

# Fantasy Series 2.0

R410A MT DC Inverter Condensing Units



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



**5~10HP**  
Rotary Compressor  
Single Compressor  
Dual Fans

## 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

## Optional



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



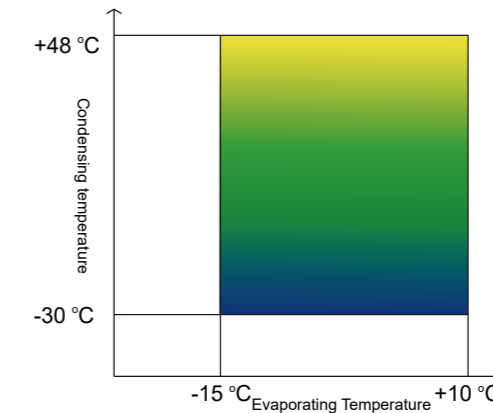
**Hinged Door**  
Convenient for maintenance



**Triangular Bracket**  
Reduced vibration and leakage

## Operation Range & Naming Rule

1.5~10HP



**G V R M 0 8 0 N S A 1 X**

- Internal Design Serial Number
- B - 2<sup>nd</sup> generation
- Power
  1. 380V/3Ph/50~60Hz
  2. 220V/1Ph/50~60Hz
  3. 220V/3Ph/60Hz
  4. 380V/3Ph/60Hz
  5. 380V/3Ph/50Hz
- Cooling Method
  - A-Air Cooling
- No. of Compressor
  - S-Single Compressor
  - D-Double Compressors
- Refrigerant
  - N-R410A
- Nominal HP
  - 015-1.5HP
  - 040-4HP
  - 100-10HP
  - 460-46HP
- Application Temperature of Unit
  - M-Medium Temperature
- Compressor Type
  - R-Rotary Compressor
  - S-Scroll Compressor
- Hermetic Inverter Compressing and Condensing Unit

## Technical Parameters

Model	GVRM 015NSA2B	GVRM 020NSA2B	GVRM 025NSA2B	GVRM 035NSA2B	GVRM 040NSA1B	GVRM 050NSA1B	GVRM 060NSA1B	GVRM 080NSA1B	GVRM 100NSA1B
Refrigerant	R410A								
Supply Voltage of Unit	220V/1PH/50~60Hz				380V/3Ph/50~60Hz				
Type of Refrigerant Oil	FV50S								
Number of Fan	1				2				
Diameter of Fan (mm)	500								
Fan Speed Range (rpm)	300~850								
Maximum Air Volume (m3/h)	4030				7060				
Reservoir Volume (L)	4.5				8.8				
Evaporating Temperature Range	-15~10								
Unit rated cooling Capacity (kW)	3.1	3.7	4.9	6.6	7.8	9.6	11.4	13.8	15.2
Unit rated power (kW)	1.0	1.2	1.6	2.4	2.8	3.2	4.0	4.8	5.8
Maximum Cooling Capacity of Unit (kW)	5.3	6.4	8.1	10.1	11.9	14.0	16.3	19.1	20.6
Maximum Power of Unit (kW)	1.8	2.3	3.3	5.0	6.4	5.2	6.5	8.1	9.8
Noise of Unit dBA@1m	52	52	53	53	56	56	59	60	60
Nominal Running Current of Unit (A)	4.8	5.7	7.8	11.0	5.0	5.5	6.3	8.9	9.6
Maximum Running Current (A)	14	20	23	33	17	20	22	27	28
Diameter of Suction Pipe (Inch)	1/2			5/8		3/4			
Diameter of Liquid Pipe (Inch)	3/8				1/2				
Dimensions (L x W x H) (mm)	1064 X 424 X 802				1064 X 448 X 1358				
Weight (kg)	93	93	95	97	142	142	146	150	

Notes: 1.5~4HP Norminal working condition: 60rps; 5~10 norminal working condition: 70rps  
Cooling capacity power testing conditions: National standard medium temperature working conditions: GB/T21363-2008  
Evaporating temperature: -7°C, ambient temperature: 32°C, return temperature 18°C.

## Performance Parameters

Model	Ambient Temperature °C	Cooling Capacity Q Power Consumption 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	2.3	3.9	2.6	4.4	2.9	4.8	3.3	5.4	3.5	5.9	4.3	7.0	5.2	8.4	6.2	9.9
		P	0.9	1.6	0.9	1.7	0.9	1.7	0.9	1.8	1.0	1.8	1.0	1.9	1.1	2.1	1.1	2.2
	32	Q	2.2	3.7	2.5	4.2	2.7	4.5	3.1	5.3	3.3	5.5	4.0	6.6	4.9	7.9	5.8	9.2
		P	0.9	1.7	1.0	1.8	1.0	1.9	1.0	1.9	1.0	2.0	1.1	2.1	1.1	2.3	1.2	2.4
	38	Q	2.0	3.3	2.3	3.8	2.5	4.2	2.8	4.7	3.0	5.1	3.7	6.1	4.5	7.2	5.3	8.5
		P	1.0	1.9	1.0	2.0	1.0	2.0	1.1	2.1	1.1	2.2	1.2	2.3	1.2	2.5	1.3	2.6
	43	Q	1.8	3.1	2.1	3.5	2.3	3.8	2.6	4.3	2.8	4.7	3.4	5.7	4.1	6.7	4.9	7.3
		P	1.1	2.1	1.1	2.2	1.1	2.2	1.1	2.3	1.2	2.3	1.2	2.5	1.3	2.6	1.4	2.4
	48	Q	1.6	2.8	1.9	3.2	2.1	3.5	2.4	3.9	2.6	4.3	3.2	4.8	3.8	5.7	4.6	6.0
		P	1.1	2.2	1.1	2.3	1.2	2.4	1.2	2.5	1.2	2.5	1.3	2.3	1.4	2.4	1.5	2.2
2HP	27	Q	2.8	4.9	3.2	5.6	3.5	6.1	3.9	6.8	4.3	7.4	5.2	8.8	6.2	10.4	7.4	12.1
		P	1.0	1.9	1.1	2.0	1.1	2.1	1.1	2.2	1.1	2.2	1.2	2.4	1.2	2.6	1.2	2.8
	32	Q	2.6	4.6	3.0	5.2	3.3	5.7	3.7	6.4	4.0	6.9	4.9	8.3	5.8	9.8	6.9	11.3
		P	1.1	2.1	1.2	2.2	1.2	2.3	1.2	2.4	1.2	2.4	1.3	2.6	1.3	2.8	1.4	3.0
	38	Q	2.4	4.2	2.7	4.8	3.0	5.2	3.4	5.8	3.7	6.3	4.5	7.6	5.4	9.0	6.4	10.4
		P	1.3	2.3	1.3	2.4	1.3	2.5	1.4	2.6	1.4	2.7	1.4	2.9	1.5	3.1	1.6	3.3

### Performance Parameters

Model	Ambient Temperature °C	Cooling Capacity Q Power Consumption 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
2HP	43	Q	2.2	3.8	2.5	4.4	2.8	4.7	3.1	5.3	3.4	5.8	4.2	6.9	5.0	8.3	5.9	9.7
		P	1.3	2.5	1.4	2.6	1.4	2.7	1.5	2.8	1.5	2.9	1.6	3.1	1.6	3.3	1.7	3.6
2.5HP	48	Q	2.0	3.4	2.3	3.9	2.5	4.2	2.9	4.8	3.1	5.2	3.8	6.3	4.6	7.4	5.4	8.1
		P	1.4	2.6	1.5	2.8	1.5	2.9	1.6	3.0	1.6	3.1	1.7	3.4	1.8	3.6	1.9	3.3
2.5HP	27	Q	3.7	6.5	4.2	7.4	4.6	8.0	5.1	8.9	5.5	9.6	6.6	11.4	7.9	13.3	9.3	15.4
		P	1.4	2.8	1.4	2.9	1.4	2.9	1.5	3.0	1.5	3.1	1.5	3.3	1.6	3.5	1.7	3.8
	32	Q	3.5	6.1	3.9	6.9	4.3	7.5	4.9	8.1	5.2	9.0	6.3	10.7	7.4	12.5	8.8	14.5
		P	1.5	3.1	1.6	3.2	1.6	3.2	1.6	3.3	1.6	3.4	1.7	3.6	1.8	3.8	1.8	4.1
	38	Q	3.2	5.5	3.6	6.3	3.9	6.8	4.4	7.6	4.8	8.2	5.8	9.9	6.9	11.6	8.1	13.3
		P	1.7	3.3	1.7	3.5	1.8	3.6	1.8	3.7	1.8	3.8	1.9	4.0	2.0	4.2	2.0	4.5
	43	Q	2.9	4.9	3.3	5.6	3.6	6.1	4.1	6.9	4.5	7.5	5.4	9.0	6.4	9.7	7.6	11.3
		P	1.8	3.5	1.9	3.7	1.9	3.8	2.0	4.0	2.0	4.1	2.1	4.3	2.1	3.8	2.2	4.0
48	Q	2.6	4.3	3.0	4.9	3.3	5.4	3.7	6.1	4.1	6.7	5.0	7.4	6.0	8.8	7.0	9.3	
	P	1.9	3.7	2.0	3.9	2.0	4.0	2.1	4.2	2.1	4.3	2.2	3.9	2.3	4.1	2.4	3.6	
3.5HP	27	Q	5.2	8.6	5.9	9.7	6.3	10.4	7.1	11.7	7.6	12.5	9.1	14.6	10.7	16.9	12.4	19.1
		P	2.0	4.1	2.1	4.4	2.1	4.5	2.2	4.7	2.2	4.9	2.4	5.4	2.5	6.0	2.7	6.6
	32	Q	4.9	8.0	5.5	9.0	6.0	9.6	6.6	10.1	7.2	11.5	8.6	13.7	10.0	15.8	11.7	17.9
		P	2.2	4.5	2.3	4.7	2.3	4.9	2.4	5.1	2.4	5.4	2.6	5.8	2.7	6.4	2.9	7.0
	38	Q	4.5	7.1	5.1	8.0	5.5	8.6	6.2	9.6	6.7	10.3	7.9	12.1	9.3	14.1	10.8	15.1
		P	2.4	4.8	2.5	5.1	2.6	5.4	2.6	5.7	2.7	5.9	2.9	6.4	3.0	7.0	3.2	6.1
	43	Q	4.1	6.2	4.7	7.1	5.1	7.7	5.7	8.6	6.1	9.2	7.4	10.2	8.7	11.9	10.0	12.7
		P	2.6	5.0	2.7	5.4	2.8	5.6	2.9	6.0	2.9	6.2	3.1	5.7	3.3	6.1	3.5	5.3
48	Q	3.7	5.2	4.2	6.0	4.6	6.5	5.2	6.9	5.6	7.4	6.7	8.4	7.9	8.9	-	9.4	
	P	2.7	5.2	2.9	5.6	3.0	5.8	3.1	5.2	3.2	5.4	3.3	5.0	3.5	4.4	-	3.7	
4HP	27	Q	6.0	9.8	6.8	10.9	7.3	11.8	8.2	13.1	8.9	14.0	10.5	16.5	12.4	19.0	14.3	21.4
		P	2.3	4.9	2.4	5.3	2.5	5.5	2.6	5.8	2.6	6.1	2.8	6.7	3.1	7.4	3.4	8.2
	32	Q	5.6	8.8	6.3	9.9	7.0	10.7	7.8	11.9	8.4	12.8	9.9	14.9	11.6	17.7	13.4	18.5
		P	2.5	5.4	2.6	5.8	2.7	6.0	2.8	6.4	2.9	6.7	3.1	7.3	3.4	8.1	3.7	7.1
	38	Q	5.0	7.6	5.7	8.6	6.2	9.3	7.0	10.4	7.5	11.2	9.1	13.1	10.7	14.4	12.3	15.6
		P	2.8	5.8	2.9	6.2	3.0	6.5	3.1	6.9	3.2	7.2	3.4	7.9	3.7	7.1	4.0	6.2
	43	Q	4.5	6.6	5.2	7.5	5.6	8.1	6.4	9.1	6.9	9.8	8.3	11.0	9.9	12.0	11.4	12.9
		P	3.0	6.2	3.1	6.6	3.2	6.9	3.4	7.3	3.5	7.6	3.7	6.9	4.0	6.2	4.3	5.4
48	Q	3.9	5.5	4.5	6.3	4.9	6.5	5.6	7.4	6.1	7.5	7.4	8.4	-	9.0	-	9.5	
	P	3.2	6.5	3.3	6.9	3.4	6.0	3.6	6.4	3.7	5.5	4.0	5.0	-	4.5	-	3.5	
5HP	27	Q	6.2	10.8	7.1	12.3	7.7	13.3	8.7	15.0	9.4	16.2	11.4	19.4	13.6	22.9	16.2	26.7
		P	2.3	4.2	2.3	4.4	2.4	4.5	2.5	4.7	2.5	4.9	2.6	5.2	2.8	5.7	2.9	6.1
	32	Q	5.8	10.0	6.6	11.5	7.2	12.4	8.1	14.0	8.8	15.1	10.7	18.1	12.8	21.4	15.2	25.0
		P	2.5	4.8	2.6	5.0	2.6	5.1	2.7	5.3	2.8	5.4	2.9	5.8	3.0	6.2	3.2	6.7
	38	Q	5.3	9.1	6.1	10.3	6.6	11.3	7.5	12.7	8.2	13.8	9.8	16.7	11.8	19.7	14.0	23.0
		P	2.8	5.4	2.9	5.6	2.9	5.8	3.0	6.0	3.1	6.1	3.2	6.5	3.4	7.0	3.6	7.5
	43	Q	4.8	8.1	5.5	9.3	6.1	10.2	6.9	11.6	7.5	12.6	9.1	15.2	10.9	18.2	13.0	21.2
		P	3.0	5.9	3.1	6.2	3.2	6.3	3.3	6.6	3.4	6.8	3.5	7.2	3.7	7.6	3.9	8.1
48	Q	4.3	7.0	5.0	8.2	5.5	9.0	6.3	10.3	6.8	11.2	8.4	13.7	10.1	16.4	11.9	19.4	
	P	3.3	6.3	3.4	6.6	3.5	6.8	3.6	7.1	3.7	7.3	3.8	7.9	4.0	8.3	4.2	8.8	

### Performance Parameters

Model	Ambient Temperature °C	Cooling Capacity Q Power Consumption 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
6HP	27	Q	7.4	12.7	8.5	14.4	9.2	15.6	10.4	17.5	11.2	18.9	13.5	22.5	16.1	26.4	19.1	30.7
		P	2.7	5.3	2.8	5.5	2.9	5.7	2.9	6.0	3.0	6.2	3.1	6.7	3.2	7.3	3.4	7.9
	32	Q	6.9	11.7	7.9	13.3	8.6	14.5	9.7	16.3	10.5	17.6	12.7	21.1	15.2	24.8	17.9	28.7
		P	3.0	5.7	3.1	6.0	3.2	6.2	3.2	6.5	3.3	6.8	3.5	7.3	3.6	7.9	3.7	8.6
	38	Q	6.3	10.6	7.2	12.1	7.8	13.1	8.9	14.8	9.6	16.0	11.7	19.2	14.0	22.8	16.5	26.4
		P	3.3	6.4	3.5	6.8	3.5	6.9	3.6	7.2	3.7	7.5	3.9	8.1	4.0	8.7	4.2	9.4
	43	Q	5.8	9.5	6.6	10.9	7.2	11.9	8.2	13.5	8.9	14.6	10.9	17.5	13.0	21.1	15.3	24.4
		P	3.6	6.9	3.7	7.3	3.8	7.5	3.9	7.9	4.0	8.2	4.2	8.7	4.4	9.4	4.6	10.1
48	Q	5.1	8.3	6.0	9.6	6.5	10.5	7.4	12.0	8.1	13.0	9.9	15.8	12.0	18.7	14.1	20.5	
	P	3.9	7.2	4.1	7.6	4.2	8.0	4.3	8.4	4.4	8.7	4.6	9.5	4.8	10.0	5.0	9.1	
8HP	27	Q	9.1	14.7	10.4	16.9	11.3	18.3	12.7	20.6	13.7	22.2	16.6	26.4	19.7	31.0	23.2	35.8
		P	3.4	6.8	3.5	7.0	3.6	7.2	3.7	7.6	3.8	7.8	3.9	8.5	4.0	9.1	4.3	9.9
	32	Q	8.5	13.5	9.7	15.4	10.5	16.8	11.9	19.1	12.9	20.6	15.5	24.6	18.5	28.9	21.7	33.4
		P	3.7	7.3	3.9	7.6	3.9	7.9	4.0	8.2	4.1	8.4	4.3	9.1	4.4	9.8	4.7	10.6
	38	Q	7.7	12.0	8.8	13.8	9.6	15.0	10.9	17.0	11.8	18.5	14.2	22.5	17.0	26.4	19.9	30.6
		P	4.1	7.9	4.3	8.3	4.4	8.6	4.5	9.0	4.6	9.3	4.8	9.9	5.0	10.6	5.3	11.5
	43	Q	7.0	10.6	8.1	12.3	8.8	13.5	10.0	15.4	10.9	16.7	13.2	20.2	15.7	24.4	18.5	28.0
		P	4.4	8.2	4.6	8.7	4.7	9.1	4.9	9.6	5.0	9.9	5.2	10.6	5.4	11.3	5.7	12.2
48	Q	6.3	9.1	7.3	10.7	7.9	11.7	9.1	13.5	9.9	14.7	12.0	18.0	14.5	20.0	17.0	21.4	
	P	4.7	8.5	5.0	9.1	5.1	9.4	5.3	10.0	5.3	10.4	5.6	11.3	5.9	10.2	6.2	9.1	
10HP	27	Q	10.2	16.1	11.5	18.3	12.5	20.0	14.1	22.5	15.2	24.2	18.2	28.7	21.6	33.5	25.2	38.4
		P	3.9	7.9	4.1	8.3	4.1	8.5	4.3	9.0	4.4	9.3	4.6	10.2	4.9	11.2	5.2	12.3
	32	Q	9.4	14.6	10.8	16.8	11.7	18.3	13.2	20.6	14.3	22.2	17.1	26.8	20.3	31.3	23.7	35.9
		P	4.4	8.5	4.5	9.0	4.6	9.4	4.7	9.9	4.8	10.2	5.1	11.0	5.4	12.0	5.8	13.2
	38	Q	8.5	12.9	9.8	14.9	10.6	16.3	12.1	18.4	13.1	20.0	15.7	24.0	18.7	28.6	21.8	32.8
		P	4.9	9.2	5.1	9.8	5.2											