



# FANTASY SERIES

DC Inverter Condensing Units



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## HAIER CARRIER

Qingdao Haier Carrier Refrigeration Equipment Co., Ltd. is a joint venture established in 2001 by Haier Group and Carrier. Its products include supermarket display cabinets (more than 1,000 specifications), compressor units (scroll, piston and screw), and heat exchangers (air-cooled condenser and air cooler). It can provide customers with whole sets of freezing and refrigerating solutions. Relying on the support of Carrier Refrigeration's R&D centers in Mainz, Germany and Shanghai, China, the company now has several laboratories. The company is committed to providing energy-saving systems, including carbon dioxide systems, for customers in the Asia Pacific region.

In the past ten years, relying on abundant resources of the parent company, Haier Carrier has become a world-class facility that owns the ISO9001 certification and the ACE certification of United Technologies (Carrier's parent). With strong R&D strength, we are able to provide world-class freezing and refrigerating integrated solutions such as D2D hot gas defrosting (national patent), Ground Water (GSHP technology dedicated for freezing and refrigerating purposes), HybridCO<sub>2</sub>OL (carbon dioxide cascade refrigeration technology), CO<sub>2</sub>OLtec (carbon dioxide transcritical refrigeration technology) and POWERCO<sub>2</sub>OL (Industrial CO<sub>2</sub> transcritical pack systems).

# OVERVIEW

## Air Cooled

### LT models

2.5~5 HP



7~10 HP



18 HP



### MT models

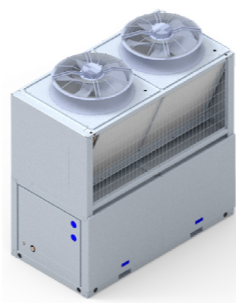
1.5~4 HP



5~12 HP



20 HP / 25 HP



18~21 HP



27~46 HP



27~46 HP

Split Unit

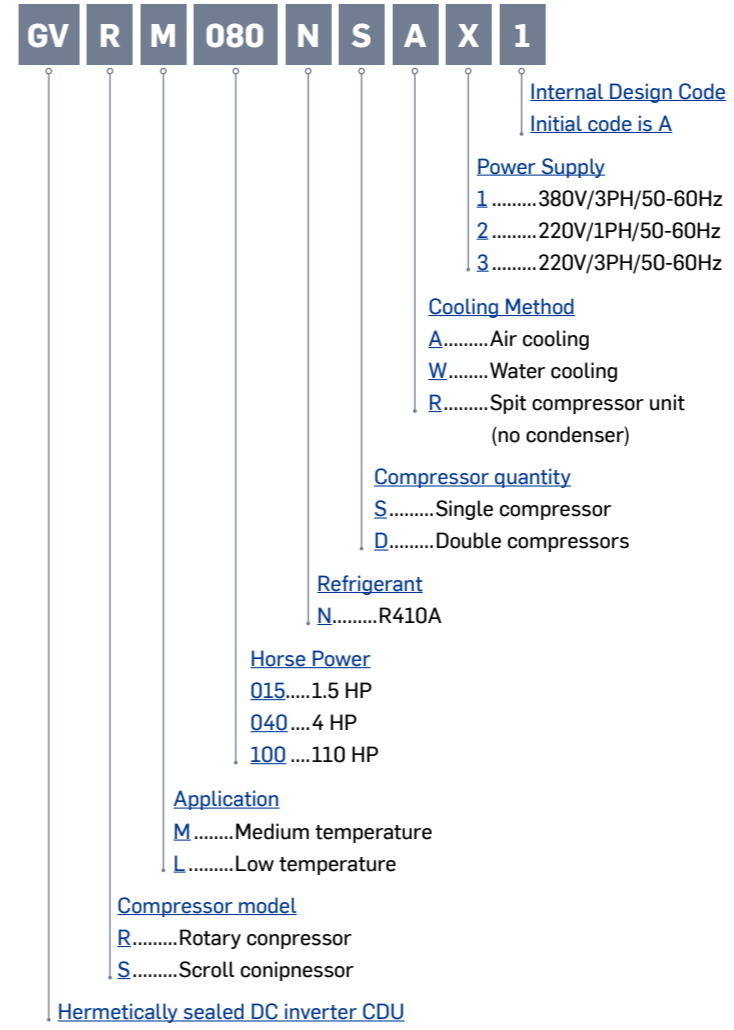


## Water Cooled

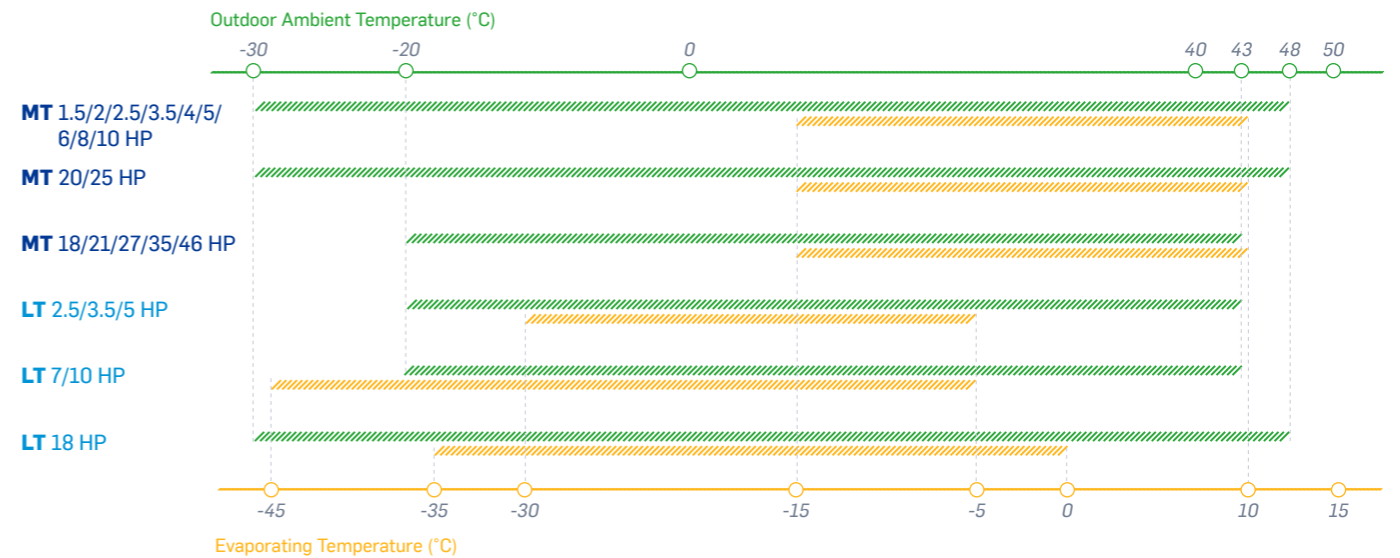
### MT / LT



## Nomeclature



## Temperature Range



# Fantasy Series Air Cooled R410A MT DC Inverter Condensing Units



**1.5-4HP**  
Rotary Compressor  
Single Compressor  
Single Fan



**5-12HP**  
Rotary Compressor  
Single Compressor  
Dual Fans

HP	Model	Power Supply
1.5HP	GVRM015NSA2B	220V-1PH-50-60Hz
2HP	GVRM020NSA2B	220V-1PH-50-60Hz
2.5HP	GVRM025NSA2B	220V-1PH-50-60Hz
3.5HP	GVRM035NSA2B	220V-1PH-50-60Hz
4HP	GVRM040NSA1C	380V-3PH-50-60Hz
5HP	GVRM050NSA1B	380V-3PH-50-60Hz
6HP	GVRM060NSA1C	380V-3PH-50-60Hz
8HP	GVRM080NSA1B	380V-3PH-50-60Hz
10HP	GVRM100NSA1B	380V-3PH-50-60Hz
12HP	GVSM120NSA1B	380V-3PH-50-60Hz
10HP	GVRM100NSA3A	220V-3PH-60Hz

## Optional



**Magnetic Air Filter**  
One-click cleaning,  
Reduce Labor Cost



**Triangular Bracket**  
Reduced vibration and leakage



**Hinged Door**  
Convenient for maintenance

## Customer Values

- Wide adjustable range for cooling capacity and small fluctuation in food storage temperature
- Low operation cost and over 30% of annual energy saving compared with Fixed Speed unit
- Low noise unit with 4BA lower sound level compared with Fix speed unit
- Working temperatures range from -30°C to 48°C, available in harsh environments
- No need for a separate machine room; easier to installation
- Optional Remote monitoring, optimize the operation mode

## Product Features

- DC inverter compressor adopted with step-less adjustment of output cooling capacity from 30Hz to 100Hz, supply on demand
- DC inverter fan adopted, adjust the speed according to the end requirements
- Large condensing coils adopted for ensuring operation under high ambient temperature
- Thickened sound insulation cotton with an effective noise insulation
- R410A refrigerant adopted with high volumetric efficiency
- Integrated shell design, compact structure
- With 485 communication interfaces for remote linking, convenient for operation

## Application Scenarios



### MT Electrical/Medical/Food cold room

Area: 100m<sup>2</sup>-200m<sup>2</sup>  
Cold room Temp.: -7°C ~ 20°C  
OAT: -30°C ~ 48°C



### S-store /C-store /supermarket

Area: 300m<sup>2</sup>-2000m<sup>2</sup>  
Cabinet Temp.: -1°C ~ +10°C  
OAT: -30°C ~ +48°C

## Technical Parameters

Model	GVRM 015NSA2B	GVRM 020NSA2B	GVRM 025NSA2B	GVRM 035NSA2B	GVRM 040NSA1C	GVRM 050NSA1B	GVRM 060NSA1C	GVRM 080NSA1B	GVRM 100NSA1B	GVSM 120NSA1B
Refrigerant	R410A									R410A
Supply Voltage of Unit	220V/1PH/50-60Hz				380V/3Ph/50-60Hz				380V/3Ph/50-60Hz	
Type of Refrigerant Oil	FV50S									MEL32R
Number of Fan	1				2				2	
Diameter of Fan (mm)	500									500
Fan Speed Range (rpm)	300-850									300-850
Maximum Air Volume (m <sup>3</sup> /h)	4030				7060				7060	
Reservoir Volume (L)	4.5				8.8				8.8	
Evaporating Temperature Range	-15-10									-45-5
Unit rated cooling Capacity (kW)	3.1	3.7	4.9	6.6	7.8	9.6	11.4	13.8	15.2	17.9
Unit rated power (kW)	1.0	1.2	1.6	2.4	2.8	3.2	4.0	4.8	5.8	7.24
Maximum Cooling Capacity of Unit (kW)	5.3	6.4	8.1	10.1	11.9	14.0	16.3	19.1	20.6	2.5
Maximum Power of Unit (kW)	1.8	2.3	3.3	5.0	6.4	5.2	6.5	8.1	9.8	20.6
Noise of Unit dBA@1m	52	52	53	53	56	56	59	60	60	62
Nominal Running Current of Unit (A)	4.8	5.7	7.8	11.0	5.0	5.5	6.3	8.9	9.6	10
Maximum Running Current (A)	14	20	23	33	17	20	22	27	28	25
Diameter of Suction Pipe (Inch)	1/2			5/8		3/4		7/8		7/8
Diameter of Liquid Pipe (Inch)	3/8				1/2				1/2	
Dimensions (L x W x H) (mm)	1064 X 424 X 802				1064 X 448 X 1358				1164 X 470 X 1373	
Weight (kg)	93	93	95	97		142	142	146	150	172

Notes:  
Capacity and power test condition: MT condition per China National Standard GB/T21363-2018;  
Evaporating temperature: -7°C, Outdoor Ambient temperature: 32°C, Return gas temperature: 18°C.

### Performance Parameters (1.5~10 HP)

Model	OAT °C	CAP-Q POW-P P (kW)	-15		-12		-10		-7		-5		0		5		10		
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
1.5HP	27	Q	1.1	3.9	1.3	4.4	1.4	4.8	1.6	5.4	1.8	5.9	2.2	7.0	2.7	8.4	3.3	9.9	
		P	0.4	1.6	0.4	1.7	0.4	1.7	0.4	1.8	0.5	1.8	0.5	1.9	0.5	2.1	0.5	2.2	
	32	Q	1.0	3.7	1.2	4.2	1.3	4.5	1.5	5.3	1.6	5.5	2.1	6.6	2.5	7.9	3.1	9.2	
		P	0.4	1.7	0.5	1.8	0.5	1.9	0.5	1.9	0.5	2.0	0.5	2.1	0.5	2.3	0.5	2.4	
	38	Q	0.9	3.3	1.1	3.8	1.2	4.2	1.3	4.7	1.5	5.1	1.9	6.1	2.3	7.2	2.8	8.5	
		P	0.5	1.9	0.5	2.0	0.5	2.0	0.5	2.1	0.5	2.2	0.6	2.3	0.6	2.5	0.6	2.6	
	43	Q	0.8	3.1	1.0	3.5	1.1	3.8	1.2	4.3	1.3	4.7	1.7	5.7	2.1	6.7	2.6	7.9	
		P	0.5	2.1	0.5	2.2	0.5	2.2	0.6	2.3	0.6	2.3	0.6	2.5	0.6	2.6	0.6	2.8	
	48	Q	0.7	2.8	0.9	3.2	0.9	3.5	1.1	3.9	1.2	4.3	1.5	5.2	1.9	6.2	2.3	7.3	
		P	0.5	2.2	0.5	2.3	0.6	2.4	0.6	2.5	0.6	2.5	0.6	2.7	0.7	2.8	0.7	3.0	
	2HP	27	Q	1.4	4.9	1.6	5.6	1.7	6.1	2.0	6.8	2.1	7.4	2.6	8.8	3.2	10.4	3.9	12.1
			P	0.6	1.9	0.6	2.0	0.6	2.1	0.6	2.2	0.6	2.2	0.6	2.4	0.6	2.6	0.6	2.8
32		Q	1.3	4.6	1.4	5.2	1.6	5.7	1.8	6.4	2.0	6.9	2.4	8.3	3.0	9.8	3.6	11.3	
		P	0.6	2.1	0.6	2.2	0.6	2.3	0.6	2.4	0.6	2.4	0.6	2.6	0.6	2.8	0.6	3.0	
38		Q	1.1	4.2	1.3	4.8	1.4	5.2	1.7	5.8	1.8	6.3	2.2	7.6	2.7	9.0	3.3	10.4	
		P	0.7	2.3	0.7	2.4	0.7	2.5	0.7	2.6	0.7	2.7	0.7	2.9	0.7	3.1	0.7	3.3	
43		Q	1.0	3.8	1.2	4.4	1.3	4.7	1.5	5.3	1.7	5.8	2.1	6.9	2.5	8.3	3.0	9.7	
		P	0.7	2.5	0.7	2.6	0.7	2.7	0.8	2.8	0.8	2.9	0.8	3.1	0.8	3.3	0.8	3.6	
48		Q	0.9	3.4	1.1	3.9	1.2	4.2	1.4	4.8	1.5	5.2	1.9	6.3	2.3	7.4	2.8	8.9	
		P	0.7	2.6	0.8	2.8	0.8	2.9	0.8	3.0	0.8	3.1	0.9	3.4	0.9	3.6	0.9	3.8	
2.5HP		27	Q	1.8	6.5	2.1	7.4	2.2	8.0	2.5	8.9	2.7	9.6	3.3	11.4	4.0	13.3	4.8	15.4
			P	0.7	2.8	0.7	2.9	0.7	2.9	0.7	3.0	0.7	3.1	0.7	3.3	0.7	3.5	0.7	3.8
	32	Q	1.7	6.1	1.9	6.9	2.1	7.5	2.4	8.1	2.6	9.0	3.1	10.7	3.8	12.5	4.5	14.5	
		P	0.7	3.1	0.7	3.2	0.7	3.2	0.8	3.3	0.8	3.4	0.8	3.6	0.8	3.8	0.8	4.1	
	38	Q	1.5	5.5	1.8	6.3	1.9	6.8	2.2	7.6	2.4	8.2	2.9	9.9	3.5	11.6	4.2	13.3	
		P	0.8	3.3	0.8	3.5	0.8	3.6	0.9	3.7	0.9	3.8	0.9	4.0	0.9	4.2	0.9	4.5	
	43	Q	1.4	4.9	1.6	5.6	1.8	6.1	2.0	6.9	2.2	7.5	2.7	9.0	3.2	10.6	3.9	12.4	
		P	0.9	3.5	0.9	3.7	0.9	3.8	0.9	4.0	0.9	4.1	1.0	4.3	1.0	4.6	1.0	4.8	
	48	Q	1.2	4.3	1.4	4.9	1.6	5.4	1.8	6.1	2.0	6.7	2.5	8.1	3.0	9.6	3.6	11.4	
		P	0.9	3.7	1.0	3.9	1.0	4.0	1.0	4.2	1.0	4.3	1.1	4.6	1.1	4.9	1.1	5.1	
	3.5HP	27	Q	2.6	8.6	2.9	9.7	3.1	10.4	3.5	11.7	3.7	12.5	4.4	14.6	5.2	16.9	6.2	19.1
			P	1.0	4.1	1.0	4.4	1.0	4.5	1.0	4.7	1.0	4.9	1.1	5.4	1.1	6.0	1.1	6.6
32		Q	2.4	8.0	2.7	9.0	2.9	9.6	3.3	10.1	3.5	11.5	4.2	13.7	5.0	15.8	5.9	17.9	
		P	1.1	4.5	1.1	4.7	1.1	4.9	1.1	5.1	1.1	5.4	1.2	5.8	1.2	6.4	1.2	7.0	
38		Q	2.3	7.1	2.6	8.0	2.8	8.6	3.1	9.6	3.3	10.3	4.0	12.1	4.7	14.1	5.5	16.0	
		P	1.2	4.8	1.2	5.1	1.2	5.4	1.2	5.7	1.3	5.9	1.3	6.4	1.3	7.0	1.4	7.6	
43		Q	2.1	6.2	2.4	7.1	2.6	7.7	2.9	8.6	3.1	9.2	3.7	10.8	4.4	12.6	5.2	14.1	
		P	1.3	5.0	1.3	5.4	1.3	5.6	1.3	6.0	1.4	6.2	1.4	6.8	1.5	7.4	1.5	8.0	
48		Q	2.0	5.2	2.2	6.0	2.4	6.5	2.7	7.3	2.9	7.8	3.5	9.5	4.1	11.0	4.8	12.6	
		P	1.4	5.2	1.4	5.6	1.4	5.8	1.5	6.2	1.5	6.4	1.5	7.1	1.6	7.7	1.6	8.4	
4HP		27	Q	2.9	9.8	3.3	10.9	3.6	11.8	4.1	13.1	4.4	14.0	5.3	16.5	6.4	19.0	7.6	21.4
			P	1.1	4.9	1.2	5.3	1.2	5.5	1.2	5.8	1.3	6.1	1.3	6.7	1.3	7.4	1.4	8.2
	32	Q	2.7	8.8	3.1	9.9	3.4	10.7	3.8	11.9	4.1	12.8	5.0	14.9	6.0	17.7	7.1	19.9	
		P	1.2	5.4	1.2	5.8	1.3	6.0	1.3	6.4	1.3	6.7	1.4	7.3	1.5	8.1	1.5	8.9	
	38	Q	2.5	7.6	2.8	8.6	3.1	9.3	3.5	10.4	3.8	11.2	4.6	13.1	5.5	15.1	6.6	16.9	
		P	1.3	5.8	1.3	6.2	1.4	6.5	1.4	6.9	1.5	7.2	1.5	7.9	1.6	8.6	1.7	9.4	
	43	Q	2.3	6.6	2.6	7.5	2.9	8.1	3.2	9.1	3.5	9.8	4.3	11.5	5.1	13.2	6.1	14.7	
		P	1.4	6.2	1.4	6.6	1.5	6.9	1.5	7.3	1.5	7.6	1.6	8.3	1.7	9.0	1.8	9.8	
	48	Q	2.0	5.5	2.3	6.3	2.6	6.9	2.9	7.7	3.2	8.3	3.9	9.8	4.7	11.2	5.6	12.7	
		P	1.4	6.5	1.5	6.9	1.5	7.2	1.6	7.6	1.7	7.9	1.8	8.7	1.9	9.4	1.9	10.2	

### Performance Parameters (1.5~10 HP)

Model	OAT °C	CAP-Q POW-P P (kW)	-15		-12		-10		-7		-5		0		5		10		
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
5HP	27	Q	3.0	10.8	3.4	12.3	3.7	13.3	4.2	15.0	4.5	16.2	5.5	19.4	6.6	22.9	8.0	26.7	
		P	1.1	4.2	1.1	4.4	1.1	4.5	1.2	4.7	1.2	4.9	1.2	5.2	1.3	5.7	1.3	6.1	
	32	Q	2.8	10.0	3.2	11.5	3.4	12.4	3.9	14.0	4.2	15.1	5.2	18.1	6.3	21.4	7.5	25.0	
		P	1.2	4.8	1.2	5.0	1.3	5.1	1.3	5.3	1.3	5.4	1.3	5.8	1.4	6.2	1.4	6.7	
	38	Q	2.5	9.1	2.9	10.3	3.1	11.3	3.6	12.7	3.9	13.8	4.8	16.7	5.7	19.7	6.9	23.0	
		P	1.3	5.4	1.4	5.6	1.4	5.8	1.4	6.0	1.4	6.1	1.5	6.5	1.6	7.0	1.6	7.5	
	43	Q	2.3	8.1	2.6	9.3	2.9	10.2	3.3	11.6	3.6	12.6	4.4	15.2	5.3	18.2	6.4	21.2	
		P	1.5	5.9	1.5	6.2	1.5	6.3	1.6	6.6	1.6	6.8	1.6	7.2	1.7	7.6	1.8	8.1	
	48	Q	2.1	7.0	2.4	8.2	2.6	9.0	3.0	10.3	3.3	11.2	4.1	13.7	4.9	16.4	5.9	19.4	
		P	1.6	6.3	1.6	6.6	1.6	6.8	1.7	7.1	1.7	7.3	1.8	7.9	1.8	8.3	1.9	8.8	
	6HP	27	Q	3.5	12.7	4.0	14.4	4.4	15.6	5.0	17.5	5.4	18.9	6.7	22.5	8.1	26.4	9.7	30.7
			P	1.3	5.3	1.3	5.5	1.3	5.7	1.4	6.0	1.4	6.2	1.4	6.7	1.6	7.3	1.7	7.9
32		Q	3.3	11.7	3.8	13.3	4.1	14.5	4.7	16.3	5.1	17.6	6.2	21.1	7.5	24.8	9.1	28.7	
		P	1.4	5.7	1.4	6.0	1.5	6.2	1.5	6.5	1.5	6.8	1.6	7.3	1.7	7.9	1.8	8.6	
38		Q	3.0	10.6	3.4	12.1	3.7	13.1	4.3	14.8	4.6	16.0	5.7	19.2	6.9	22.8	8.3	26.4	
		P	1.5	6.4	1.6	6.8	1.6	6.9	1.7	7.2	1.7	7.5	1.8	8.1	1.9	8.7	2.0	9.4	
43		Q	2.7	9.5	3.1	10.9	3.4	11.9	3.9	13.5	4.3	14.6	5.3	17.5	6.4	21.1	7.7	24.4	
		P	1.7	6.9	1.7	7.3	1.7	7.5	1.8	7.9	1.8	8.2	1.9	8.7	2.0	9.4	2.1	10.1	
48		Q	2.4	8.3	2.8	9.6	3.1	10.5	3.5	12.0	3.9	13.0	4.8	15.8	5.9	18.7	7.1		
		P	1.8	7.2	1.8	7.6	1.9	8.0	1.9	8.4	2.0	8.7	2.0	9.5	2.2	10.0	2.2		
8HP		27	Q	4.3	14.7	4.8	16.9	5.3	18.3	5.9	20.6	6.4	22.2	7.8	26.4	9.3	31.0	11.1	35.8
			P	1.6	6.8	1.7	7.0	1.7	7.2	1.8	7.6	1.8	7.8	1.9	8.5	2.0	9.1	2.1	9.9
	32	Q	4.0	13.5	4.6	15.4	4.9	16.8	5.6	19.1	6.0	20.6	7.3	24.6	8.8	28.9	10.4	33.4	
		P	1.7	7.3	1.8	7.6	1.8	7.9	2.0	8.2	2.0	8.4	2.1	9.1	2.2	9.8	2.3	10.6	
	38	Q	3.7	12.0	4.2	13.8	4.6	15.0	5.2	17.0	5.6	18.5	6.8	22.5	8.1	26.4	9.7	30.6	
		P	1.9	7.9	2.0	8.3	2.0	8.6	2.1	9.0	2.2	9.3	2.3	9.9	2.4	10.6	2.5	11.5	
	43	Q	3.4	10.6	3.9	12.3	4.2	13.5	4.8	15.4									

# Fantasy Series Air Cooled R410A MT DC Inverter Condensing Units



**18HP~21HP**  
Scroll Compressor  
Dual Compressors  
Single Fan



**27HP~46HP (Split)**  
Scroll Compressor  
Dual Compressors  
Dual fans



**27HP~46HP (Integrated)**  
Scroll Compressor  
Dual Compressors  
Dual fans

## Customer Values

- Various models, applicable for C-stores, supermarkets and cold rooms
- Wide adjustable cooling capacity, with little temperature fluctuation for food
- Low operating cost, 30%+ annual energy saving compared with fixed frequency units
- Low noise units, 4dBA noise reduction compared with fixed frequency units
- Small pipe size, saving 15% installation cost
- Adaption to the highest ambient temperature of 43 °C
- Compact structure, saving occupied area to save footprint
- Optional split design, suitable for various applications

## Product Features

- DC inverter compressor, step-less regulation of load and rotary speed, highly efficient and energy saving
- DC inverter fan, automatically adjustable fan speed, low noise and energy saving
- Thickened sound-absorbing cotton, effective noise insulation
- R410A refrigerant adopted, high cooling capacity per unit volume
- Large-area condensing coils adopted, ensuring high temperature operation
- Integrated enclosure, no separate machine room, saving space and easy installation

## Application Scenarios



### MT Electrical/Medical/Food cold room

Area: 100m<sup>2</sup>~500m<sup>2</sup>  
Cold room Temp.: -7°C ~ 20°C  
OAT: -30°C ~ 48°C



### S-store /C-store /supermarket

Area: 1000m<sup>2</sup>~5000m<sup>2</sup>  
Cabinet Temp.: -1°C ~ 10°C  
OAT: -30°C ~ 48°C

## Technical Parameters (18-46HP)

Model	GVSM 180NDA50	GVSM 210NDA50	GVSM 270NDA50	GVSM 350NDA50	GVSM 460NDA50
Refrigerant	R410A				
Supply Voltage of Unit	380V/3Ph/50Hz				
Type of Refrigerant Oil	160SZ				
Self-contained Oil in the Compressor	6.3	6.6	6.9	13.4	13.4
Complimentary Oil (Refill according to site requirements) (L)	2.5				
Number of Fan	1		2		
Diameter of Fan (mm)	800				
Fan Speed Range (rpm)	710				930
Nominal Air Volume (m <sup>3</sup> /h)	14000				19000
Reservoir Volume (L)	20		40		
Oil Accumulator Capacity (L)	4		8		
Evaporating Temperature Range	-15°C ~ 0°C				
Unit rated cooling Capacity (kW)	34.3	38.5	49.6	65.3	82.7
Unit rated power (kW)	13.4	15.4	19.6	25.6	33.6
Maximum Cooling Capacity of Unit (kW)	42.1	46.0	59.9	80.6	97.4
Maximum Power of Unit (kW)	18.1	20.2	25.8	34.1	42.1
Noise of Unit dBA@1m (Integrated)	66	66	66	67	68
Noise of Unit dBA@1m (Remote)	NA	NA	62	64	64
Nominal Running Current of Unit (A)	26	30	39	45	59
Maximum Running Current (A)	60	65	80	100	125
Diameter of Suction Pipe (Inch)	1 3/8	1 3/8	1 5/8	2 1/8	2 1/8
Diameter of Liquid Pipe (Inch)	5/8	5/8	7/8	7/8	1 1/8
Dimensions (L x W x H)(mm)	1240x1050x1870			2240x1200x2250	
Weight (kg)	565	575	700	870	880

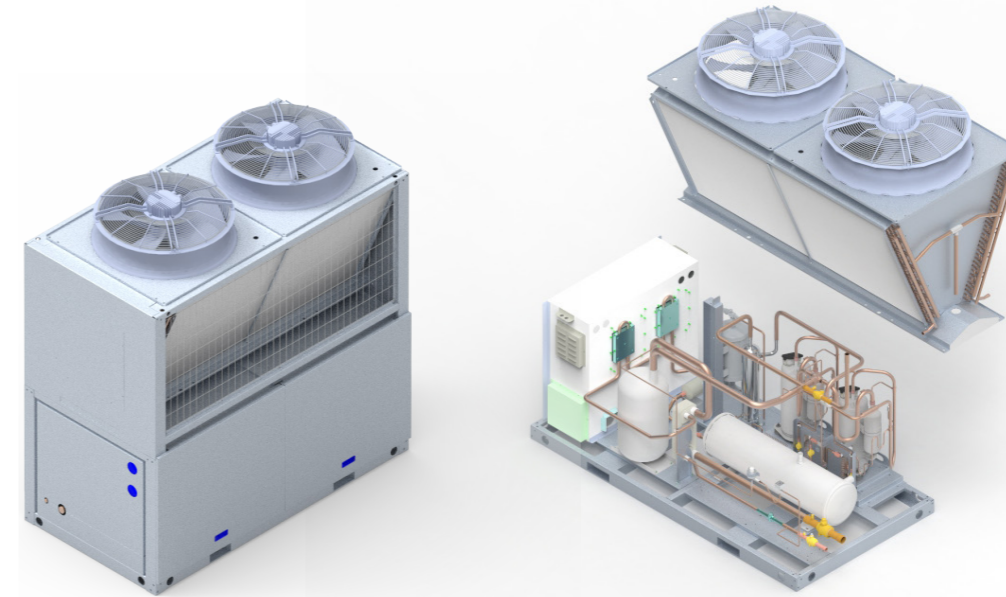
Notes:  
Capacity and power test condition: MT condition per China National Standard GB/T21363-2018;  
Evaporating temperature: -7°C, Outdoor Ambient temperature: 32°C, Return gas temperature: 18°C.

## Performance Parameters (18-46HP)

Model	OAT °C	CAP-Q POW-P P (kW)	Evaporating Temperature °C							
			-10		-7		-5		0	
			Min	Max	Min	Max	Min	Max	Min	Max
18HP	27	Q	29.9	40.2	33.3	44.5	35.7	47.6	42.2	56.0
		P	10.8	16.2	11.0	16.6	11.1	17.0	11.6	17.9
	32	Q	28.2	37.9	31.4	42.1	33.7	45.1	40.0	53.0
		P	11.8	17.6	12.1	18.1	12.2	18.4	12.7	19.4
	38	Q	26.2	35.3	29.2	39.2	31.4	42.0	37.2	49.4
		P	13.3	19.5	13.5	20.0	13.7	20.3	14.2	21.2
43	Q	24.5	33.0	27.3	36.7	29.4	39.3	34.9	46.3	
	P	14.6	21.2	14.8	21.7	15.0	22.0	15.5	22.9	
21HP	27	Q	34.1	43.9	38.0	48.7	40.7	52.0	48.0	61.1
		P	12.4	18.0	12.8	18.6	13.0	19.0	13.8	20.3
	32	Q	32.2	41.5	35.9	46.0	38.5	49.2	45.5	57.8
		P	13.7	19.6	14.0	20.2	14.3	20.7	15.0	21.9
	38	Q	29.9	38.5	33.3	42.8	35.8	45.8	42.3	53.9
		P	15.3	21.7	15.7	22.3	16.0	22.8	16.7	24.0
43	Q	27.9	36.0	31.1	40.0	33.4	42.8	39.7	50.5	
	P	16.8	23.6	17.2	24.3	17.5	24.7	18.2	25.9	
27HP	27	Q	43.9	57.3	48.7	63.4	52.2	67.8	61.5	79.4
		P	15.8	23.0	16.1	23.6	16.4	24.1	17.0	25.3
	32	Q	41.4	54.1	46.0	59.9	49.3	64.0	58.2	75.1
		P	17.5	25.2	17.8	25.8	18.1	26.3	18.7	27.5
	38	Q	38.3	50.1	42.7	55.6	45.8	59.5	54.1	69.8
		P	19.8	28.1	20.1	28.7	20.3	29.1	20.9	30.4
43	Q	35.7	46.8	39.9	51.9	42.8	55.5	50.7	65.3	
	P	21.8	30.6	22.1	31.2	22.3	31.7	23.0	32.9	
35HP	27	Q	56.9	76.9	63.2	85.2	67.7	91.0	79.9	106.5
		P	20.7	30.4	21.0	31.3	21.2	31.9	21.9	33.6
	32	Q	53.8	72.8	59.8	80.6	64.1	86.1	75.7	101.0
		P	22.7	33.2	23.1	34.1	23.3	34.7	24.0	36.4
	38	Q	49.9	67.7	55.6	75.0	59.7	80.2	70.6	94.1
		P	25.5	36.8	25.8	37.7	26.0	38.3	26.7	40.0
43	Q	46.7	63.3	52.1	70.3	55.9	75.2	66.2	88.3	
	P	27.9	40.0	28.3	40.9	28.5	41.5	29.2	43.1	
46HP	27	Q	73.8	92.9	81.9	102.9	87.7	109.9	103.3	128.7
		P	27.9	37.7	28.5	38.9	29.0	39.7	30.2	42.0
	32	Q	69.8	87.9	77.5	97.4	83.0	104.0	97.8	121.9
		P	30.4	40.9	31.0	42.1	31.4	42.9	32.7	45.1
	38	Q	64.8	81.8	72.1	90.6	77.3	96.9	91.2	113.6
		P	33.7	45.1	34.3	46.2	34.7	47.0	35.9	49.2
43	Q	60.6	76.5	67.5	84.9	72.4	90.7	85.5	106.5	
	P	36.6	48.9	37.2	50.0	37.7	50.8	38.9	52.9	

\* This technical parameter is a range of selection parameters, not the actual operating range.

# Fantasy Series Air Cooled R410A MT DC Inverter Condensing Units

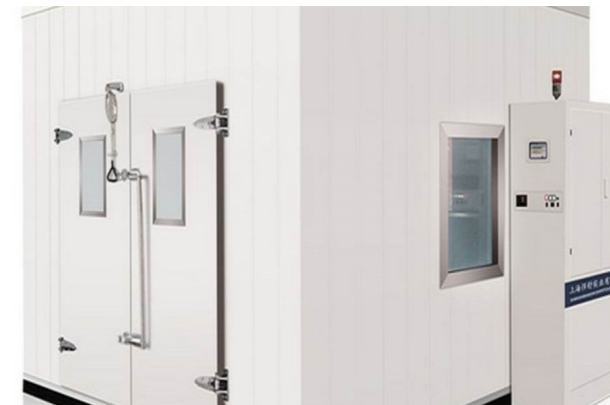


**LT 18 HP  
MT 20 HP/25 HP**  
380V/3ph/50-60Hz  
Optional: integrated or split

### Customer Value

- No need for machine room, integrated and split optional
- DC Inverter compressor + Fan, wide adjustable cooling capacity  
30-100rps for compressor speed  
0-100% for Fan speed
- Low noise units, 10dBA noise reduction compared with FS
- Small fluctuation
- Large condensing coil with subcooling, ensure high temperature operation
- Cost optimization vs traditional scroll rack + V-type condenser
- Wide application field, working temperature range OAT: -30 ~48°C

### Application Scenarios



**MT Electrical/Medical/Food cold room**  
Area: 100m<sup>2</sup>-500m<sup>2</sup>  
Cold room Temp.: -7°C ~ 20°C  
OAT: -30°C ~ 48°C



**S-store /C-store /supermarket**  
Area: 1000m<sup>2</sup>-5000m<sup>2</sup>  
Cabinet Temp.: -1°C ~ 10°C  
OAT: -30°C ~ 48°C

### Technical Parameters (LT 18 HP)

Model	GVRL180NDA1A
Refrigerant	R410A
Power supply	380V/3Ph/50-60Hz
Oil	FVC68D
Compressor Oil charge litre (L)	4
Fan quantity	2
Fan diameter(mm)	710
Fan speed(RPM)	200-950
Max air volume(m <sup>3</sup> /h)	25000
Liquid Receiver(L)	29.9
Oil Receiver(L)	/
Evaporating temperature range	-35-0°C
Rating capacity(kW)	22.3
Input power(kW)	14.1
Maximum capacity(kW)	32.5
Noise level dBA@1m	61
Rating current(A)	26.8
Maximum current(A)	85
Suction diameter(Inch)	1-3/8
Liquid supply diameter(Inch)	3/4
Size (length×width×height)(mm)	1805x955x1950
Weight(kg)	530

Notes:  
Capacity and power test condition :MT condition per China National Standard GB/T21363-2018;  
Evaporating temperature: -23°C, Outdoor Ambient temperature: 32°C, Return gas temperature: 5°C.

### Technical Parameters (MT 20HP/25HP)

Model	GVRM200NDA1A	GVRM250NDA1A
Refrigerant	R410A	R410A
Power supply	380V/3Ph/50-60Hz	380V/3Ph/50-60Hz
Oil	FV50S	FVC68D
Compressor Oil charge litre (L)	4.6	4
Fan quantity	2	2
Fan diameter(mm)	630	710
Fan speed(RPM)	200-950	200-950
Max air volume(m <sup>3</sup> /h)	20000	25000
Liquid Receiver(L)	29.9	29.9
Oil Receiver(L)	4	/
Evaporating temperature range	-15-10°C	-35-10°C
Rating capacity(kW)	25.5	40
Input power(kW)	9.8	16.3
Maximum capacity(kW)	39.6	57.5
Noise level dBA@1m	57	61
Rating current(A)	20	30.5
Maximum current(A)	70	85
Suction diameter(Inch)	1-3/8	
Liquid supply diameter(Inch)	3/4	
Size (length×width×height)(mm)	1805x955x1950	
Weight(kg)	480	530

Notes:  
Capacity and power test condition :MT condition per China National Standard GB/T21363-2018;  
Evaporating temperature: -7°C, Outdoor Ambient temperature: 32°C, Return gas temperature: 18°C.

### Performance Parameters (MT 20HP/25HP)

Model	OAT °C	CAP-Q POW-P P (kW)	Evaporating Temperature °C															
			-15		-12		-10		-7		-5		0		5		10	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MT 20HP	27	Q	10.4	31.6	11.8	35.5	12.8	38.4	14.3	42.8	15.4	45.9	18.6	54.5	22.2	64.1	26.4	75.9
		P	3.8	16.3	3.9	17.0	4.0	17.5	4.1	18.3	4.2	18.8	4.3	20.2	4.4	21.6	4.5	22.5
	32	Q	9.7	28.9	11.0	32.7	11.9	35.4	13.5	39.6	14.7	42.5	17.6	50.6	20.9	59.6	24.9	69.4
		P	4.2	17.3	4.3	18.3	4.4	18.9	4.5	19.8	4.6	20.4	4.8	21.8	4.9	23.3	5.0	24.9
	38	Q	8.8	25.4	10.1	28.8	11.0	31.2	12.4	35.1	13.4	37.9	16.2	45.5	19.7	53.8	23.2	62.7
		P	4.6	18.4	4.8	19.4	5.0	20.1	5.1	21.2	5.2	21.9	5.4	23.7	5.6	25.4	5.7	27.1
43	Q	8.0	22.2	9.3	25.4	10.1	27.6	11.4	31.2	12.3	33.7	15.1	40.6	18.1	48.3	21.5	56.6	
	P	4.9	19.2	5.1	20.3	5.3	21.1	5.5	22.2	5.6	22.9	5.9	24.8	6.1	26.7	6.3	28.6	
48	Q	7.1	19.0	8.3	21.7	9.1	23.8	10.4	27.0	11.3	29.3	13.7	35.6	16.6		19.8		
	P	5.3	20.0	5.6	21.2	5.8	22.0	6.0	23.1	6.2	23.9	6.4	25.9	6.7		6.9		
MT 25HP	27	Q	15.2	45.7	17.0	50.7	18.3	54.3	20.3	60.0	21.8	64.0	25.7	74.9	30.2	87.2	35.5	94.1
		P	5.8	27.3	5.9	28.6	6.0	29.5	6.1	31.0	6.2	32.0	6.3	34.8	6.4	37.8	6.5	33.4
	32	Q	14.6	43.9	16.3	48.7	17.5	52.1	19.5	57.5	20.9	61.3	24.7	71.7	28.9	77.6	33.9	89.7
		P	6.7	30.2	6.8	31.6	6.9	32.6	7.0	34.1	7.1	35.3	7.2	38.1	7.3	33.8	7.4	36.4
	38	Q	13.9	41.6	15.4	46.1	16.6	49.3	18.4	54.4	19.7	57.9	23.3	67.7	27.5	73.1	32.1	
		P	7.7	33.9	7.8	35.4	7.9	36.5	8.0	38.2	8.1	39.3	8.2	42.3	8.3	37.5	8.5	
43	Q	13.2	36.6	14.7	40.6	15.8	43.5	17.5	48.0	18.8	51.1	22.2	59.8	26.1		30.4		
	P	8.7	31.3	8.8	32.5	8.9	33.4	9.0	34.8	9.1	35.7	9.2	38.1	9.3		9.4		
48	Q	12.5	34.7	13.9	38.5	14.9	41.2	16.6	45.4	17.7	48.4	21.0		24.7		28.8		
	P	9.8	34.2	9.9	35.5	10.0	36.4	10.1	37.8	10.2	38.8	10.3		10.4		10.5		

### Performance Parameters (LT 18 HP)

Model	OAT °C	CAP-Q POW-P P (kW)	Evaporating Temperature °C																					
			-35		-30		-25		-23		-20		-15		-12		-10		-7		-5		0	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
LT 18HP	27	Q	6.9	20.8	8.5	25.7	10.4	31.4	11.3	33.9	12.7	38.0	15.2	45.7	17.0	50.7	18.3	54.3	20.3	60.0	21.8	64.0	25.7	74.9
		P	5.3	19.5	5.4	21.4	5.5	23.2	5.6	23.9	5.7	25.3	5.8	27.3	5.9	28.6	6.0	29.5	6.1	31.0	6.2	32.0	6.3	34.8
	32	Q	6.6	19.9	8.1	24.6	10.0	30.1	10.8	32.5	12.1	36.5	14.6	43.9	16.3	48.7	17.5	52.1	19.5	57.5	20.9	61.3	24.7	71.7
		P	6.2	22.3	6.3	23.9	6.4	26.0	6.5	26.8	6.6	28.2	6.7	30.2	6.8	31.6	6.9	32.6	7.0	34.1	7.1	35.3	7.2	38.1
	38	Q	6.2	18.8	7.7	23.2	9.4	28.5	10.2	30.8	11.4	34.5	13.9	41.6	15.4	46.1	16.6	49.3	18.4	54.4	19.7	57.9	23.3	67.7
		P	7.2	25.3	7.3	27.4	7.4	29.7	7.5	30.4	7.6	31.7	7.7	33.9	7.8	35.4	7.9	36.5	8.0	38.2	8.1	39.3	8.2	42.3
43	Q	5.9	17.9	7.3	22.1	9.0	27.0	9.7	29.2	10.9	32.8	13.2	36.6	14.7	40.6	15.8	43.5	17.5	48.0	18.8	51.1	22.2	59.8	
	P	8.2	28.3	8.3	30.5	8.4	32.7	8.5	33.5	8.6	34.8	8.7	31.3	8.8	32.5	8.9	33.4	9.0	34.8	9.1	35.7	9.2	38.1	
48	Q	5.6	15.5	6.9	19.1	8.5	23.4	9.1	25.4	10.3	28.5	12.5	34.7	13.9	38.5	14.9	41.2	16.6	45.4	17.7	48.4	21.0		
	P	9.0	26.6	9.3	28.6	9.5	30.6	9.6	31.3	9.7	32.3	9.8	34.2	9.9	35.5	10.0	36.4	10.1	37.8	10.2	38.8	10.3		

# Fantasy Series Air Cooled R410A LT DC Inverter Condensing Units



2.5-5 HP



7-10 HP

## Product Features

- Freezing and refrigerating integrated application, easy to store renovation and maintenance
- DC variable frequency compressor, wide adjustable range, high energy efficiency, low operating cost
- Frequency conversion fan, low operating cost
- Compact structure, small occupied area
- Inner frame with sound insulation cotton, low noise
- R410A refrigerant, low piping installation cost
- 30% energy saving, -4dBA noise reduction compared with fixed frequency units

## Available Models

HP	Model	Power Supply
2.5 HP	GVRL025NSA2A	220V-1 PH-50-60Hz
3.5 HP	GVRL035NSA2A	220V-1PH-50-60Hz
5 HP	GVRL050NSA2B	220V - 1PH-50-60Hz
7 HP	GVSL070NSA1B	380V-3PH-50-60Hz
10 HP	GVSL100NSA1B	380V-3PH-50-60Hz
10 HP	GVSL100NSA3B	220V-3PH-60Hz

## Application Scenarios



### Medium / small cold storage

Hotel cold storage, chain restaurant, front warehouse, food cold storage with small and medium-sized low-temperature cold storage

Room temperature: -30°C ~ 10°C



### Supermarket

Provides cooling capacity to remote freezer

Food temperature: -30°C ~ 10°C

## Technical Parameters

Unit Model	GVRL025NSA2A	GVRL035NSA2A	GVRL050NSA2A	GVSL070NSA1A	GVSL100NSA1A
Number of matches	2.5HP	3.5HP	5.0HP	7.0HP	10HP
Refrigerant	R410A				
Supply Voltage of Unit	220V/1PH/50-60Hz			380V/3PH/50-60Hz	
Type of Refrigerant Oil	a68HES-H			MEL32R	
Compressor Oil charge litre(L)	1.65			2.3	3
Operating Frequency Range (rps)	30-100		30-90	30-85	30-100
Minimum evaporation temperature	-30			-45	
Number of Fan	1			2	
Diameter of Fan (mm)	500				
Fan Speed Range (rpm)	300-850				
Maximum Air Volume (m <sup>3</sup> /h)	4030			7060	
Reservoir Volume (L)	4.5			8.8	
Evaporating Temperature Range	-30°C--5°C			-45°C--5°C	
Maximum Capacity(kW)	5.1	6.6	7.6	11.1	16.8
Cooling capacity(kW)	3.4	4.1	5.4	8.9	13
Input power(kW)	2.1	2.5	3.5	5	7.5
Noise level dBA@1m	54	54	54	57	60
Unit starting current (A)	--				
Unit rated operating current (A)	10	12	16	10	13
Maximum Running Current (A)	25	30	33	25	30
Diameter of Suction Pipe (Inch)	1/2	5/8		3/4	1-1/8
Diameter of Liquid Pipe (Inch)	3/8			1/2	
Dimensions (L x W x H) (mm)	1164*470*802			1164*470*1358	
Weight (kg)	112	112	112	172	186

Notes:  
Capacity and power test condition :MT condition per China National Standard GB/T21363-2018;  
Evaporating temperature: -23°C, Outdoor Ambient temperature: 32°C, Return gas temperature: 5°C.

## Performance Parameters

Model	OAT °C	Evaporating Temperature °C	Min Frequency for selection(50 rps)			max capacity for selection*		
			Power(kW)	Capacity(kW)	COP	Power(kW)	Capacity(kW)	COP
2.5HP	27	-5	1.67	5.33	3.18	3.57	9.91	2.77
		-7	1.67	4.99	2.99	3.52	9.31	2.64
		-10	1.66	4.51	2.73	3.44	8.45	2.46
		-15	1.64	3.79	2.32	3.31	7.14	2.15
		-20	1.62	3.16	1.95	3.19	5.98	1.88
		-23	1.60	2.82	1.76	3.12	5.35	1.72
	32	-25	1.59	2.61	1.64	3.07	4.96	1.62
		-30	1.56	2.15	1.38	2.95	4.08	1.38
		-5	1.87	5.11	2.73	3.93	9.46	2.4
		-7	1.86	4.79	2.58	3.87	8.89	2.3
		-10	1.84	4.33	2.36	3.78	8.07	2.14
		-15	1.81	3.64	2.01	3.63	6.83	1.88
38	-20	1.79	3.04	1.7	3.49	5.73	1.64	
	-23	1.77	2.71	1.54	3.40	5.13	1.51	
	-25	1.75	2.51	1.44	3.34	4.76	1.42	
	-30	1.70	2.06	1.21	3.21	3.91	1.22	
	-5	2.11	4.84	2.29	3.99	8.39	2.1	
	-7	2.10	4.53	2.16	4.00	7.97	1.99	
43	-10	2.07	4.11	1.98	4.02	7.39	1.84	
	-15	2.04	3.45	1.7	4.03	6.45	1.6	
	-20	2.00	2.88	1.44	3.86	5.42	1.4	
	-23	1.97	2.57	1.31	3.76	4.85	1.29	
	-25	1.95	2.39	1.22	3.69	4.50	1.22	
	-30	1.89	1.96	1.04	3.54	3.70	1.04	
3.5HP	27	-5	2.33	4.60	1.97	3.95	7.43	1.88
		-7	2.31	4.31	1.87	3.95	7.08	1.79
		-10	2.28	3.91	1.71	3.93	6.53	1.66
		-15	2.23	3.29	1.47	3.96	5.71	1.44
		-20	2.18	2.74	1.26	4.02	5.00	1.24
		-23	2.15	2.45	1.14	4.07	4.61	1.13
	32	-25	2.12	2.27	1.07	4.00	4.28	1.07
		-30	2.05	1.87	0.91	3.83	3.51	0.92
		-5	1.90	6.00	3.16	5.01	12.07	2.41
		-7	1.88	5.63	3	4.87	11.39	2.34
		-10	1.85	5.11	2.76	4.67	10.42	2.23
		-15	1.81	4.32	2.39	4.36	8.93	2.05
38	-20	1.77	3.62	2.05	4.08	7.58	1.86	
	-23	1.75	3.25	1.86	3.93	6.85	1.74	
	-25	1.73	3.01	1.74	3.83	6.39	1.67	
	-30	1.68	2.49	1.48	3.59	5.34	1.49	
	-5	2.12	5.77	2.72	5.48	11.59	2.11	
	-7	2.10	5.42	2.58	5.33	10.95	2.05	
43	-10	2.06	4.92	2.38	5.12	10.03	1.96	
	-15	2.01	4.16	2.07	4.79	8.60	1.8	
	-20	1.96	3.49	1.78	4.48	7.32	1.63	
	-23	1.93	3.13	1.62	4.31	6.62	1.54	
	-25	1.91	2.91	1.52	4.20	6.18	1.47	
	-30	1.85	2.40	1.3	3.94	5.17	1.31	
5HP	27	-5	2.40	5.48	2.28	4.74	9.37	1.98
		-7	2.37	5.15	2.17	4.74	8.99	1.9
		-10	2.33	4.68	2.01	4.77	8.48	1.78
		-15	2.26	3.96	1.75	4.74	7.55	1.59
		-20	2.20	3.33	1.51	4.79	6.78	1.41
		-23	2.16	2.98	1.38	4.80	6.32	1.32
	32	-25	2.14	2.77	1.3	4.68	5.91	1.26
		-30	2.06	2.29	1.11	4.39	4.95	1.13
		-5	2.65	5.22	1.97	4.43	8.00	1.8
		-7	2.61	4.91	1.88	4.45	7.70	1.73
		-10	2.56	4.47	1.74	4.72	7.52	1.59
		-15	2.49	3.79	1.52	4.84	6.87	1.42
38	-20	2.42	3.18	1.32	5.09	6.36	1.25	
	-23	2.37	2.85	1.2	5.23	6.06	1.16	
	-25	2.34	2.65	1.13	5.10	5.66	1.11	
	-30	2.25	2.19	0.97	4.78	4.75	0.99	

Model	OAT °C	Evaporating Temperature °C	Min Frequency for selection(50 rps)			max capacity for selection*		
			Power(kW)	Capacity(kW)	COP	Power(kW)	Capacity(kW)	COP
2.5HP	27	-5	3.09	8.73	2.83	5.37	12.39	2.31
		-7	3.03	8.20	2.7	5.31	11.81	2.22
		-10	2.95	7.44	2.52	5.26	11.03	2.1
		-15	2.81	6.29	2.24	4.99	9.63	1.93
		-20	2.67	5.28	1.97	5.02	8.63	1.72
		-23	2.59	4.73	1.82	4.99	8.04	1.61
	32	-25	2.54	4.39	1.73	4.94	7.65	1.55
		-30	2.42	3.61	1.49	4.73	6.66	1.41
		-5	3.54	8.35	2.36	5.88	11.70	1.99
		-7	3.47	7.85	2.26	5.82	11.16	1.92
		-10	3.37	7.13	2.12	5.77	10.44	1.81
		-15	3.21	6.04	1.88	5.60	9.24	1.65
38	-20	3.04	5.07	1.67	5.41	8.10	1.5	
	-23	2.95	4.55	1.54	5.39	7.56	1.4	
	-25	2.88	4.22	1.46	5.36	7.20	1.34	
	-30	2.74	3.47	1.27	5.31	6.41	1.21	
	-5	4.10	7.88	1.93	5.31	9.58	1.81	
	-7	4.01	7.41	1.85	5.39	9.28	1.72	
43	-10	3.89	6.74	1.73	5.38	8.71	1.62	
	-15	3.70	5.72	1.55	5.49	7.94	1.45	
	-20	3.50	4.81	1.37	5.45	7.07	1.3	
	-23	3.39	4.31	1.27	5.44	6.62	1.22	
	-25	3.32	4.00	1.21	5.41	6.31	1.17	
	-30	3.15	3.29	1.05	5.42	5.64	1.04	
5HP	27	-5	4.58	7.48	1.63	5.00	8.02	1.6
		-7	4.49	7.04	1.57	5.00	7.68	1.54
		-10	4.35	6.41	1.47	5.31	7.60	1.43
		-15	4.13	5.44	1.32	5.48	6.97	1.27
		-20	3.91	4.58	1.17	5.45	6.24	1.14
		-23	3.78	4.11	1.09	5.75	6.08	1.06
	32	-25	3.70	3.81	1.03	5.56	5.67	1.02
		-30	3.51	3.14	0.89	5.34	4.90	0.92

## Performance Parameters

Model	OAT °C	Evaporating Temperature °C	Min Frequency for selection(50 rps)			max capacity for selection*		
			Power(kW)	Capacity(kW)	COP	Power(kW)	Capacity(kW)	COP
2.5HP	27	-5	4.45	13.73	3.09	7.46	21.01	2.82
		-7	4.35	12.89	2.97	7.22	19.77	2.74
		-10	4.20	11.71	2.79	6.88	18.00	2.61
		-15	3.99	9.91	2.49	6.38	15.28	2.39
		-20	3.81	8.33	2.18	5.95	12.86	2.16
		-23	3.73	7.47	2	5.73	11.54	2.01
	32	-25	3.68	6.93	1.88	5.59	10.72	1.92
		-30	3.59	5.73	1.6	5.28	8.85	1.68
		-35	3.52	4.69	1.33	5.04	7.22	1.43
		-40	3.47	3.81	1.1	4.85	5.83	1.2
		-5	4.96	13.19	2.66	8.08	20.10	2.49
		-7	4.85	12.39	2.55	7.84	18.92	2.41
38	-10	4.70	11.26	2.39	7.49	17.24	2.3	
	-15	4.49	9.54	2.13	6.98	14.65	2.1	
	-20	4.31	8.02	1.86	6.54	12.34	1.89	
	-23	4.23	7.20	1.7	6.31	11.08	1.76	
	-25	4.18	6.68	1.6	6.17	10.29	1.67	
	-30	4.09	5.52	1.35	5.85	8.50	1.45	
7HP	32	-35	4.03	4.53	1.12	5.61	6.94	1.24
		-40	3.97	3.68	0.92	5.43	5.60	1.03
		-5	5.63	12.51	2.22	8.88	18.97	2.14
		-7	5.52	11.76	2.13	8.63	17.87	2.07
		-10	5.36	10.69	1.99	8.28	16.29	1.97
		-15	5.14	9.08	1.77	7.76	13.87	1.79
	38	-20	4.97	7.64	1.54	7.31	11.70	1.6
		-23	4.89	6.86	1.4	7.07	10.51	1.49
		-25	4.85	6.37	1.31	6.93	9.77	1.41
		-30	4.77	5.26	1.1	6.61	8.07	1.22
		-35	4.70	4.32	0.92	6.37	6.59	1.03
		-40	4.65	3.51	0.76	6.19	5.32	0.86
10HP	32	-5	6.23	11.91	1.91	9.60	17.99	1.88
		-7	6.12	11.21	1.83	9.34	16.96	1.82
		-10	5.96	10.20	1.71	8.99	15.48	1.72
		-15	5.74	8.67	1.51	8.46	13.20	1.56
		-20	5.58	7.30	1.31	8.01	11.14	1.39
		-23	5.50	6.55	1.19	7.76	10.01	1.29
	38	-25	5.46	6.09	1.11	7.62	9.31	1.22
		-30	5.38	5.04	0.94	7.30	7.69	1.05
		-35	5.32	4.13	0.78	7.07	6.28	0.89
		-40	5.27	3.36	0.64	6.88	5.07	0.74

Model	OAT °C	Evaporating Temperature °C	Min Frequency for selection(50 rps)			max capacity for selection*		
			Power(kW)	Capacity(kW)	COP	Power(kW)	Capacity(kW)	COP
2.5HP	27	-5	7.10	20.84	2.93	13.72	29.65	2.16
		-7	6.94	19.67	2.84	13.26	28.10	2.12
		-10	6.70	18.00	2.69	12.61	25.86	2.05
		-15	6.34	15.43	2.43	11.62	22.35	1.92
		-20	6.01	13.13	2.18	10.75	19.15	1.78
		-23	5.83	11.87	2.04	10.28	17.38	1.69
	32	-25	5.71	11.08	1.94	9.98	16.26	1.63
		-30	5.45	9.28	1.7	9.30	13.69	1.47
		-35	5.22	7.70	1.48	8.69	11.42	1.31
		-40	5.02	6.32	1.26	8.16	9.43	1.16
		-5	7.88	20.08	2.55	14.85	28.50	1.92
		-7	7.70	18.97	2.46	14.37	27.04	1.88
38	-10	7.45	17.37	2.33	13.70	24.91	1.82	
	-15	7.06	14.92	2.11	12.68	21.58	1.7	
	-20	6.70	12.71	1.9	11.77	18.52	1.57	
	-23	6.51	11.50	1.77	11.27	16.82	1.49	
	-25	6.38	10.74	1.68	10.96	15.75	1.44	
	-30	6.09	9.00	1.48	10.24	13.28	1.3	
10HP	32	-35	5.84	7.47	1.28	9.59	11.08	1.16
		-40	5.63	6.14	1.09	9.02	9.16	1.02
		-5	8.86	19.11	2.16	11.98	23.43	1.96
		-7	8.67	18.07	2.08	11.85	22.37	1.89
		-10	8.40	16.57	1.97	11.73	20.89	1.78
		-15	7.98	14.26	1.79	12.06	19.06	1.58
	38	-20	7.59	12.17	1.6	12.71	17.43	1.37
		-23	7.38	11.02	1.49	12.53	16.10	1.28
		-25	7.24	10.30	1.42	12.20	15.09	1.24
		-30	6.93	8.64	1.25	11.44	12.74	1.11
		-35	6.65	7.18	1.08	10.75	10.65	0.99
		-40	6.42	5.90	0.92	10.14	8.81	0.87
10HP	32	-5	9.72	18.26	1.88	9.		

# Fantasy Series Water Cooled R410A MT/LT DC Inverter Condensing Units



**R410A DC Inverter Compressor**  
Electric system: 220V/1PH/50Hz (60Hz)

## Product Design Advantages



Horizontal rotary inverter compressor, energy saving up to **25%\***



Low temperature spray design to **improve operation reliability**



Water cooled brazed plate with **high** heat exchange efficiency



**Mature controller** for refrigeration

## Customer Values

- Low noise
- Low energy consumption (energy saving ~ 25% \*)
- Stable food temperature
- Low downtime
- 100% heat recovery

## Product Features

- Water-cooled, no indoor cooling, silent
- Compact design, height less than 300m, highly flexible
- No machine room needed, flexibly placing
- Speed range: 30-80rps
- DC inverter compressor, highly energy efficient
- Mature Carel controller, highly reliable, stable food temperature

## Application Scenarios



### Catering chain

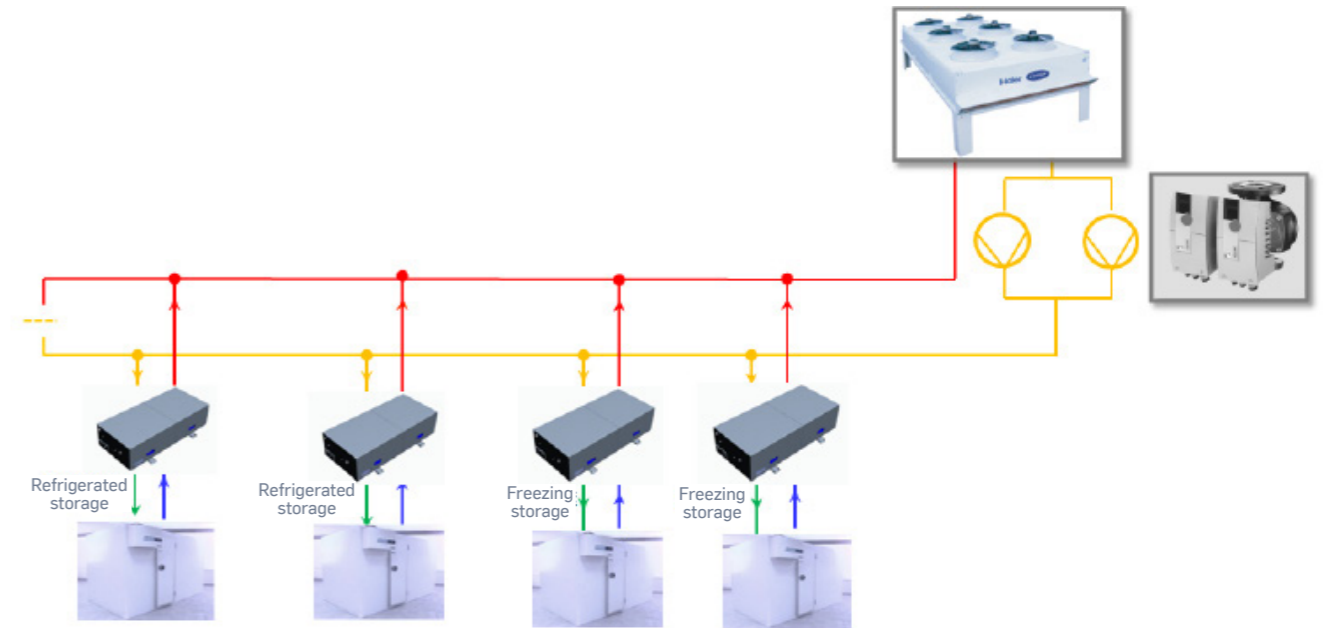
Chain restaurants with small medium / low temperature cold storage  
 Room temperature: -30°C ~ 13°C  
 Ambient temperature: -20°C ~ 43°C  
 Storage capacity: <5t



### Hotel cold storage

Chain restaurants with small and medium temperatures cold storage  
 Room temperature: -30°C ~ 13°C  
 Ambient temperature: -20°C ~ 43°C  
 Storage capacity: <5t

## Brief Introduction of Water Cooling Inverter Compressor Unit



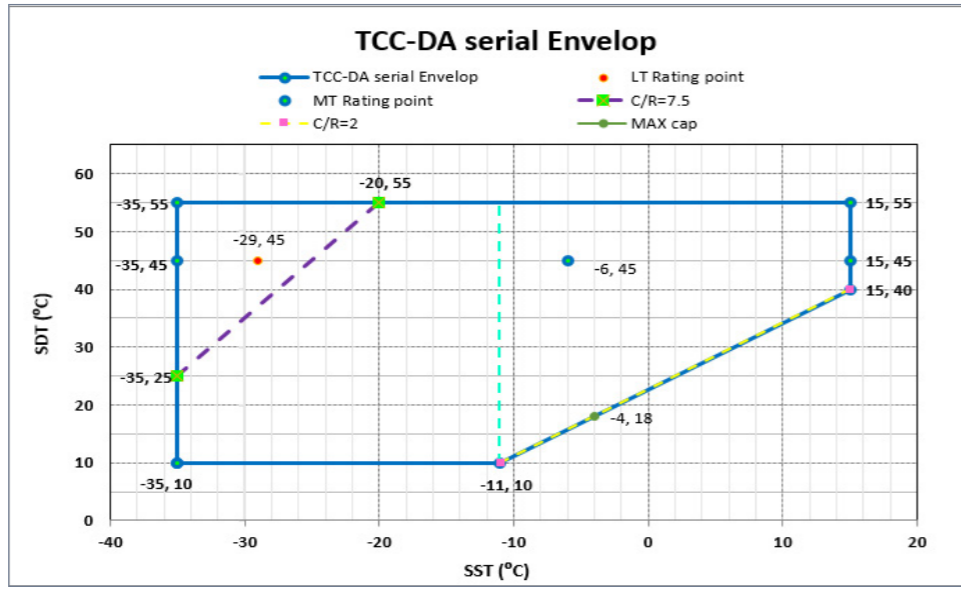
### System advantages:

- The refrigeration part of the main machine adopts compressed condensed water cooling inverter unit, which has a small footprint
- The frozen part does not need to choose a place with good ventilation, and the equipment can be placed flexibly
- The refrigeration of each piece of equipment is independently controlled, and the failure of a single piece of equipment does not affect the system's operation using environmentally friendly refrigerant R410A
- Easy to install
- 100% heat recovery

## Application Scope of Water Cooling Inverter Compressor Unit

Working Condition	MT/LT
Refrigerant	R410A
Evaporation Temperature °C	-35 ~ +15

	CDU Name	CDU Model
MT	MT 1HP	GVRM10NSW2X
	MT 1.5HP	GVRM15NSW2X
	MT 2.5HP	GVRM25NSW2X
	MT 3.5HP	GVRM35NSW2X
	MT 4.5HP	GVRM45NSW1X
LT	LT 1HP	GVRL10NSW2X
	LT 1.5HP	GVRL15NSW2X
	LT 2.5HP	GVRL25NSW2X
	LT 3.5HP	GVRL35NSW2X
	LT 4.5HP	GVRL45NSW1X



## Water Cooling - MT Technical Parameters

Model	GVRM10NSW2X	GVRM15NSW2X	GVRM25NSW2X	GVRM35NSW2X	GVRM45NSW2X	
Refrigerant	R410A					
Ambient Temperature Condition	25°C, 60%					
Rated Running Condition	Evaporation temperature: -5°C, condensation temperature: 48°C, subcooling degree: 2K, superheating degree: 10K, frequency: 60Hz					
Cooling Capacity	kW	1.69	2.33	4.09	6.14	7.75
Power	kW	0.73	1.04	1.76	2.62	3.23
COP	W/W	2.33	2.24	2.32	2.35	2.35
Plate Replacement Model	B26x8	B26x12	B26x18	B26x24	B26x24	
Plate Water Exchange Side Interface Size <sup>1</sup>	Stainless steel, internal thread 3/4"					
water Flow	m <sup>3</sup> /h	0.48	0.76	1.141	1.929	2.343
Noise	dB(A)	<52	<52	<52	<52	<52
Maximum Running Current	A	8.5	9.2	11.1	15.6	25
Power Type	220V - 1ph - 50/60Hz			380V - 3ph - 50/60Hz		
Compressor	Type	Silent, efficient, fully enclosed rotary compressor				
	Model	DA91A1FJH-10A	DA130A1FJH-10A	DA220A1FJH-10B	DA330A3FJH-10C	DA420A3FJH-10C
	Quantity	1	1	1	1	1
	Self-contained Oil	0.4	0.4	0.62	0.9	0.9
Frequency Range, Hz	30-80	30-80	30-80	30-80	30-80	
Reservoir	Type	Vertical		Horizontal		
	Volume L	1.8	1.8	3.3	4	4
Overall Dimensions	mm	1100*500*300				
Packing Dimensions	mm	1203*640*440				
Weight	kg	62	63	63.8	65	65.8

Water cooling working conditions: condensation temperature: 48 °C, superheating degree: 10K, subcooling degree: 2K.  
<sup>1</sup> It is recommended to select water connector (0080600407) on the plate water exchange side. CDU shall be connected at the external thread side of water connector, and PVR water pipe shall be connected at PP-R side after hot melting.

## Water Cooling - MT Performance Parameters

Model	Ambient Temperature (°C)	Capacity Q Power P (KW)	Evaporating Temp(°C)												
			-12		-10		-7		15		0		5		
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
GVRM010NSW2X	25	Q	1.82	2.30	1.97	2.48	2.22	2.78	2.39	3.00	2.87	3.58	3.42	4.23	
		P	0.36	0.44	0.36	0.45	0.31	0.45	0.36	0.45	0.39	0.51	0.38	0.51	
	35	Q	1.60	2.02	1.74	2.20	1.96	2.47	2.12	2.67	2.56	3.21	3.06	3.82	
		P	0.41	0.51	0.42	0.53	0.49	0.64	0.42	0.53	0.52	0.66	0.52	0.66	
	45	Q	1.30	1.66	1.42	1.81	1.62	2.06	1.76	2.24	2.15	2.73	2.59	3.29	
		P	0.51	0.65	0.52	0.67	0.79	0.99	0.52	0.67	0.73	0.91	0.75	0.93	
	55	Q	0.87	1.14	0.98	1.28	1.14	1.50	1.26	1.66	1.60	2.09	1.98	2.59	
		P	0.54	0.69	0.56	0.72	0.90	1.12	0.56	0.72	0.80	1.00	0.83	1.04	
	GVRM015NSW2X	25	Q	2.60	3.28	2.82	3.55	3.18	3.99	3.43	4.29	4.13	5.14	4.92	6.09
			P	0.51	0.63	0.52	0.64	0.46	0.65	0.52	0.64	0.56	0.74	0.55	0.73
35		Q	2.27	2.89	2.47	3.14	2.80	3.54	3.03	3.82	3.66	4.61	4.39	5.49	
		P	0.60	0.74	0.61	0.76	0.71	0.93	0.61	0.76	0.74	0.94	0.75	0.95	
45		Q	1.93	2.46	2.11	2.69	2.40	3.06	2.60	3.32	3.18	4.04	3.83	4.86	
		P	0.73	0.93	0.75	0.96	1.14	1.42	0.75	0.96	1.05	1.31	1.08	1.34	
55		Q	1.57	2.01	1.72	2.21	1.98	2.54	2.16	2.78	2.67	3.44	3.25	4.18	
		P	0.77	1.00	0.80	1.03	1.30	1.60	0.80	1.03	1.16	1.44	1.20	1.49	
GVRM025NSW2X		25	Q	4.42	5.52	4.79	5.98	5.38	6.70	5.81	7.21	6.97	8.62	8.29	10.20
			P	0.86	1.05	0.88	1.08	0.82	1.14	0.88	1.08	0.97	1.25	0.95	1.24
	35	Q	3.89	4.88	4.23	5.31	4.78	5.98	5.17	6.46	6.24	7.78	7.46	9.26	
		P	1.00	1.25	1.03	1.28	1.21	1.59	1.03	1.28	1.25	1.59	1.25	1.60	
	45	Q	3.30	4.17	3.60	4.55	4.09	5.18	4.45	5.62	5.42	6.83	6.53	8.21	
		P	1.23	1.57	1.27	1.63	1.92	2.40	1.27	1.63	1.76	2.20	1.81	2.26	
	55	Q	2.62	3.35	2.88	3.70	3.31	4.26	3.62	4.67	4.49	5.77	5.48	7.03	
		P	1.31	1.68	1.36	1.74	2.20	2.70	1.36	1.74	1.96	2.42	2.02	2.50	
	GVRM035NSW2X	25	Q	6.58	8.29	7.13	8.97	8.02	10.06	8.65	10.84	10.40	12.95	12.38	15.34
			P	1.29	1.57	1.32	1.61	1.19	1.72	1.32	1.61	1.43	1.87	1.40	1.86
35		Q	5.75	7.30	6.25	7.93	7.07	8.94	7.65	9.66	9.25	11.63	11.07	13.86	
		P	1.51	1.86	1.55	1.91	1.80	2.39	1.55	1.91	1.87	2.39	1.88	2.41	
45		Q	4.88	6.23	5.33	6.81	6.06	7.74	6.59	8.40	8.03	10.22	9.68	12.28	
		P	1.85	2.34	1.91	2.42	2.87	3.61	1.91	2.42	2.64	3.30	2.71	3.39	
55		Q	3.96	5.07	4.36	5.60	5.00	6.44	5.47	7.04	6.75	8.70	8.23	10.58	
		P	1.96	2.51	2.03	2.60	3.27	4.07	2.03	2.60	2.92	3.65	3.02	3.76	
GVRM045NSW2X		25	Q	8.41	10.59	9.12	11.46	10.26	12.86	11.07	13.86	13.31	16.57	15.85	19.64
			P	1.65	2.02	1.68	2.06	1.53	2.16	1.68	2.06	1.83	2.38	1.79	2.37
	35	Q	7.35	9.31	8.00	10.12	9.04	11.42	9.78	12.34	11.83	14.87	14.16	17.73	
		P	1.92	2.39	1.97	2.45	2.31	3.04	1.97	2.45	2.40	3.05	2.41	3.08	
	45	Q	6.24	7.94	6.82	8.68	7.76	9.88	8.43	10.73	10.27	13.06	12.39	15.70	
		P	2.36	3.01	2.44	3.11	3.68	4.59	2.44	3.11	3.37	4.21	3.47	4.32	
	55	Q	5.07	6.48	5.58	7.15	6.40	8.23	7.00	9.00	8.64	11.12	10.52	13.54	
		P	2.51	3.24	2.60	3.35	4.19	5.17	2.60	3.35	3.73	4.64	3.85	4.79	

The minimum and maximum cooling capacity is the selected cooling capacity, corresponding to 60Hz and 75Hz.

## Water Cooling - LT Technical Parameters

Model		GVRL10NSW2X	GVRL15NSW2X	GVRL25NSW2X	GVRL35NSW2X	GVRL45NSW2X
Refrigerant		R410A				
Ambient Temperature Condition		25°C, 60%				
Rated Running Condition		Evaporation temperature: - 29°C, condensation temperature: 48 °C, subcooling degree: 2K, superheating degree: 10K, frequency: 60Hz				
Cooling Capacity	kW	0.5	0.72	1.26	1.89	2.33
Power	kW	0.53	0.76	1.28	1.90	2.42
COP	W/W	0.95	0.95	0.98	1.00	0.96
Plate Replacement Model		B26x8	B26x12	B26x18	B26x24	B26x24
Plate Water Exchange Side Interface Size <sup>1</sup>		Stainless steel, internal thread 3/4"				
water Flow	m <sup>3</sup> /h	0.48	0.76	1.141	1.929	2.343
Noise	dB(A)	<52	<52	<52	<52	<52
Maximum Running Current	A	8.1	8.7	10.8	15.1	20
Power Type		220V - 1ph - 50/60Hz			380V - 3ph - 50/60Hz	
Frequency Range, Hz		30-80	30-80	30-80	30-80	30-80
Reservoir	Type	Vertical		Horizontal		
	Volume L	1.8	1.8	3.3	4	4
Overall Dimensions	mm	1100*500*300				
Packing Dimensions	mm	1203*640*440				
Weight	kg	62	63	63.8	65	65.8

Water cooling working conditions: condensation temperature: 48 °C, superheating degree: 10K, subcooling degree: 2K.  
<sup>1</sup> It is recommended to select water connector (0080600407) on the plate water exchange side. CDU shall be connected at the external thread side of water connector, and PVR water pipe shall be connected at PP-R side after hot melting.

## Water Cooling - LT Performance Parameters

Model	Ambient Temperature (°C)	Capacity Q Power P (KW)	Evaporating Temp °C						
			-35		-30		-25		
			Min	Max	Min	Max	Min	Max	
GVRL010NSW2X	25	Q	0.58	0.77	0.78	1.01	1.02	1.30	
		P	0.36	0.44	0.39	0.51	0.40	0.51	
	35	Q	0.49	0.62	0.67	0.85	0.88	1.11	
		P	0.41	0.51	0.52	0.66	0.51	0.65	
	45	Q	0.35	0.41	0.50	0.61	0.68	0.84	
		P	0.51	0.65	0.74	0.93	0.71	0.89	
	55	Q	0.10	0.08	0.22	0.24	0.36	0.44	
		P	0.54	0.69	0.82	1.03	0.78	0.98	
	GVRL015NSW2X	25	Q	0.85	1.10	1.12	1.45	1.45	1.86
			P	0.51	0.63	0.56	0.73	0.57	0.74
35		Q	0.68	0.87	0.93	1.19	1.23	1.57	
		P	0.60	0.74	0.74	0.95	0.74	0.94	
45		Q	0.51	0.62	0.74	0.92	1.00	1.26	
		P	0.73	0.93	1.07	1.33	1.02	1.28	
55		Q	0.34	0.36	0.54	0.62	0.76	0.93	
		P	0.77	1.00	1.18	1.47	1.13	1.41	
GVRL025NSW2X		25	Q	1.43	1.82	1.91	2.42	2.47	3.12
			P	0.86	1.05	0.95	1.24	0.97	1.25
	35	Q	1.16	1.44	1.60	2.00	2.11	2.65	
		P	1.00	1.25	1.25	1.60	1.24	1.57	
	45	Q	0.87	1.03	1.26	1.53	1.71	2.13	
		P	1.23	1.57	1.80	2.24	1.72	2.16	
	55	Q	0.55	0.58	0.87	1.02	1.26	1.54	
		P	1.31	1.68	2.00	2.48	1.91	2.37	
	GVRL035NSW2X	25	Q	2.15	2.79	2.85	3.67	3.69	4.71
			P	1.29	1.57	1.41	1.87	1.44	1.87
35		Q	1.72	2.20	2.37	3.01	3.12	3.98	
		P	1.51	1.86	1.88	2.41	1.86	2.36	
45		Q	1.29	1.56	1.86	2.31	2.53	3.19	
		P	1.85	2.34	2.69	3.36	2.58	3.23	
55		Q	0.84	0.88	1.34	1.55	1.92	2.34	
		P	1.96	2.51	2.99	3.73	2.85	3.56	
GVRL045NSW2X		25	Q	2.73	3.59	3.63	4.69	4.70	6.01
			P	1.65	2.02	1.81	2.37	1.84	2.39
	35	Q	2.19	2.82	3.01	3.85	3.98	5.07	
		P	1.92	2.39	2.40	3.07	2.38	3.02	
	45	Q	1.64	2.02	2.37	2.95	3.23	4.06	
		P	2.36	3.01	3.43	4.29	3.30	4.12	
	55	Q	1.07	1.16	1.71	1.99	2.45	2.99	
		P	2.51	3.24	3.81	4.74	3.63	4.54	

The minimum and maximum cooling capacity is the selected cooling capacity, corresponding to 60Hz and 75Hz.



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