaphragm type high pressure switch and low pressure switch					
	Fam Motor	40W*1			65W*1		
	Reservoir	0.8			2.5L		
	Sight Glass	3/8					
	Oil Pressure Gauge	High pressure oil pressure gauge and low pressure oil pressure gauge					
	Dryer Filter	083S					
Personalization Options	Accumulator	0.6L		1L			
	Solenoid Valve	3/8					
	Crankshaft Heating Belt	25W		28W			40W
	Air Cooler	HQHD-16KB-ZF-01	HQHD-23KB-ZF-01	HQHD-36KB-ZF-01		HQHD-456KB-ZF-01	
	Cold storage electrical box	The distribution box is integrated on the outdoor unit side and uses hot gas defrosting. The external dimensions of the 1.5HP unit need to be increased.					
Electric Control	AC Contactor	18/01				25/01	
	Control board	Phase sequence protection and phase loss protection, exhaust temperature protection, liquid injection control, condensing fan speed control, fault code alarm output, and fan start/stop control.					
Pipe (mm)	Gas Inlet OD	1/2"(12.7)			5/8"(15.88)		
	Liquid Outlet OD	1/4"(6.35)		3/8"(9.53)			
	Product Dimension (mm)	900*350*610			950*420*800	1015*420*850	
	Installation Dimension (mm)	500*320			615*390	580*385	
R449A Cooling Capacity (W)	Evap.Temp (°C)	Test Conditions: GB/T 21363-2018 Ambient Temp.:32°C Subcooling Temp.:0°C Suction Temp.:18°C					
	-40	445	560	735	820	1145	1205
	-35	585	730	920	1050	1365	1435
	-30	670	820	1130	1215	1730	1815
	-25	810	1030	1300	1450	2085	2195
	-20	1130	1395	1860	2045	2880	3030
	-15	1440	1645	2230	2520	3300	3470
	-10	1625	2090	2600	3020	4205	4425
	-5	1860	2415	2925	3625	5055	5320

2-8HP MBP/LBP Variable Frequency Outdoor Condensing Unit



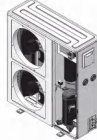
Model		ODU020LKDV_BY	ODU030LKDV_BY	ODU040LKDV_BY	ODU060LMDV_HT	ODU080LMDV_HT
Previous Model		BYGF-020-QXL-SZDP	BYGF-030-QXL-SZDP	BYGF-040-QXL-SZDP	BYGF-060-HIL-SZDP	BYGF-080-HIL-SZDP
Power Supply		1PH 220V 50/60 Hz (3PH 380V 50/60Hz, 3PH 200V 50/60Hz, 3PH 220V 50/60Hz)			3PH 380V 50/60 Hz	
Inverter Control Scheme		Frequency control based on the thermostat or low-pressure signal.				
HP Compressor		2 HP	3 HP	4 HP	6 HP	8 HP
Refrigerant		R449A / R448A / R454C / R455A / R404A				
Evap Temp.(°C)		-40~-5				
Standard Configuration	Compressor Model	BOYARD KXSD203Z312	BOYARD KXSD300Z312	BOYARD TXSD456Z312	HITACHI LS400DHD-64D	HITACHI LS600DHD-90D
	Fan Motor	φ480*1	φ480*1	φ480*1	φ480*2	φ480*2
	Pressure Controller(Mpa)	Diaphragm type high pressure switch / Low pressure sensor or low pressure switch				
	Reservoir	2.5L			6L	
	Dryer Filter	083S		084S		165S
	Sight Glass	3/8		1/2"		5/8"
	Oil Pressure Gauge	High pressure gauge and low pressure gauge				
	Liquid Valve	Liquid injection solenoid valve or electronic expansion valve				
Electric Control	Circuit Breaker	D63				
	Variable Frequency Control Function	Compressor inverter control, electronic expansion valve control, condenser fan control, defrost control, high and low pressure protection, liquid injection control, discharge temperature protection, current protection, and fault code output.				
Pipe(mm)	Gas Inlet OD	5/8"(15.88)		3/4"(19.05)	7/8"(22.22)	
	Liquid Outlet OD	3/8"(9.53)		1/2"(12.7)		5/8"(15.88)
Product Dimension(mm)		1015*420*850		1180*490*860	1200*490*1250	
Installation Dimension(mm)		580*385		640*440		
Personalization Options	Solenoid Valve	3/8"(9.53)		1/2"(12.7)		5/8"(15.88)
	Oil Separator	BLR/A-W 55833			BLR/A-W 55824	
	Accumulator	1L			3.5L	
	Crankshaft Heating Belt	25W		28W	40W	
R449A Cooling Capacity(W)	Evap Temp.(°C)	Test Conditions: GB/T 21363-2018 Ambient Temp.:32°C Subcooling Temp.:0°C Suction Temp.:18°C				
	-40	770	1145	1455	2520	3820
	-35	965	1365	1805	3080	4550
	-30	1130	1730	2210	3780	5415
	-25	1385	2085	2685	4620	6440
	-20	1970	2910	3715	6345	8600
	-15	2310	3335	4505	7755	10150
	-10	2740	4250	5465	9400	12220
	-5	3055	5110	6585	11560	14380

2-13HP MBP Fixed-Frequency Outdoor Condensing Unit



Model		ODU020 MMDF_CP	ODU030 MMDF_CP	ODU040 MMDF_CP	ODU050 MMDF_CP	ODU060 MMDF_CP	ODU070 MMDF_CP	ODU080 MMDF_CP	ODU100 MMDF_CP	ODU130 MMDF_CP	
Previous Model		BYGF-020-ZBM-SMDP	BYGF-030-ZBM-SMDP	BYGF-040-ZBM-SMDP	BYGF-050-ZBM-SMDP	BYGF-060-ZBM-SMDP	BYGF-070-ZBM-SMDP	BYGF-080-ZBM-RMDP	BYGF-100-ZBM-RMDP	BYGF-130-ZBM-RMDP	
Power Supply		3PH 380V 50Hz									
HP Compressor		2 HP	3 HP	4 HP	5 HP	6 HP	7 HP	8 HP	10 HP	13 HP	
Refrigerant		R448A / R449A / R454C / R455A /R404A									
Evap.Temp (°C)		-20~10									
Ambient Temp (°C)		-15~45									
Standard Configuration	Compressor Model	ZB15KQE	ZB21KQE	ZB29KQE	ZB38KQE	ZB45KQE	ZB48KQE	ZB58KQE	ZB76KQE	ZB95KQE	
	Pressure Controller (Mpa)	Diaphragm type high pressure switch and low pressure switch. Use a low-pressure pressure switch to control compressor start/stop; the brand must be Danfoss or SAGINOMIYA.									
	Fam Motor	65W*1			65W*2		90W*2	550W		460W*2	
	Reservoir	2.5L			6L			10 L		14L	
	Dryer Filter	083S			084S			165S			
	Sight Glass	3/8			1/2"			5/8"			
	Oil Pressure Gauge	High pressure oil pressure gauge+Low pressure oil pressure gauge									
	Liquid Injection Valve	Liquid Injection Valve or Electronic expansion valvee									
	Crankshaft heating belt	40W						90W			
Electric control	AC contactor	18/01						25/01		32/01	
	Control Board	Phase sequence protection and phase loss protection, discharge temperature protection, liquid injection control, condenser fan speed control, fault code alarm output, and other functions.									
Pipe (mm)	Gas Inlet OD	5/8"(15.88)		3/4"(19.05)		7/8"(22.22)		11/8"(28.58)			
	Liquid Outlet OD	3/8"(9.53)			1/2"(12.7)			5/8"(15.88)			
Product Dimension (mm)		1015*420*850			1015*420*1250			1000*810*1230		1400*810*1230	
Installation Dimension (mm)		580*385						450*760		900*760	
Personalization Options	Oil Separator	BLR/A-W 55833			BLR/A-W 55824			BLR/A-W 55877			
	Refrigeration Solenoid Valve	3/8"(9.53)			1/2"(12.7)			5/8"(15.88)			
	Accumulator	1L			3.5L						10.5L
R449A Cooling Capacity (W)	Evap.Temp (°C)	Test Conditions: GB/T 21363-2018 Ambient Temp.:32°C Subcooling Temp.:0°C Suction Temp.:18°C									
	-20	2090	3250	4450	5600	6600	7200	8350	11300	13750	
	-15	2570	3950	5300	6700	7900	8650	10300	13950	17000	
	-10	3120	4650	6350	8000	9350	10300	12350	16250	20450	
	-5	3720	5550	7500	9450	11150	12150	17450	19500	24150	
	0	4410	6500	8800	11150	13000	14300	17200	22950	28050	
	5	5110	7550	10200	12900	15250	16700	19950	26650	32600	

3-13HP LBP Fixed-Frequency Outdoor Condensing Unit



Model			ODU020 LMDF_CP	ODU030 LMDF_CP	ODU040 LMDF_CP	ODU050 LMDF_CP	ODU060 LMDF_CP	ODU075 LMDF_CP	ODU080 LMDF_CP	ODU100 LMDF_CP	ODU130 LMDF_CP	
Previous Model			BYGF-020-ZSL-SMDP	BYGF-030-ZSL-SMDP	BYGF-040-ZSL-SMDP	BYGF-050-ZSL-SMDP	BYGF-060-ZSL-SMDP	BYGF-075-ZFL-SMDP	BYGF-080-ZFL-SMDP	BYGF-100-ZFL-SMDP	BYGF-130-ZFL-SMDP	
Power Supply			3PH 380V 50Hz									
HP Compressor			2 HP	3 HP	4 HP	5 HP	6 HP	7 HP	8 HP	10 HP	13 HP	
Refrigerant			R448A / R449A / R454C / R455A /R404A									
Evap.Temp (°C)			-40~-5									
Ambient Temp (°C)			-15~48									
Standard Configuration	Compressor Model	ZSI Series	ZSI 06KQE	ZSI 09KQE	ZSI 11KQE	ZSI 15KQE	ZSI 18KQE	/	/	/	/	
		ZF Series	ZF 06KQE	ZF09 KQE	ZF13 KQE	ZF15 KQE	ZF18 KQE	ZF25KQE	ZFI36KQE	ZFI50KQE	ZFI59KQE	
	Pressure Controller (Mpa)		Diaphragm type high pressure switch and low pressure switch. Use a low-pressure pressure switch to control compressor start/stop; the brand must be Danfoss or SAGINOMIYA.									
	Fam Motor		65W*1			65W*2		65W*2		65W*2		
	Reservoir		2.5L			4L		6L		10 L	14 L	
	Dryer filter		083S			084S		165S				
	Sight Glass		3/8			1/2"		5/8"				
	Oil Pressure Gauge		High pressure oil pressure gauge and low pressure oil pressure gauge									
	Liquid Injection Valve		Liquid Injection Valve or Electronic expansion valvee									
	Personalization Options	Accumulator		1L			3.5L			11.2 L		
Crankshaft Heating Belt		40W						90W				
Electric Control	AC Contactor		18/01							32/01		
	Control Board		Phase sequence protection and phase loss protection, discharge temperature protection, liquid injection control, condenser fan speed control, fault code alarm output, and other functions.									
Pipe (mm)	Gas Inlet OD		5/8"(15.88)		3/4"(19.05)		7/8"(22.22)		1 1/8"(28.58)		1 3/8"(34.93)	
	Liquid Outlet OD		3/8"(9.53)			1/2"(12.7)		5/8"(15.88)				
Product Dimension (mm)			1015*420*850			1015*420*1250		1200*490*1250		1000*810*1230		1400*810*1230
Installation Dimension (mm)			580*385					640*440		450*760		900*760
Personalization Options	Oil Separator		BLR/A-W 55833			BLR/A-W 55824			BLR/A-W 55877			
	Refrigeration Solenoid Valve		3/8"(9.53)			1/2"(12.7)			5/8"(15.88)			
R449A Cooling Capacity (W)	Evap.Temp (°C)		Test Conditions：GB/T 21363-2018 Ambient Temp.:32°C Subcooling Temp.:0°C Suction Temp.:18°C									
	-40		920	1250	1700	2200	2700	3200	4700	6550	7950	
	-35		1160	1550	2100	2800	3400	3900	5750	7700	9400	
	-30		1410	2100	2600	3750	4550	4800	7000	9300	11300	
	-25		1710	2350	3150	4200	5050	5850	8300	11300	14400	
	-20		2090	3100	4250	5600	6600	7800	10650	14850	18100	
	-15		2570	3600	5150	6700	7900	9250	12550	17450	21350	
	-10		3120	4400	6250	8000	9350	10800	14850	20450	24600	
	-5		3720	5200	7550	9450	11150	12450	16700	23300	27900	

R448A/R449A/R454C MBP/LBP Variable Frequency Wall-Mounted Monoblock



Model			MON010LKDV_BYW	MON015LKDV_BYW	MON020LKDV_BYW	MON030LKDV_BYW	MON040LKDV_BYW	
Previous Model			BYGY-010-QXD-RZDP	BYGY-015-QXD-RZDP	BYGY-020-QXD-RZDP	BYGY-030-QXD-RZDP	BYGY-040-QXD-RZDP	
Nominal Input (W)			1120	1465	2020	2610	3200	
Power Supply			1PH 220V 50/60 Hz (3PH 380V 50/60Hz, 3PH 200V 50/60Hz, 3PH 220V 50/60Hz)					
Refrigerant			R449A / R448A / R454C / R455A / R404A					
Max Running Current (A)			6.2	10.5	13.5	16.5	20.0	
Evap. Temp (°C)			-40~-5					
Ambient Temp (°C)			-20~43					
Standard Configuration	Compressor(Model)		JXSD150Z312	KXSD203Z312	KXSD300Z312	KXSD300Z312	TXSD456Z312	
	Condenser	Style		Copper tube fin condenser or microchannel condenser				
		Fan Motor	Diameter*Quantity(mm)	φ300*1	φ300*1	φ350*1	φ300*2	φ300*2
			Air Flow (m³/hr)	1800/2000	1800/2000	2500/2800	3600/4000	3600/4000
	Evaporator	Style		Copper tube fin evaporator				
		Fan Motor	Diameter*Quantity(mm)	φ250*1	φ300*1	φ300*1	φ300*2	φ300*2
			Air Flow (m³/hr)	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					
	Sight Glass		3/8"					
	Oil Extractor		TDW-4808S		BLR/A-W 55833			
	Filter Drier		083S					
	Check Valve		3/8"					
	Expansion Valve		Electronic Expansion Valve / Thermostatic Expansion Valve					
	Liquid Injection Valve		1/4"					
	Four-way Valve		SHF7		SHF9			
	Defrosting Heating Element		350W		500W			
	Defrosting Heating Belt		25W/m, 1.5m		25W/m,3m			
	Electric Control	AC Contactor		18/01				
Air Switch		2P NXB-63 D32						
Configurable Functions		Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions						
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)	Length(mm)		525		685	855	875	
	Width(mm)		825		885	925	945	
	Height(mm)		705			730	760	
Cooling Capacity(W)	Evap. Temp.(°C)		Ambient Temp.: 32°C Subcooling Temp.: 0°C					
	-40		485	695	820	1130	1440	
	-35		595	860	1045	1345	1780	
	-30		755	1035	1225	1705	2185	
	-25		950	1245	1450	2060	2655	
	-20		1325	1775	2115	2910	3715	
	-15		1595	2105	2585	3335	4505	
	-10		1880	2490	3100	4250	5465	
	-5		2180	2770	3690	5110	6585	

SYSTEMS CATALOG

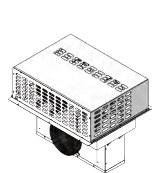
26

R290 MBP/LBP Variable Frequency
Wall-Mounted Monoblock



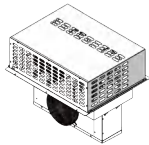
Model				MON010LKPV_BYW	MON015LKPV_BYW	MON020LKPV_BYW
Previous Model				BYGY-010-QXD-RZPP	BYGY-015-QXD-RZPP	BYGY-020-QXD-RZPP
Nominal Input (W)				750	1175	1410
Power Supply				1PH 220V 50/60 Hz (3PH 380V 50/60Hz, 3PH 200V 50/60Hz, 3PH 220V 50/60Hz)		
Refrigerant				R290		
Max Running Current (A)				5.5	7.5	9.5
Evap. Temp (°C)				-40~-5		
Ambient Temp (°C)				-20~43		
Standard Configuration	Compressor Model			JXSP150Z312	KXSP203Z312	KXSP300Z312
	Condenser	Style		Copper tube fin condenser or microchannel condenser		
		Fan Motor	Diameter*Quantity (mm)	φ300*1	φ300*1	φ350*1
			Air Flow (m³/hr)	1800/2000	1800/2000	2500/2800
	Evaporator	Style		Copper tube fin evaporator		
		Fan Motor	Diameter*Quantity (mm)	φ250*1	φ300*1	φ300*1
			Air Flow (m³/hr)	1100/1250	1800/2000	1800/2000
	Pressure Controller (Mpa)			Diaphragm type high pressure switch / Low pressure sensor		
	Accumulator			/	650cc	
	Sight Glass			3/8"		
	Oil Extractor			TDW-4808S		BLR/A-W 55833
	Filter Drier			083S		
	Check Valve			3/8"		
	Expansion Valve			Electronic Expansion Valve / Thermostatic Expansion Valve		
	Liquid Injection Valve			1/4"		
	Four-way Valve			SHF7		
	Defrosting Heating Element			350W		500W
	Defrosting Heating Belt			25W/m,1.5m		25W/m,3m
Electric Control	AC Contactor			18/01		
	Air Switch			2P NXB-63 D32		
	Configurable Functions			Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions		
	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)	Length (mm)			525		685
	Width (mm)			825		885
	Height (mm)			705		
R290 Cooling Capacity(W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C		
	-40			470	600	945
	-35			615	770	1175
	-30			710	870	1440
	-25			845	1090	1655
	-20			1075	1325	2135
	-15			1370	1575	2520
	-10			1535	1995	3000
	-5			1700	2315	3600

R448A/R449A/R454C MBP/LBP Variable Frequency
Top-Mounted Monoblock



Model				MON010LKDV_BYT	MON015LKDV_BYT	MON020LKDV_BYT	MON030LKDV_BYT	
Previous Model				BYGD-010-QHD-SZDP	BYGD-015-QHD-SZDP	BYGD-020-QHD-SZDP	BYGD-030-QHD-SZDP	
Nominal Input (W)				1100	1425	1920	2530	
Power Supply				1PH 220V 50/60 Hz (3PH 380V 50/60Hz, 3PH 200V 50/60Hz, 3PH 220V 50/60Hz)				
Refrigerant				R449A / R448A / R454C / R455A / R404A				
Max Running Current (A)				6.2	10.5	13.5	16.5	
Evap.Temp (°C)				-40~-5				
Ambient Temp (°C)				5~43				
Standard Configuration	Compressor Model			JHSD150Z312	KHSD203Z312	KHSD300Z312	KHSD300Z312	
	Condenser	Style		Copper tube fin condenser or microchannel condenser				
		Fan Motor	Diameter*Quantity (mm)	φ230*2(EC)	φ230*2(EC)	φ230*3(EC)	φ230*4(EC)	
			Air Flow (m³/hr)	730*2/750*2	730*2/750*2	730*3/750*3	730*4/750*4	
	Evaporator	Style		Copper tube fin evaporator				
		Fan Motor	Diameter*Quantity (mm)	φ250*1	φ250*1	φ300*1	φ300*2	
			Air Flow (m³/hr)	1100/1250	1100/1250	1800/2000	3600/4000	
	Pressure Controller (Mpa)			Diaphragm type high pressure switch / Low pressure sensor				
	Oil Extractor			TDW-4808S	BLR/A-W 55833			
	Accumulator			650cc			1L	
	Reservoir			1.1L				2L
	Sight Glass			3/8"				
	Filter Drier			083S				
	Check Valve			3/8"				
	Expansion Valve			Electronic Expansion Valve / Thermostatic Expansion Valve				
	Liquid Injection Valve			1/4"				
	Four-way Valve			SHF7			SHF9	
	Defrosting Heating Element			350W			550W	
	Defrosting Heating Belt			25W/m,1.5m			25W/m,3m	
	Electric Control	AC Contactor			18/01			
Air Switch			2P NXB-63 D32					
Configurable Functions			Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions					
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)	Length (mm)			840		940	1350	
	Width (mm)			676				
	Height (mm)			695		830		
R449A Cooling Capacity (W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C				
	-40			485	695	820	1130	
	-35			595	860	1045	1345	
	-30			755	1035	1225	1705	
	-25			950	1245	1450	2060	
	-20			1325	1775	2115	2910	
	-15			1595	2105	2585	3335	
	-10			1880	2490	3100	4250	
	-5			2180	2770	3690	5110	

R290 MBP/LBP Variable Frequency
Top-Mounted Monoblock



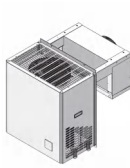
Model				MON010LKPV_BYT	MON015LKPV_BYT		MON020LKPV_BYT	
Previous Model				BYGD-010-QHD-SZPP	BYGD-015-QHD-SZPP		BYGD-020-QHD-SZPP	
Nominal Input (W)				740	1145		1310	
Power Supply				1PH 220V 50/60 Hz (3PH 380V 50/60Hz, 3PH 200V 50/60Hz, 3PH 220V 50/60Hz)				
Refrigerant				R290				
Max Running Current (A)				5.5	7.5		9.5	
Evap.Temp (°C)				-40~-5				
Ambient Temp (°C)				5~43				
Standard Configuration	Compressor Model			JHSP150Z312	KHSP203Z312		KHSP300Z312	
	Condenser	Style		Copper tube fin condenser or microchannel condenser				
		Fan Motor	Diameter*Quantity (mm)	φ230*2(EC)	φ230*2(EC)		φ230*3(EC)	
			Air Flow (m³/hr)	730*2/750*2	730*2/750*2		730*3/750*3	
	Evaporator	Style		Copper tube fin evaporator				
		Fan Motor	Diameter*Quantity (mm)	φ250*1	φ250*1		φ300*1	
			Air Flow (m³/hr)	1100/1250	1100/1250		1800/2000	
	Pressure Controller (Mpa)			Diaphragm type high pressure switch / Low pressure sensor				
	Oil Extractor			TDW-4808S	BLR/A-W 55833			
	Sight Glass			650cc				
	Accumulator			3/8"				
	Filter Drier			083S				
	Check Valve			3/8"				
	Expansion Valve			Electronic Expansion Valve / Thermostatic Expansion Valve				
	Liquid Injection Valve			1/4"				
	Four-way Valve			SHF7				
	Defrosting Heating Element			350W				500W
	Defrosting Heating Belt			25W/m,1.5m				25W/m,3m
Electric Control	AC Contactor			18/01				
	Air Switch			2P NXB-63 D32				
	Configurable Functions			Cold storage light, door switch, and other functions				
	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)	Length (mm)			840			940	
	Width (mm)			676				
	Height (mm)			695			830	
R290 Cooling Capacity (W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C				
	-40			470	600		945	
	-35			615	770		1175	
	-30			710	870		1440	
	-25			845	1090		1655	
	-20			1075	1325		2135	
	-15			1370	1575		2520	
	-10			1535	1995		3000	
	-5			1700	2315		3600	

R448A/R449A/R454C MBP/LBP Fixed Frequency
Wall-Mounted Monoblock



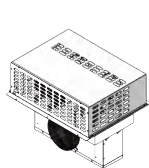
Model				MON010LKDF_BYW	MON015LKDF_BYW	MON020LKDF_BYW	MON030LKDF_BYW
Previous Model				BYGY-010-QXD-REDP	BYGY-015-QXD-REDP	BYGY-020-QXD-REDP	BYGY-030-QXD-REDP
Nominal Input (W)				1120	1465	2020	2800
Power Supply				220V 50/60 Hz			
Refrigerant				R449A / R448A / R454C / R455A / R404A			
Max Running Current (A)				6.2	10.5	13.5	16.0
Evap.Temp (°C)				-40~-5			
Ambient Temp (°C)				-20~43			
Standard Configuration	Compressor Model			KXSD176KS	KXSD203KS	TXSD329KS	TXSD456KS
	Condenser	Style		Copper tube fin condenser or microchannel condenser			
		Fan Motor	Diameter*Quantity (mm)	φ300*1	φ300*1	φ350*1	φ300*2
			Air Flow (m³/hr)	1800/2000	1800/2000	2500/2800	3600/4000
	Evaporator	Style		Copper tube fin evaporator			
		Fan Motor	Diameter*Quantity (mm)	φ250*1	φ300*1	φ300*1	φ300*2
			Air Flow (m³/hr)	1100/1250	1800/2000	1800/2000	3600/4000
	Pressure Controller (Mpa)			Diaphragm type high pressure switch /Diaphragm type low pressure switch			
	Accumulator			650cc		1L	
	Reservoir			2L			
	Filter Drier			083S			
	Check Valve			SR-08		SR-10	
	Expansion Valve			Electronic Expansion Valve / Thermostatic Expansion Valve			
	Liquid Injection Valve			1/4"(φ6.35)			
	Four-way Valve			SHF7		SHF9	
	Defrosting Heating Element			350W		550W	
	Defrosting Heating Belt			25W/m,1.5m		25W/m,3m	
Electric Control	AC Contactor			18/01*2			
	Air Switch			2P NXB-63 D32			
	Fixed Frequency Control			Control via operation panel, phase sequence and phase loss protection, discharge temperature protection,liquid injection control, condenser fan speed control, evaporator fan control, defrost control,high/low pressure protection, fault code alarm output.			
	Configurable Functions			Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions			
Dimension (mm)	Length (mm)			525		685	855
	Width (mm)			825		885	925
	Height (mm)			705			730
R449A Cooling Capacity (W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C			
	-40			455	485	770	1145
	-35			550	595	960	1365
	-30			690	745	1165	1730
	-25			820	945	1350	2055
	-20			1150	1320	1960	2895
	-15			1470	1575	2315	3150
	-10			1650	1850	2755	4225
	-5			1880	2165	3275	4940

R290 MBP/LBP Fixed Frequency
Wall-Mounted Monoblock

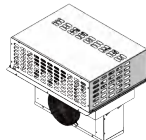


Model				MON005LKPF_BYW	MON010LKPF_BYW	MON015LKPF_BYW	MON020LKPF_BYW
Previous Model				BYGY-005-QXD-REPP	BYGY-010-QXD-REPP	BYGY-015-QXD-REPP	BYGY-020-QXD-REPP
Nominal Input (W)				350	780	950	1400
Power Supply				220V 50/60 Hz			
Refrigerant				R290			
Max Running Current (A)				2.2	5.5	7.5	9.5
Evap.Temp (°C)				-40~-5			
Ambient Temp (°C)				-5~43			
Standard Configuration	Compressor Model			JXP058KS	KXSP176KS	KXSP203KS	KXSP329KS
	Condenser	Style		Copper tube fin condenser			
		Fan Motor	Diameter*Quantity (mm)	φ230*1	φ250*1	φ300*1	φ350*1
			Air Flow (m³/hr)	740	925	1800	2500
	Evaporator	Style		Copper tube fin evaporator			
		Fan Motor	Diameter*Quantity (mm)	φ200*1	φ250*1	φ250*1	φ300*1
			Air Flow (m³/hr)	400	925	925	1800
	Pressure Controller (Mpa)			Diaphragm type high pressure switch /Diaphragm type low pressure switch			
	Filter Drier			052S	083S		
	Check Valve			/	SR-06		
	Expansion Valve			Electronic Expansion Valve / Thermostatic Expansion Valve			
	Four-way Valve			/	SHF7		
	Defrosting Heating Element			250W*2	350W		500W
	Defrosting Heating Belt			25W/m,1.5m	25W/m,3m		
Electric Control	AC Contactor			18/01*2			
	Air Switch			2P NXB-63 D32			
	Fixed Frequency Control			Control via operation panel, phase sequence and phase loss protection, discharge temperature protection,liquid injection control, condenser fan speed control, evaporator fan control, defrost control,high/low pressure protection, fault code alarm output.			
	Configurable Functions			Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions			
Dimension (mm)	Length (mm)			285	450	600	700
	Width (mm)			880	920	910	930
	Height (mm)			580	730	750	780
R290 Cooling Capacity (W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C			
	-40			160	465	500	790
	-35			210	605	645	980
	-30			245	700	725	1200
	-25			290	830	910	1380
	-20			365	1055	1105	1780
	-15			470	1345	1315	2100
	-10			525	1505	1665	2500
	-5			605	1730	1930	3000

R448A/R449A/R454C MBP/LBP Fixed Frequency
Top-Mounted Monoblock



Model				MON010LKDF_BYT	MON015LKDF_BYT	MON020LKDF_BYT	MON030LKDF_BYT
Previous Model				BYGD-010-QHD-SEDP	BYGD-015-QHD-SEDP	BYGD-020-QHD-SEDP	BYGD-030-QHD-SEDP
Nominal Input (W)				1030	1180	1900	2670
Power Supply				220V 50Hz			
Refrigerant				R449A / R448A / R454C / R455A / R404A			
Max Running Current (A)				6.2	8.0	12.0	16.0
Evap.Temp (°C)				-40~-5			
Ambient Temp (°C)				5~43			
Standard Configuration	Compressor Model			KHSD176KS	KHSD203KS	THSD329KS	THSD456KS
	Condenser	Style		Copper tube fin condenser			
		Fan Motor	Diameter*Quantity (mm)	φ230*2(EC)	φ230*2(EC)	φ230*3(EC)	φ230*4(EC)
			Air Flow (m³/hr)	730*2	730*2	730*3	730*4/
	Evaporator	Style		Copper tube fin evaporator			
		Fan Motor	Diameter*Quantity (mm)	φ250*1	φ250*1	φ300*1	φ300*2
			Air Flow (m³/hr)	1100	1100	1800	1800*2
	Pressure Controller (Mpa)			Diaphragm type high pressure switch /Diaphragm type low pressure switch			
	Accumulator			650cc		1L	
	Reservoir			1.1L		2L	
	Filter Drier			083S			
	Check Valve			SR-06			
	Thermostatic Expansion Valve			068Z3430			
	Liquid Injection Valve			1/4"			
	Four-way Valve			SHF7		SHF9	
	Defrosting Heating Element			350W		550W	
	Defrosting Heating Belt			25W/m,1.5m		25W/m,3m	
Electric Control	AC Contactor			18/01*2			25/01+18/01
	Air Switch			2P NXB-63 D32			
	Fixed Frequency Control			Control via operation panel, phase sequence and phase loss protection, discharge temperature protection,liquid injection control, condenser fan speed control, evaporator fan control, defrost control,high/low pressure protection, fault code alarm output.			
	Configurable Functions			Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions			
Dimension (mm)	Length (mm)			840		940	1350
	Width (mm)			676			
	Height (mm)			695			830
R449A Cooling Capacity (W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C			
	-40			455	485	770	1145
	-35			550	595	960	1365
	-30			690	745	1165	1730
	-25			820	945	1350	2055
	-20			1150	1320	1960	2895
	-15			1470	1575	2315	3150
	-10			1650	1850	2755	4225
	-5			1880	2165	3275	4940

R290 MBP/LBP Fixed Frequency Top-Mounted Monoblock									
Model				MON010LKPF_BYT		MON015LKPF_BYT		MON020LKPF_BYT	
Previous Model				BYGD-010-QHD-SEPP		BYGD-015-QHD-SEPP		BYGD-020-QHD-SEPP	
Nominal Input (W)				740		1145		1310	
Power Supply				220V 50/60Hz					
Refrigerant				R290					
Max Running Current (A)				5.5		7.5		9.5	
Evap.Temp (°C)				-40~-5					
Ambient Temp (°C)				5~43					
Standard Configuration	Compressor Model			KHSP176KS		KHSP203KS		THSP329KS	
	Condenser	Style		Copper tube fin condenser					
		Fan Motor	Diameter*Quantity (mm)	φ230*2(EC)		φ230*2(EC)		φ230*3(EC)	
			Air Flow (m³/hr)	730*2		730*2		730*3	
	Evaporator	Style		Copper tube fin evaporator					
		Fan Motor	Diameter*Quantity (mm)	φ250*1		φ250*1		φ300*1	
			Air Flow (m³/hr)	1100		1100		1800	
	Pressure Controller (Mpa)			Diaphragm type high pressure switch / Diaphragm type low pressure sensor					
	Accumulator			650cc					
	Sight Glass			3/8"					
	Filter Drier			083S					
	Check Valve			SR-06					
	Expansion Valve			Electronic Expansion Valve / Thermostatic Expansion Valve					
	Liquid Injection Valve			1/4"					
	Four-way Valve			SHF7					
	Defrosting Heating Element			350W		500W			
Defrosting Heating Belt			25W/m,3m						
Electric Control	AC Contactor			18/01*2					
	Air Switch			2P NXB-63 D32					
	Fixed 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.					
	Configurable Functions			Cold storage light, door switch, Wi-Fi or 4G temperature controller and other functions					
Dimension (mm)	Length (mm)			800				940	
	Width (mm)			676					
	Height (mm)			695				830	
R290 Cooling Capacity (W)	Evap.Temp (°C)			Ambient Temp.: 32°C Subcooling Temp.: 0°C					
	-40			465		500		790	
	-35			605		645		980	
	-30			700		725		1200	
	-25			830		910		1380	
	-20			1055		1105		1780	
	-15			1345		1315		2100	
	-10			1505		1665		2500	
	-5			1730		1930		3000	