

GREEN COLD CHAIN · PROTECTS FOOD SAFETY



Global Cold Chain Experts



FIXED SPEED CDU

Product Features

Below 7HP

- Advanced microprocessor control system can automatically adjust based on load variation
- Double speed fan motor automatically switches to low speed in partial loads and lower outdoor air temperature
- Cutting-edge control logic eliminates the overfrequency cycle risk of compressor

Above 7HP

- Famous brand scroll compressor and fan
- Case closed sound insulation design brings quieter operation

Customer Value

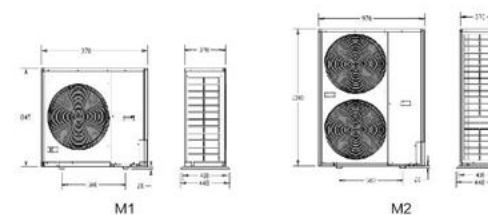
- Energy efficiency saves around 8% of operation cost
- Intermediate temperature/low temperature, 1.5HP-15HP, many models for selection
- Leading environmental protection, easy installation, low maintenance cost as well as stable and reliable system operation

Wide Applications



Selection List of Medium Temperature Constant Frequency Unit (< 7HP)

GQH		015PS	021PS	026PS	030PS	038PS	045PS	048PS
Refrigerant		R404A						
Size of casing		M1	M1	M1	M1	M2	M2	M2
Nominal cooling capacity (1) kW		4.15	5.57	6.88	8.06	10.16	12.08	13.03
Nominal input power (1) kW		1.58	2.24	2.77	3.37	3.86	4.71	5.09
Coefficient of performance		2.63	2.49	2.48	2.39	2.63	2.56	2.56
Compressor	Number	1	1	1	1	1	1	1
	Model	MLZ015T4	MLZ021T4	MLZ026T4	MLZ030T4	MLZ038T4	MLZ045T4	MLZ048T4
	Power HP	1x2	1x3	1x3.5	1x4	1x5	1x6	1x7
Crankcase heater	No. x Power W	70	70	70	70	70	70	70
Sound level	dB (A) @1m (2)	60	60	60	60	60	60	60
Condensing Fan	No. x Diameter mm	1xØ500	1xØ500	1xØ500	1xØ500	2xØ500	2xØ500	2xØ500
	Air flow m ³ /h	5425	5425	5425	5425	8716	8716	8716
Total current	Rated I A	0.71	0.71	0.71	0.71	1.42	1.42	1.42
	LRA comp. A	30	45	45	60	70	82	87
	MCC comp. A	7	9.5	11	13	15	15	16
Receiver volume	dm ³	6	6	6	6	7.6	7.6	7.6
Connections SAE	Suction inch	5/8"	5/8"	5/8"	5/8"	3/4"	3/4"	3/4"
	Liquid inch	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Dimension		As shown in the attached figure						
Weight	kg	68	68	68	68	125	125	125



(1) Nominal Testing Condition: National Standard For Mt Application
Saturated Suction Temperature: -7°C, Ambient Air Temperature: 32°C, Return Gas Temperature: 18°C.
(2) The Sound Pressure Levels (in dB(A) At 1 Meter) Are Mentioned In Free Field Running The Equipment In Conditions Differing From These Nominal Values May Lead To Different Results. The Results Obtained On The Installation Site May Differ From Those In This Leaflet, due To Sound Reflections From Walls, etc. The Reduction Of Sound Level As A Function Of Distance Is Theoretical And Sound Reflection And Resonance May Alter The Results, Either On Total Sound Level Or On Certain Frequencies.

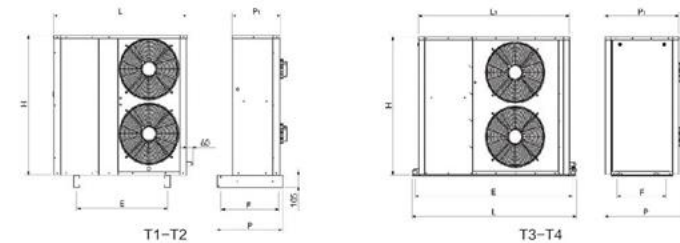
Technical Parameters of Medium Temperature Constant Frequency Unit (< 7HP)

	GQH	Ambient Temperature							
		27°C		32°C		37°C		42°C	
		Cap Q kW	Power P kW	Cap Q kW	Power P kW	Cap Q kW	Power P kW	Cap Q kW	Power P kW
Saturated Suction Temperature: -15°C	015PS	3.07	1.48	2.82	1.67	2.56	1.86	2.26	2.07
	021PS	4.23	1.91	3.89	2.14	3.59	2.35	3.23	2.60
	026PS	5.13	2.48	4.70	2.74	4.36	2.98	3.91	3.28
	030PS	6.00	2.99	5.62	3.23	5.10	3.56	5.06	3.92
	038PS	7.70	3.39	7.08	3.76	6.54	4.12	5.89	4.55
	045PS	9.01	4.16	8.26	4.61	7.64	5.04	6.86	5.57
048PS	9.73	4.52	8.93	5.00	8.26	5.45	7.42	6.01	
Saturated Suction Temperature: -10°C	015PS	3.83	1.43	3.51	1.63	3.22	1.83	2.88	2.05
	021PS	5.13	1.98	4.73	2.22	4.41	2.43	3.99	2.69
	026PS	6.21	2.54	5.84	2.75	5.33	3.04	4.81	3.34
	030PS	7.23	3.10	6.82	3.34	6.21	3.67	5.59	4.03
	038PS	9.36	3.48	8.64	3.84	8.04	4.20	7.28	4.63
	045PS	10.94	4.28	10.07	4.74	9.37	5.16	8.46	5.69
048PS	11.77	4.66	11.07	5.06	10.11	5.58	9.13	6.14	
Saturated Suction Temperature: -5°C	015PS	4.66	1.37	4.29	1.57	3.98	1.77	3.59	2.00
	021PS	6.16	2.06	5.81	2.26	5.33	2.51	4.84	2.78
	026PS	7.42	2.62	7.02	2.82	6.44	3.10	5.83	3.41
	030PS	8.86	3.15	8.17	3.46	7.46	3.79	6.74	4.15
	038PS	11.23	3.57	10.41	3.94	9.74	4.29	8.86	4.72
	045PS	13.11	4.44	12.37	4.80	11.34	5.29	10.28	5.83
048PS	14.08	4.81	13.31	5.20	12.20	5.72	11.06	6.29	
Saturated Suction Temperature: 0°C	015PS	5.60	1.30	5.18	1.50	4.83	1.70	4.39	1.94
	021PS	7.30	2.15	6.92	2.34	6.37	2.60	5.81	2.87
	026PS	8.77	2.71	8.34	2.90	7.67	3.18	6.97	3.49
	030PS	10.47	3.27	9.67	3.60	8.86	3.93	8.01	4.30
	038PS	13.34	3.69	12.64	4.00	11.66	4.39	10.65	4.83
	045PS	15.56	4.61	14.75	4.96	13.55	5.45	12.32	5.98
048PS	16.65	5.00	15.82	5.36	14.55	5.89	13.22	6.46	

Cooling capacity Q in kW; Input power P in kW; Performance data with R404A, Superheat: 10K

Selection List of Medium Temperature Constant Frequency Unit (> 7HP)

GQH		066PS	076PD	090PD	096PD	114PS		
Refrigerant		R404A						
Size of casing		T2	T3	T4	T4	T4		
Nominal cooling capacity	(1) kW	14.20	15.89	19.70	22.29	23.44		
Nominal input power	(1) kW	7.19	8.46	9.50	11.95	13.51		
Compressor	Number	1	2	2	2	1		
	Model	ZB66 KQE	ZB38 KQE	ZB45 KQE	ZB48 KQE	ZB114 KQE		
Crankcase heater	Nominal Power	HP	1x9	2x5	2x6	2x7	1x15	
	No.x Power	W	90	2x70	2x70	2x70	90	
level Sound	Min. speed	(2) dB(A)	57	56	58	60	60	
	Max. speed	(2) dB(A)	62	63	64	65	65	
Condensing Fan	No.x Diameter	mm	2xØ450	2xØ500	2xØ500	2xØ500	2xØ500	
	Air flow	m³/h	6000	7000	8000	8000	8000	
Current Total	I cond.	(3) A	2.4	2.8	2.8	2.8	2.8	
	LRA comp.	A	111	78	87	115	174	
	RLA comp.	A	17.3	26	27	30	27.1	
Receiver volume		dm³	14	14	18	24	24	
Connections	Suction	inch	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	
	Liquid	inch	5/8"	5/8"	7/8"	7/8"	7/8"	
Dimension	Length	L	mm	1290	1570	1870	1870	1870
		L1	mm	-	1450	1750	1750	1750
	Width	P	mm	580	720	840	840	840
		P1	mm	510	700	820	820	820
	Height	H	mm	1300	1290	1290	1290	1290
	Fixing points	E	mm	844	1525	1825	1825	1825
F		mm	550	450	570	570	570	
Weight		kg	216	249	290	345	280	



(1) Nominal testing condition: National Standard for MT application
 (2) Saturated suction temperature: -10°C; Ambient air temperature: +32°C; Superheat: 10K.
 (3) The sound pressure levels (in dB(A) at 1 meter) are mentioned in free field. Running the equipment in conditions differing from these nominal values may lead to different results. The results obtained on the installation site may differ from those in this leaflet, due to sound reflections from walls, etc. The reduction of sound level as a function of distance is theoretical and sound reflection and resonance may alter the results, either on total sound level or on certain frequencies.
 (4) Locked rotor current of fan, supply 230V/50Hz.

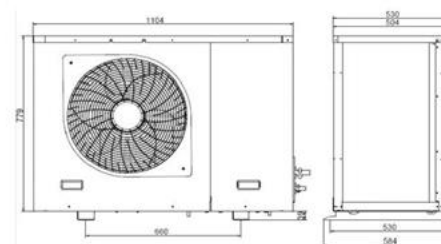
Technical Parameters of Medium Temperature Constant Frequency Unit (> 7HP)

	GQH	Ambient Temperature							
		27 °C		32 °C		37 °C		42 °C	
		Cap Q kW	Power P kW	Cap Q kW	Power P kW	Cap Q kW	Power P kW	Cap Q kW	Power P kW
Saturated Suction Temperature: -15°C	066PS	12.89	6.28	11.81	6.93	10.72	7.57	9.64	8.22
	076PD	14.53	7.37	13.33	7.99	12.13	8.61	10.93	9.24
	090PD	17.93	8.26	16.41	9.20	14.89	10.14	13.38	11.08
	096PD	20.12	10.47	18.13	11.61	16.15	12.75	14.17	13.89
	114PS	21.38	11.83	19.27	13.00	17.17	14.17	15.06	15.34
Saturated Suction Temperature: -10°C	066PS	16.05	6.47	14.3	7.45	12.8	8.05	11.85	9.01
	076PD	17.25	7.85	15.89	8.46	14.54	9.07	13.19	9.68
	090PD	21.46	8.58	19.70	9.50	17.94	10.42	16.19	11.33
	096PD	24.38	10.90	22.29	11.95	20.20	13.00	18.11	14.06
	114PS	25.73	12.39	23.44	13.51	21.16	14.64	18.87	15.75
Saturated Suction Temperature: -5°C	066PS	18.23	6.90	16.79	7.48	15.35	8.06	13.91	8.64
	076PD	20.22	8.36	18.69	8.95	17.15	9.54	15.62	10.13
	090PD	25.40	8.93	23.41	9.81	21.43	10.69	19.44	11.58
	096PD	28.96	11.36	26.73	12.33	24.51	13.31	22.28	14.29
	114PS	30.44	12.97	27.92	14.01	25.40	15.05	22.88	16.08
Saturated Suction Temperature: 0°C	066PS	21.30	7.24	19.68	7.78	18.05	8.33	16.42	8.87
	076PD	23.43	8.87	21.67	9.42	19.91	9.97	18.14	10.51
	090PD	29.73	9.28	27.46	10.12	25.19	10.97	22.92	11.82
	096PD	33.81	11.85	31.35	12.78	28.88	13.72	-	-
	114PS	35.58	13.59	32.84	14.56	30.10	15.53	-	-

Cooling capacity Q in kW; Input power P in kW; Performance data with R404A, Superheat: 10K

Performance Data For The Quietor Lt CDU

GQL		005PS	009PS	010PS	012PS	016PS	
Refrigerant		R404A					
Size of casing		L1					
Nominal cooling capacity	(1) kW	2.30	3.43	4.12	4.93	6.17	
Nominal input power	(1) kW	1.49	2.13	2.68	3.07	4.14	
Coefficient of performance		1.54	1.61	1.54	1.61	1.49	
Compressor	Number	1	1	1	1	1	
	Type	NTZ048	NTZ068	NTZ096	NTZ108	NTZ136	
	Nominal Power	HP	1x1.5	1x2.5	1x3	1x4	1x5
Crankcase heater	No.x Power	W	27	27	27	27	
	No.x Diameter	mm	1xØ500	1xØ500	1xØ500	1xØ500	
Condensing Fan	Air flow	m³/h	3012	3012	3012	5287	
	rated I	A	0.7	0.7	0.7	0.7	
Total current	LRA comp.	A	16	25	32	45	51
	MCC	A	4.8	8.4	10.1	12.1	14.3
	Receiver volume	dm³	6	6	6	6	6
Connections /SAE	Suction	inch	5/8"	5/8"	3/4"	3/4"	3/4"
	Liquid	inch	1/2"	1/2"	1/2"	1/2"	1/2"
Dimension		As shown in the attached figure					
Weight	kg	98	104	112	112	112	
Sound pressure level @1m	dBA	65	66	66	66	66	



L1

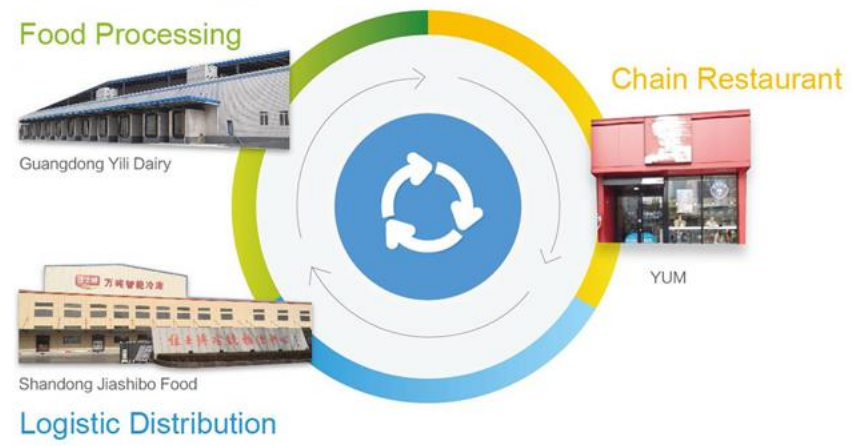
(1) Nominal testing condition: National Standard for LT application
Saturated suction temperature: -23°C; Ambient temperature: 32°C; Return gas temperature: 5°C
Note: All data are for reference. Carrier reserve the rights to make change without notice.

Low Temperature Application

		Ambient Temperature							
		27 °C		32 °C		37 °C		42 °C	
	GQL	Cap Q kW	Power P kW	Cap Q kW	Power P kW	Cap Q kW	Power P kW	Cap Q kW	Power P kW
Saturated Suction Temperature: -40°C	005PS	0.78	0.80	0.64	0.77	0.54	0.75	0.46	0.80
	009PS	1.34	1.33	1.16	1.35	0.98	1.36	0.82	1.41
	010PS	1.49	1.56	1.25	1.51	1.02	1.45	0.80	1.36
	012PS	1.84	1.83	1.56	1.80	1.33	1.78	1.16	1.83
	016PS	2.27	2.49	1.95	2.47	1.72	2.49	1.39	2.40
Saturated Suction Temperature: -30°C	005PS	1.14	0.99	0.98	0.99	0.82	0.96	0.67	0.97
	009PS	1.82	1.56	1.61	1.59	1.41	1.63	1.24	1.70
	010PS	2.11	1.89	1.83	1.86	1.55	1.82	1.35	1.83
	012PS	2.54	2.20	2.20	2.19	1.97	2.22	1.64	2.17
	016PS	3.08	2.99	2.71	2.99	2.50	3.04	2.11	3.01
Saturated Suction Temperature: -20°C	005PS	1.56	1.17	1.37	1.18	1.19	1.19	1.01	1.24
	009PS	2.37	1.80	2.13	1.85	2.06	1.86	1.72	1.98
	010PS	2.81	2.25	2.49	2.24	2.29	2.28	1.96	2.25
	012PS	3.36	2.57	2.96	2.60	2.74	2.66	2.32	2.64
	016PS	4.01	3.53	3.57	3.56	3.39	3.63	2.94	3.63
Saturated Suction Temperature: -15°C	005PS	2.11	1.38	1.84	1.39	1.61	1.41	1.42	1.48
	009PS	3.01	2.07	2.73	2.13	2.57	2.22	2.28	2.28
	010PS	3.62	2.66	3.25	2.66	3.06	2.71	2.67	2.69
	012PS	4.32	2.98	3.82	3.03	3.64	3.10	3.15	3.12
	016PS	5.05	4.14	4.96	4.20	4.42	4.25	3.89	4.29
Saturated Suction Temperature: -10°C	005PS	2.85	1.63	2.47	1.64	2.24	1.70	1.93	1.72
	009PS	3.74	2.37	3.42	2.44	3.26	2.53	2.92	2.60
	010PS	4.53	3.13	4.39	3.18	3.94	3.19	3.49	3.18
	012PS	5.47	3.46	5.37	3.52	4.72	3.57	4.11	3.61
	016PS	6.85	4.79	6.23	4.87	5.60	4.94	4.97	5.01

Cooling capacity Q in kW; Input power P in kW; Performance data with R404A, 10K superheat
 Condensing fan running mode: Low Speed
 Condensing fan running mode: High Speed

Freezer Pilot Project



We constantly enrich our freezer product series and dedicate to providing safe and reliable freezing and refrigeration solutions for chain catering trade, food processing and logistics distribution.

