

R410A MT DC Inverter Condensing Units



1.5-4HP
Rotary Compressor
Single Compressor
Single Fan

6-10HP
Rotary Compressor
Single Compressor
Dual Fans

18HP-21HP
Scroll Compressor
Dual Compressors
Single Fan

27HP-46HP
Scroll Compressor
Dual Compressors
Dual fans

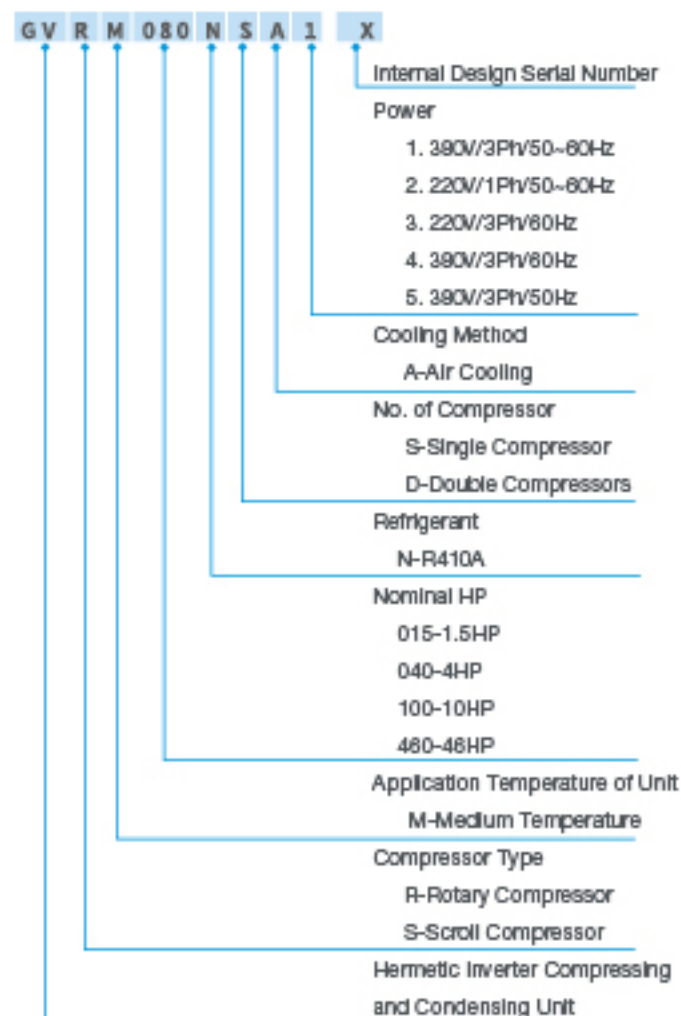
Customer Value

- Various models options, applicable for C-stores, supermarkets and cold storage
- Wide adjustable range for cooling capacity and small fluctuation food storage temperature
- Low operation cost and over 30% of annual energy saving compared with Fixed Speed unit
- Quiet unit with 4BA lower sound level compared with Fix speed unit
- Small pipe size to save Installation cost
- Application scope is wide with the highest adaptable temperature of 43°C
- Compact structure to save footprint

Product Features

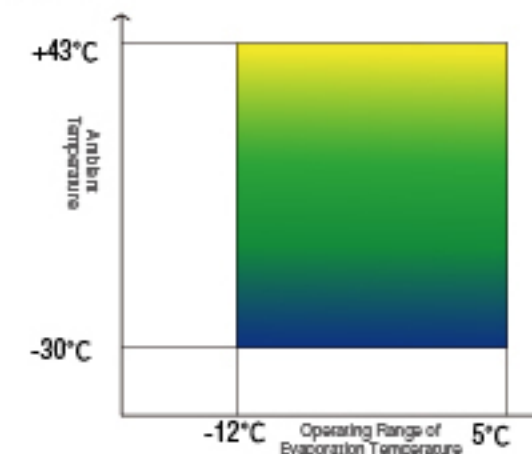
- DC Inverter compressor design with step-less regulation of load and rotary speed for maintaining high efficiency and saving energy
- DC Inverter fan with automatic adjustment of fan speed for reducing noise and saving energy
- Thickened sound insulation cotton with effective noise insulation
- R410A refrigerant adopted with high volumetric efficiency
- Large areas of condensing coils adopted for ensuring operation under high temperature
- Integrated shell without separate machine room for saving space and convenient installation

Naming Rule of MT DC Inverter Condensing Units

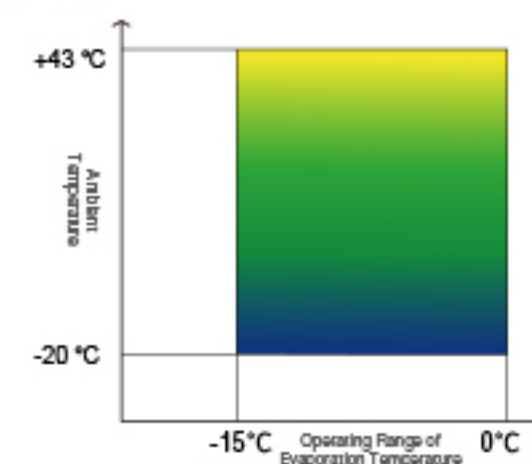


Operation Range

1.5HP-10HP



18HP-46HP



Technical Parameters (1.5-10HP)

Model	GVRM 015NSA2A	GVRM 025NSA2A	GVRM 035NSA2A	GVRM 040NSA1A	GVRM 060NSA1A	GVRM 090NSA1A	GVRM 100NSA1A
Refrigerant	R410A						
Supply Voltage of Unit	220V/1PhV50~60Hz				380V/3PhV50~60Hz		
Compressor Model	SNB140 FCAMC	TNB220 FFEMC-L	TNB306 FPPMC-L	MNB36 FABMC	MNB42FF DMC-L	LNB53 FCAMC	LNB65F
Type of Refrigerant Oil	FV50S				FV50S		
Unit Oil Charge (L)	1.35	1.72	2.07	2.4	2.7	3	3.6
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		
Maximum Cooling Capacity of Unit (kW)	4.6	7.6	9.3	10.9	14.3	17.5	18.7
Maximum Power of Unit (kW)	1.9	3.2	4.2	5.1	5.5	7.6	8.1
Noise of Unit dBA@1m	52	53	53	56	59	60	60
Nominal Running Current of Unit (A)	6	9	11	5.0	6.3	8.9	9.6
Maximum Running Current (A)	12	16	23	12	16	23	25
Diameter of Suction Pipe [in.]	1/2		5/8		3/4		
Diameter of Liquid Pipe [in.]	3/8				1/2		
Dimensions (L x W x H) (mm)	1064X424X802				1064X448X1358		
Weight (kg)	93	95	97	97	142	146	150

Cooling capacity power testing conditions: National standard medium temperature working conditions: GB/T21383-2018
Evaporating temperature: -7°C, ambient temperature: 32°C, return temperature 18°C.

Technical Parameters (1.5-10HP)

Model	Ambient Temperature °C	Cooling Capacity Q (kW) Power Consumption P (kW)	Evaporating Temperature °C							
			-10		-7		-5		0	
			Min	Max	Min	Max	Min	Max	Min	Max
1.5HP	27	Q	2.7	4.2	3.1	4.8	3.4	5.1	4.1	6.3
		P	0.9	1.8	0.9	1.8	1.0	1.8	1.0	2.0
	32	Q	2.7	4.1	3.0	4.6	3.2	5.0	4.0	6.0
		P	1.0	1.9	1.0	1.9	1.1	2.0	1.1	2.1
	38	Q	2.4	3.7	2.7	4.2	2.9	4.6	3.7	5.5
		P	1.1	1.9	1.1	2.0	1.2	2.0	1.2	2.2
2.5HP	43	Q	2.2	3.1	2.5	3.6	2.7	3.9	3.3	4.8
		P	1.1	2.0	1.2	2.2	1.2	2.1	1.2	2.2
	27	Q	4.6	7.1	5.2	8.0	5.6	8.5	6.7	10.5
		P	1.5	2.7	1.5	2.7	1.5	2.9	1.6	3.0
	32	Q	4.4	6.8	4.9	7.6	5.3	8.2	6.3	9.7
		P	1.6	2.9	1.7	3.2	1.7	3.1	1.8	3.3
3.5HP	38	Q	4.1	6.4	4.8	7.0	4.9	7.6	5.9	9.1
		P	1.8	3.1	1.9	3.4	1.9	3.5	2.0	3.7
	43	Q	3.8	5.5	4.3	6.3	4.6	6.7	5.6	8.4
		P	2.0	3.5	2.0	3.6	2.1	3.8	2.2	4.1
	27	Q	6.2	9.8	6.9	9.8	7.5	10.6	8.9	12.5
		P	2.1	3.5	2.1	3.7	2.2	3.8	2.3	4.1
4HP	32	Q	5.9	9.3	6.6	9.3	7.1	10.1	8.5	11.9
		P	2.3	3.9	2.4	4.2	2.4	4.3	2.6	4.5
	38	Q	5.5	7.7	6.1	8.6	6.6	9.3	7.9	11.1
		P	2.6	4.2	2.7	4.5	2.7	4.6	2.9	5.0
	43	Q	5.1	6.7	5.7	7.5	6.2	8.2	7.4	10.1
		P	2.8	4.6	2.9	4.8	2.9	5.0	3.1	5.5
6HP	27	Q	7.2	10.8	8.0	11.9	8.6	12.7	10.1	14.8
		P	2.4	4.6	2.5	4.9	2.6	4.9	2.7	5.3
	32	Q	6.5	9.8	7.3	10.9	7.8	11.6	9.2	13.5
		P	2.7	4.9	2.7	5.1	2.8	5.3	2.9	5.7
	38	Q	5.8	8.7	6.4	9.6	6.9	10.3	8.1	12.0
		P	2.9	5.5	3.0	5.6	3.1	5.7	3.2	6.1
8HP	43	Q	4.9	6.5	5.5	7.5	5.9	8.0	7.0	9.4
		P	3.2	5.8	3.3	6.3	3.4	6.3	3.6	6.6
	27	Q	9.1	13.6	10.2	15.2	11.0	16.4	13.3	19.5
		P	2.9	5.0	3.0	5.1	3.0	5.3	3.2	5.7
	32	Q	8.5	12.7	9.8	14.3	10.4	15.4	12.5	18.4
		P	3.2	5.3	3.3	5.5	3.3	5.7	3.5	6.1
10HP	38	Q	7.8	11.9	8.9	13.2	9.6	14.2	11.5	17.0
		P	3.5	5.6	3.6	5.9	3.7	6.1	3.8	6.5
	43	Q	7.1	9.4	8.0	10.7	8.6	11.8	10.4	14.9
		P	3.8	6.1	4.0	6.4	4.0	6.7	4.1	7.3
	27	Q	10.9	16.6	12.2	19.7	13.2	20.1	15.9	24.1
		P	3.6	6.7	3.8	6.9	3.9	7.2	4.1	8.0
10HP	32	Q	10.2	15.5	11.5	17.5	12.4	18.9	15.0	22.7
		P	3.9	7.2	4.1	7.6	4.2	7.8	4.5	8.5
	38	Q	9.3	14.6	10.6	16.1	11.5	17.4	13.9	20.9
		P	4.3	7.5	4.5	8.2	4.6	8.5	5.0	9.3
	43	Q	8.4	11.8	9.5	13.3	10.3	14.5	12.6	18.4
		P	4.8	8.0	5.0	8.9	5.1	9.3	5.4	10.4
10HP	27	Q	12.9	17.9	14.3	20.2	15.3	21.7	18.2	26.0
		P	4.3	7.5	4.5	7.6	4.6	8.0	4.8	8.7
	32	Q	12.0	16.8	13.5	18.7	14.5	20.2	17.2	24.3
		P	4.7	8.0	4.9	8.1	4.9	8.8	5.4	9.2
	38	Q	11.2	15.6	12.5	17.2	13.4	18.6	15.9	22.4
		P	5.3	8.5	5.3	8.9	5.4	9.4	5.9	9.8
10HP	43	Q	10.1	12.5	11.2	14.1	12.2	15.4	14.5	19.5
		P	5.8	9.0	5.9	9.7	6.0	10.3	6.4	10.8

*Max. load 90RPS, Min. load 60RPS

Technical Parameters (18-46HP)

Model	GVSM180NDA50	GVSM210NDA50	GVSM270NDA50	GVSM350NDA50	GVSM460NDA50
Refrigerant	R410A				
Supply Voltage of Unit	380W3PhV50Hz				
Compressor Model	SH090+VZH088	SH120+VZH088	SH161+VZH117	SH180+VZH170	SH295+VZH170
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
Maximum Air Volume (m ³ /h)	14000				19000
Reservoir Volume (L)	4		8		
Oil Accumulator Capacity (L)	20		40		
Maximum Cooling Capacity of Unit (kW)	39.5	43.6	56.5	75.6	92.6
Maximum Power of Unit (kW)	16.4	18.5	23.7	31.2	39.2
Noise of Unit dBA@1m	65	65	67	70	72
Nominal Running Current of Unit (A)	26	30	39	45	59
Maximum Running Current (A)	60	65	80	100	125
Diameter of Suction Pipe [in.]	1-3/8"		1-5/8"		2-1/8"
Diameter of Liquid Pipe [in.]	5/8"		7/8"		1-1/8"
Dimensions (L x W x H) (mm)	1240x1050x1870			2240x1200x2250	
Weight (kg)	565	575	700	870	880

Cooling capacity power testing conditions: National standard medium temperature working conditions: GB/T21363-2018 GB/T21363-2008 Evaporating temperature: -7°C, ambient temperature: 32°C, return temperature 18°C.

Technical Parameters (18-46HP)

Model	Ambient Temperature °C	Cooling Capacity Q (kW) Power Consumption P (kW)	Evaporating Temperature °C							
			-10°C		-7°C		-5°C		0°C	
			Min	Max	Min	Max	Min	Max	Min	Max
18HP	27	Q	29.9	37.7	33.3	41.8	35.7	44.8	42.2	52.7
		P	10.8	14.7	11.0	15.1	11.1	15.4	11.8	16.2
	32	Q	29.2	35.6	31.4	39.5	33.7	42.3	40.0	49.9
		P	11.8	16.0	12.1	16.4	12.2	16.7	12.7	17.6
	38	Q	28.2	33.1	29.2	36.8	31.4	39.4	37.2	46.5
		P	13.3	17.8	13.5	18.2	13.7	18.5	14.2	19.3
21HP	43	Q	24.5	30.9	27.3	34.4	29.4	36.9	34.9	43.6
		P	14.6	19.4	14.8	19.8	15.0	20.1	15.5	20.9
	27	Q	34.1	41.8	38.0	46.1	40.7	49.3	48.0	57.9
		P	12.4	16.4	12.8	17.0	13.0	17.4	13.8	18.6
	32	Q	32.2	39.2	35.9	43.6	38.5	46.6	45.5	54.9
		P	13.7	18.0	14.0	18.5	14.3	18.9	15.0	20.1
27HP	38	Q	29.9	36.4	33.3	40.5	35.8	43.4	42.3	51.1
		P	15.3	19.9	15.7	20.5	16.0	20.9	16.7	22.1
	43	Q	27.9	34.0	31.1	37.9	33.4	40.6	39.7	47.9
		P	16.8	21.7	17.2	22.3	17.5	22.7	18.2	23.8
	27	Q	43.9	54.0	48.7	59.8	52.2	64.0	61.5	75.1
		P	15.8	21.1	16.1	21.6	16.4	22.0	17.0	23.1
35HP	32	Q	41.4	51.0	46.0	56.5	49.3	60.5	58.2	71.0
		P	17.5	23.1	17.8	23.7	18.1	24.1	18.7	25.2
	38	Q	38.3	47.3	42.7	52.5	45.8	56.1	54.1	66.0
		P	19.8	25.8	20.1	26.3	20.3	26.7	20.9	27.8
	43	Q	35.7	44.1	39.9	49.0	42.8	52.5	50.7	61.7
		P	21.8	28.2	22.1	28.7	22.3	29.1	23.0	30.2
46HP	27	Q	56.9	72.1	63.2	79.9	67.7	85.4	79.9	100.2
		P	20.7	27.9	21.0	28.6	21.2	29.1	21.9	30.5
	32	Q	53.8	68.2	59.8	75.6	64.1	80.8	75.7	94.9
		P	22.7	30.4	23.1	31.2	23.3	31.7	24.0	33.1
	38	Q	49.9	63.4	55.6	70.4	59.7	75.3	70.6	88.5
		P	25.5	33.8	25.8	34.5	26.0	35.1	26.7	36.5
48HP	43	Q	46.7	59.3	52.1	65.9	55.9	70.5	66.2	83.0
		P	27.9	36.8	28.3	37.6	28.5	38.1	29.2	39.5
	27	Q	73.8	88.3	81.9	97.8	87.7	104.5	103.3	122.5
		P	27.9	35.2	28.5	36.2	29.0	36.9	30.2	38.9
	32	Q	69.8	83.5	77.5	92.6	83.0	99.0	97.8	116.1
		P	30.4	38.2	31.0	39.2	31.4	39.9	32.7	41.9
48HP	38	Q	64.8	77.7	72.1	86.2	77.3	92.2	91.2	108.2
		P	33.7	42.1	34.3	43.1	34.7	43.8	35.9	45.7
48HP	43	Q	60.6	72.7	67.5	80.7	72.4	86.3	85.5	101.5
		P	36.6	45.7	37.2	46.6	37.7	47.3	38.9	49.2

*Max. load Fixed Speed +80RPS and Min. load Fixed Speed +50RPS