

# Fantasy Series

## R410A LT DC Inverter Condensing Units



2.5~5HP



7-10HP

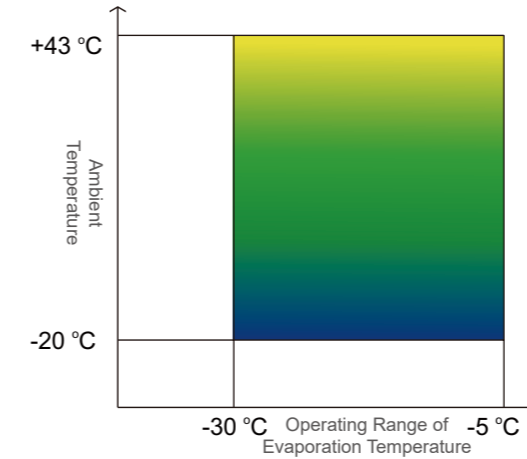


### Product Features

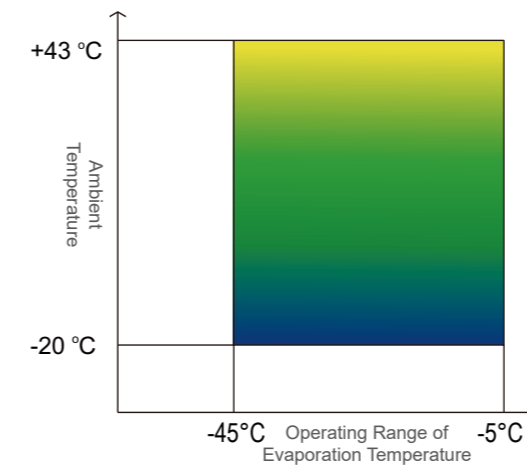
- Freezing and refrigerating integrated application, easy to store renovation and maintenance
- DC variable frequency compressor, wide adjustable range, high energy efficiency, low operating cost
- Frequency conversion fan, low operating cost.
- Compact structure, small occupied area
- Inner frame with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

### Operation Range and Naming Rule

#### 2.5HP~5HP



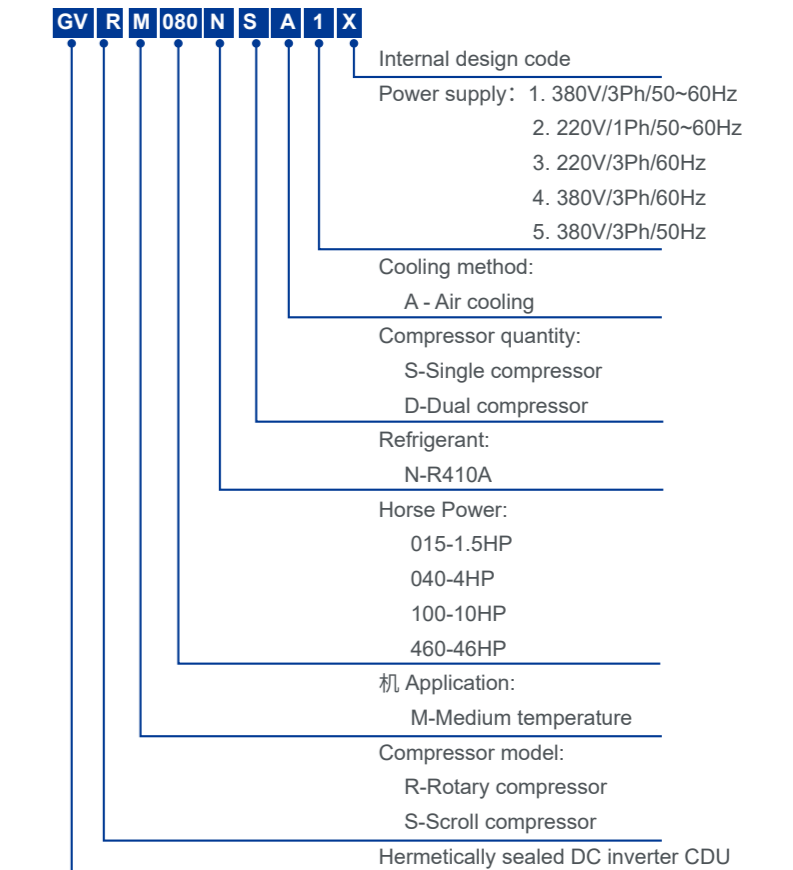
#### 7HP~10HP



### Operating Range and Naming Rule

Model	Refrigerant	Minimum Evaporating Temperature	Nominal Cooling Capacity / (kW)*	COP	Maximum Cooling Capacity
2.5HP	R410A	-30	2.1	1.2	4.2
3.5HP			2.4	1.3	5.4
5HP		-45	3.5	1.3	6.9
7HP			5.5	1.3	9.2
10HP			9.0	1.5	14.6

\* The working condition is based on the ambient temperature of 32 °C and the evaporation temperature of - 30 °C. Rated working conditions is 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: -35°C ~ +5°C



### Supermarket

Provides cooling capacity to remote freezer

Food temperature: -35°C ~ +5°C

## Unit Performance Parameters - Low Temperature Unit Model Selection Table

Unit Model	GVRL 025NSA2A	GVRL 035NSA2A	GVRL 050NSA2A	GVSL 070NSA1A	GVSL 100NSA1A
Refrigerant	R410A				
Supply Voltage of Unit	220V/1PH/50~60Hz			380V/3PH/50~60Hz	
Type of Refrigerant Oil	a68HES-H			MEL32R	
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 (m³/h)	4030			7060	
Reservoir Volume (L)	4.5			8.8	
Evaporating Temperature Range	-30°C~-5°C			-45°C~-5°C	
Unit rated cooling Capacity (kW)	3.4	4.1	5.4	8.9	13
Unit rated power (kW)	2.1	2.5	3.5	5	7.5
Maximum Cooling Capacity of Unit (kW)	5.5	6.9	8.8	12	18.4
Maximum Power of Unit (kW)	3.8	4.7	7.1	7.2	13.3
Noise of Unit 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)	1164x470x817			1164x470x1373	
Weight (kg)	112	112	112	172	186

Cooling capacity power testing conditions: National standard medium temperature working conditions: GB/T21363-2008  
Evaporating temperature: -23°C, ambient temperature: 32°C, return temperature 5°C.

Model	Ambient Temperature (°C)	Capacity Q Power P (KW)	Evaporating Temperature °C											
			-5		-10		-15		-20		-25		-30	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2.5HP	27	Q	5.3	10.7	4.5	9.1	3.8	7.7	3.2	6.4	2.6	5.3	2.1	4.4
		P	1.7	4.2	1.7	4.0	1.6	3.8	1.6	3.6	1.6	3.5	1.6	3.3
		LST	5.1	10.2	4.3	8.7	3.6	7.3	3.0	6.2	2.5	5.1	2.1	4.2
	32	Q	1.9	4.6	1.8	4.3	1.8	4.1	1.8	4.0	1.7	3.8	1.7	3.6
		P	19.3	19.8	16.5	17.3	13.9	15.1	11.5	13.0	9.4	11.2	7.4	9.6
		LST	4.8	9.2	4.1	8.0	3.5	6.9	2.9	5.8	2.4	4.8	2.0	3.9
38	Q	2.1	4.7	2.1	4.6	2.0	4.6	2.0	4.4	1.9	4.2	1.9	4.0	
	P	25.7	28.3	22.9	26.1	20.3	24.1	17.9	22.0	15.7	20.1	13.7	18.4	
	LST	4.6	8.3	3.9	7.2	3.3	6.3	2.7	5.4	2.3	4.6	1.9	3.7	
43	Q	2.3	4.6	2.3	4.6	2.2	4.6	2.2	4.6	2.1	4.5	2.1	4.3	
	P	26.5	30.2	23.7	27.9	21.0	25.9	18.5	24.4	16.3	22.9	14.3	21.2	
	LST	6.0	12.7	5.1	11.0	4.3	9.4	3.6	8.0	3.0	6.7	2.5	5.6	
3.5HP	27	Q	1.9	5.6	1.9	5.2	1.8	4.8	1.8	4.5	1.7	4.1	1.7	3.8
		P	5.8	12.2	4.9	10.5	4.2	9.0	3.5	7.7	2.9	6.5	2.4	5.4
		LST	2.1	6.1	2.1	5.7	2.0	5.2	2.0	4.9	1.9	4.5	1.9	4.2
	32	Q	26.3	32.7	21.0	26.9	16.5	21.9	12.9	17.7	10.1	14.4	8.1	11.9
		P	5.5	10.6	5.1	9.4	4.7	8.3	4.0	7.2	3.3	6.2	3.0	5.2
		LST	2.4	5.7	2.4	5.6	2.3	5.4	2.3	5.3	2.2	5.0	2.2	4.7
38	Q	30.8	34.7	25.5	29.4	21.0	25.0	17.3	21.6	14.5	18.8	12.5	16.3	
	P	5.2	9.3	4.5	8.6	3.8	7.7	3.2	6.8	2.6	5.9	2.2	4.9	
	LST	2.6	5.5	2.6	5.7	2.5	5.6	2.4	5.6	2.3	5.4	2.3	5.1	
43	Q	34.8	37.7	29.5	32.7	25.0	28.4	21.3	25.3	18.4	22.7	16.4	20.2	
	P	8.7	14.9	7.4	13.5	6.3	12.0	5.3	10.2	4.4	8.6	3.6	7.2	
	LST	3.1	8.2	2.9	8.3	2.8	7.8	2.7	6.9	2.5	6.1	2.4	5.3	
5HP	27	Q	8.4	13.7	7.1	12.5	6.0	11.3	5.1	9.8	4.2	8.2	3.5	6.9
		P	3.5	8.2	3.4	8.3	3.2	8.2	3.0	7.6	2.9	6.7	2.7	5.9
		LST	27.9	37.6	23.2	33.8	19.0	30.4	15.3	26.4	12.0	22.4	9.3	18.8
	32	Q	7.9	12.0	6.7	10.9	5.7	9.9	4.8	8.9	4.0	7.8	3.3	6.6
		P	4.1	7.9	3.9	7.8	3.7	8.0	3.5	7.9	3.3	7.6	3.1	6.7
		LST	31.5	40.5	27.0	36.8	22.9	34.1	19.4	31.5	16.3	29.0	13.8	25.6
38	Q	7.5	10.5	6.4	9.5	5.4	8.5	4.6	7.7	3.8	6.9	3.1	6.3	
	P	4.6	7.3	4.3	7.3	4.1	7.3	3.9	7.3	3.7	7.3	3.5	7.4	
	LST	35.1	42.4	30.7	39.0	26.8	36.0	23.4	33.8	20.5	32.3	18.1	31.9	
43	Q	13.7	23.0	11.7	19.7	9.9	16.7	8.3	14.0	6.9	11.6	5.7	9.6	
	P	4.4	8.5	4.2	7.9	4.0	7.3	3.8	6.8	3.7	6.3	3.6	6.0	
	LST	13.2	21.9	11.3	18.8	9.5	16.0	8.0	13.4	6.7	11.1	5.5	9.2	
7HP	27	Q	5.0	9.3	4.7	8.6	4.5	8.0	4.3	7.5	4.2	7.0	4.1	6.6
		P	26.2	30.0	20.9	24.3	16.3	19.2	12.2	14.7	8.7	10.7	5.7	7.4
		LST	12.5	20.6	10.7	17.7	9.1	15.0	7.6	12.7	6.4	10.5	5.3	8.7
	32	Q	5.6	10.2	5.4	9.5	5.1	8.9	5.0	8.3	4.8	7.9	4.8	7.5
		P	30.3	34.2	25.0	28.4	20.2	23.3	16.1	18.7	12.5	14.7	9.6	11.3
		LST	11.9	19.5	10.2	16.8	8.7	14.3	7.3	12.0	6.1	10.0	5.0	8.2
38	Q	6.2	11.0	6.0	10.3	5.7	9.7	5.6	9.1	5.5	8.6	5.4	8.2	
	P	33.9	37.9	28.6	32.2	23.8	27.0	19.7	22.4	16.1	18.4	13.1	14.9	
	LST	20.8	31.9	18.0	28.0	15.4	24.3	13.1	20.8	11.1	17.8	9.3	15.0	
43	Q	7.1	16.6	6.7	15.2	6.3	13.9	6.0	12.8	5.7	11.8	5.4	10.9	
	P	20.1	30.7	17.4	27.0	14.9	23.4	12.7	20.2	10.7	17.2	9.0	14.6	
	LST	7.9	17.9	7.4	16.4	7.1	15.1	6.7	14.0	6.4	12.9	6.1	12.0	
10HP	27	Q	37.9	42.3	30.1	34.7	23.3	28.1	17.3	22.4	12.3	17.6	8.2	13.7
		P	19.1	25.2	16.6	22.5	14.3	20.6	12.2	19.0	10.3	16.5	8.6	14.0
		LST	8.9	13.8	8.4	13.6	8.0	14.0	7.6	15.0	7.2	14.3	6.9	13.4
	32	Q	38.3	44.3	31.3	38.2	25.2	34.1	20.0	31.3	15.8	27.9	12.4	24.8
		P	15.2	20.1	15.9	18.7	13.7	18.2	11.7	17.8	9.9	15.9	8.3	13.5
		LST	7.8	11.0	9.2	11.5	8.8	13.1	8.4	15.5	8.0	15.6	7.7	14.6
38	Q	7.8	11.0	9.2	11.5	8.8	13.1	8.4	15.5	8.0	15.6	7.7	14.6	
	P	35.9	37.9	29.5	33.4	24.1	32.4	19.5	32.9	15.8	31.2	13.1	28.8	
	LST	7.8	11.0	9.2	11.5	8.8	13.1	8.4	15.5	8.0	15.6	7.7	14.6	

(1) The technical parameters are the range of selection parameters, not the actual operating range  
(2) LST is the liquid supply temperature and is only used for the selection of expansion valves