COOL-TAI Series

R404A Air-cooled Fix Speed Condensing Units

Stable Reliable Quiet

Customer Values

- For freezing and refrigerating, stable, simple and reliable
- Applicable for 48°C ambient temperature, providing solutions in harsh environments
- Low noise units, complaint-free
- No need for a separate machine room; easy to install
- Multiple flexible control options, applicable in various application scenarios
- Optional remote monitoring module, optimize operating

Product Features

- Apply brand compressors with built-in oil separators, reliable oil return without internal leakage
- Large condenser design with high heat transfer area, applicable for the ambient temperature range of -15 to 48°C, -30°C is also optional application
- Options: mechanical control/PCB control/no electronic control
- Internet-capable, equipped with 485 RS connection for PCB control
- Options: solenoid valve liquid line to avoid liquid in the compressor

Optional

- Flexible control, multiple applications
- Mechanical control/PCB control/no electronic control
- -30°C low OAT option, applicable for multiple areas
- Assembled liquid line with solenoid valve, avoid liquid back into the compressor
- Triangular bracket is used to reduce vibration and leakage

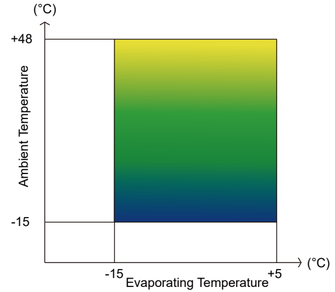
Naming Rule

GQ	H	050	P	S	4	KT	A

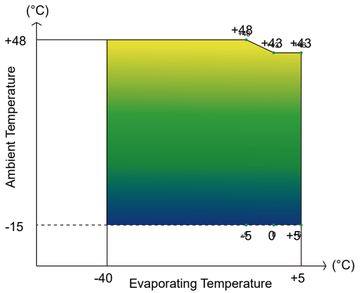
- A: Internal Design Serial Number
- KT: Cool-Tai Series
- 4: Power（Voltage fluctuation±10%）
  - 4. 380-400V/3Ph/50Hz
  - 5. 230V/1Ph/50Hz
- S: No. of Compressor
  - S-Single Compressor
  - D-Double Compressors
- P: Refrigerant
  - P-R404A
- 050: Nominal HP
- H: Application Temperature of Unit
  - L-LT /H-MT
- GQ: Hermetic Inverter Compressing and Condensing Unit

Operation Range

MT



MT & LT



MT - Technical Parameters

GQH			025PS5	030PS4	045PS4	050PS4	070PS4
Refrigerant			R404A				
Supply Voltage of Unit			220V/1PH/50HZ	380V/3PH/50HZ			
R404A	Nominal Cooling Capacity (1)	kW	4.13	5.79	9.09	10.06	12.55
	Nominal Input Power (1)	kW	1.67	2.22	3.51	4.32	5.35
Compressor	Quantity		1	1	1	1	1
	Nominal Power	HP	1x2.5	1x3	1x4.5	1x5	1x7
Crankcase Heating Belt	Quantity x Power (2)	W	1x65	1x65	1x65	1x65	1x65
Noise	dB (A) (3)		56	56	60	60	60
Fan Motor	Quantity x Diameter	mm	1xØ490	1xØ490	2xØ490	2xØ490	2xØ490
	Quantity x Diameter	m^3/h	4043	4043	7060	7060	7060
Total Current	Fan Nominal Current	A	0.66	0.66	1.32	1.32	1.32
	Compressor Starting Current	A	50	32	83	55	67.5
	Compressor Max. Continuous Current	A	19.9	8.5	21	22.8	20.1
Factory Setting for Over Current Protection		A	15	7	12	13	13
Reservoir Volume		L	5	5	7	7	7
Lubricating Oil	(R404A)		α68HES-H				FV68S
Oil Charge		L	0.6	1.05	1.85	1.85	1.7
Connection	Gas Return	inch	5/8"	5/8"	3/4"	3/4"	3/4"
	Liquid Line	inch	1/2"	1/2"	1/2"	1/2"	1/2"
Dimensions (L x W x H)		mm	960X370X810			960×370×1260	
Weight		kg	63	68	125	125	125

(1) Testing conditions of nominal cooling capacity and nominal power: National standard medium temperature working conditions SST -7°C , ambient temperature 32°C , gas return temperature 18° C.
(2) The power of the low ambient temperature series of COL crankcase is 2 times higher than the standard model.
(3) Noise measurement standard: dB(A)@1m, different operating environment may lead to different noise values. Affected by wall sound reflection and other factors may lead to differences between measured values and nominal values at the installation field. Acoustic attenuation due to distance only exists in theory. Sound reflection and resonance may lead to different results of measurement, including total noise and frequency.

MT - Selection Table

Evaporating Temperature (°C)	Model	Ambient Temperature									
		27°C		32°C		38°C		43°C		48°C	
		Q kW	P kW	Q kW	P kW	Q kW	P kW	Q kW	P kW	Q kW	P kW
-15	GQH025PS5KTA	3.55	1.43	3.17	1.56	2.91	1.66	2.66	1.77	2.37	1.91
	GQH030PS4KTA	4.98	1.90	4.45	2.07	4.09	2.20	3.73	2.35	3.32	2.55
	GQH045PS4KTA	7.74	3.17	6.91	3.45	6.43	3.69	5.94	3.93	5.41	4.16
	GQH050PS4KTA	8.65	3.70	7.72	4.02	7.10	4.28	6.47	4.58	5.77	4.95
	GQH070PS4KTA	13.65	4.39	8.86	4.84	8.17	5.60	7.61	6.23	6.66	6.57
-10	GQH025PS5KTA	4.19	1.48	3.74	1.61	3.42	1.72	3.11	1.84	2.76	1.99
	GQH030PS4KTA	5.87	1.97	5.25	2.14	4.80	2.28	4.36	2.45	3.88	2.65
	GQH045PS4KTA	9.18	3.19	8.19	3.47	7.61	3.75	7.02	4.02	6.38	4.28
	GQH050PS4KTA	10.20	3.83	9.11	4.17	8.34	4.44	7.57	4.76	6.73	5.15
	GQH070PS4KTA	14.52	4.69	11.17	5.16	9.84	5.89	9.39	6.51	7.91	6.86
-5	GQH025PS5KTA	4.91	1.57	4.39	1.71	4.00	1.83	3.62	1.96	3.21	2.12
	GQH030PS4KTA	6.90	2.09	6.16	2.27	5.61	2.43	5.08	2.51	4.50	2.82
	GQH045PS4KTA	10.84	3.26	9.68	3.54	8.98	3.86	8.28	4.17	7.52	4.47
	GQH050PS4KTA	11.98	4.07	10.69	4.42	9.75	4.73	8.82	5.07	7.84	5.49
	GQH070PS4KTA	15.39	4.98	13.52	5.48	12.24	6.20	11.18	6.80	9.16	7.14
0	GQH025PS5KTA	5.69	1.61	5.08	1.75	4.61	1.88	4.16	2.02	3.67	2.19
	GQH030PS4KTA	7.98	2.32	7.13	2.52	6.48	2.50	5.83	2.69	/	/
	GQH045PS4KTA	12.66	3.17	11.31	3.44	10.48	3.80	9.65	4.14	8.74	4.48
	GQH050PS4KTA	13.87	4.17	12.38	4.53	11.25	4.86	10.13	5.23	8.95	5.67
	GQH070PS4KTA	16.26	5.27	15.93	5.81	14.25	6.31	12.44	6.87	/	/

Notes: the variable condition data is based on the national standard GB/T 21363 requirements, return temperature 18° C.

LT - Technical Parameters

GQL			015PS5	020PS4	030PS4	035PS4
Refrigerant			R404A			
Supply Voltage of Unit			220V/1PH/50HZ	380V/3PH/50HZ		
R404A	Nominal Cooling Capacity (1)	kW	2.18	3.00	4.90	5.60
	Nominal Input Power (1)	kW	1.43	1.86	3.05	3.96
Compressor	Quantity		1	1	1	1
	Nominal Power	HP	1x1.5	1x2	1x3	1x3.5
Crankcase Heating Belt	Quantity x Power (2)	W	1x65	1x65	1x65	1x65
Noise	dB（A） (3)		56	56	56	60
Fan Motor	Quantity x Diameter	mm	1xØ490	1xØ490	1xØ490	2xØ490
	Quantity x Diameter	m^3/h	4043	4043	4043	7060
Total Current	Fan Nominal Current	A	0.66	0.66	0.66	1.32
	Compressor Starting Current	A	50	32	83	55
	Compressor Max. Continuous Current	A	19.9	8.5	21	22.8
Factory Setting for Over Current Protection		A	15	7	12	13
Reservoir Volume		L	5	5	5	7
Lubricating Oil	（R404A）		α68HES-H			
Oil Charge		L	0.6	1.05	1.85	1.85
Connection	Gas Return	inch	5/8"	5/8"	5/8"	3/4"
	Liquid Line	inch	1/2"	1/2"	1/2"	1/2"
Dimensions (L x W x H)		mm	960X370X810			960×370×1260
Weight		kg	63	68	82	125

(1) Testing conditions of nominal cooling capacity and nominal power: National standard medium temperature working conditions SST -23° C , ambient temperature 32° C , gas return temperature 5° C.
(2) The power of the low ambient temperature series of COL crankcase is 2 times higher than the standard model.
(3) Noise measurement standard: dB(A)@1m, different operating environment may lead to different noise values. Affected by wall sound reflection and other factors may lead to differences between measured values and nominal values at the installation field. Acoustic attenuation due to distance only exists in theory. Sound reflection and resonance may lead to different results of measurement, including total noise and frequency.

LT - Selection Table

Evaporating Temperature (°C)	Model	Ambient Temperature									
		27°C		32°C		38°C		43°C		48°C	
		Q kW	P kW	Q kW	P kW	Q kW	P kW	Q kW	P kW	Q kW	P kW
-40	GQL015PS5KTA	1.21	1.14	1.08	1.24	0.98	1.36	0.87	1.41	0.68	1.54
	GQL020PS4KTA	1.52	1.40	1.39	1.54	1.18	1.80	0.98	2.05	0.85	2.3
	GQL030PS4KTA	2.67	2.15	2.38	2.33	2.21	2.44	2.03	2.54	1.74	2.64
	GQL035PS4KTA	2.94	2.75	2.66	2.97	2.34	3.47	2.07	3.89	1.82	4.33
-35	GQL015PS5KTA	1.49	1.18	1.33	1.29	1.22	1.36	1.10	1.46	0.89	1.59
	GQL020PS4KTA	2.41	1.75	2.15	1.91	1.98	2.01	1.81	2.12	1.53	2.24
	GQL030PS4KTA	3.33	2.33	2.97	2.53	2.75	2.66	2.52	2.78	2.16	2.90
	GQL035PS4KTA	3.72	2.99	3.38	3.22	3.01	3.65	2.62	4.10	2.35	4.55
-30	GQL015PS5KTA	1.87	1.23	1.67	1.34	1.54	1.42	1.39	1.52	1.15	1.64
	GQL020PS4KTA	2.66	1.61	2.18	1.68	1.94	1.83	1.68	2.08	1.59	2.34
	GQL030PS4KTA	3.72	2.46	3.69	2.75	3.41	2.90	3.13	3.05	2.67	3.19
	GQL035PS4KTA	4.49	3.24	4.10	3.47	3.68	3.83	3.18	4.31	2.87	4.78
-25	GQL015PS5KTA	2.23	1.28	2.00	1.39	1.84	1.48	1.66	1.58	1.39	1.7
	GQL020PS4KTA	3.23	1.72	2.80	1.82	2.41	1.98	2.15	2.18	1.87	2.45
	GQL030PS4KTA	4.93	2.73	4.40	2.97	4.06	3.14	3.73	3.31	3.18	3.48
	GQL035PS4KTA	5.62	3.45	5.14	3.78	4.50	4.12	4.07	4.57	3.53	5.04
-20	GQL015PS5KTA	2.75	1.38	2.45	1.50	2.25	1.59	2.03	1.70	1.7	1.83
	GQL020PS4KTA	3.80	1.82	3.42	1.96	2.88	2.13	2.62	2.28	2.15	2.56
	GQL030PS4KTA	6.01	2.92	5.66	3.18	5.25	3.39	4.83	3.59	4.28	3.79
	GQL035PS4KTA	6.74	3.67	6.18	4.09	5.32	4.40	4.96	4.82	4.29	5.29

Notes: the variable condition data is based on the national standard GB/T 21363 requirements, return temperature 5° C.