

Refrigeration dryer GTA Series

High reliability
Energy saving
Secure control

GTA series dryers are a new addition to our line of dryers designed to operate in high temperature environments for use in Southeast Asia

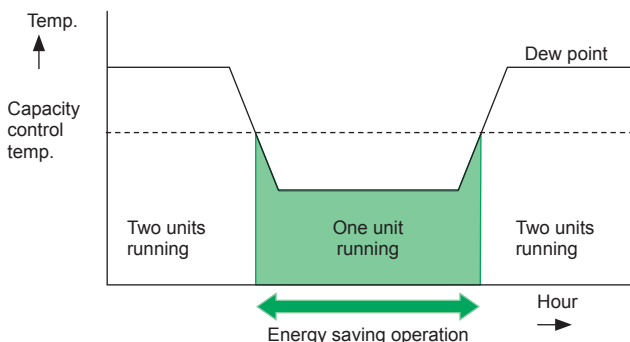


High quality and reliability

- **Aluminum heat exchanger is designed to handle oil-free air**
Aluminum heat exchanger equipped in these dryers is manufactured with materials resistant to corrosion so dust generation is kept to a minimum.
- **Higher temperatures are tolerated**
These dryers can be operated in an environment where the ambient temperature can reach as high as 45°C.

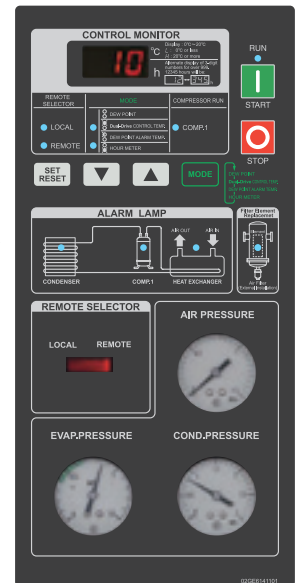
Energy saving

- **Power consumption is reduced by 50% with energy saving operation (GTA2900, 3300, 4300, 3900W, 5000W, 7000W models)**
These dryers are equipped with 2 refrigerating compressors. When the dew point is lower than the set capacity control temperature*, operation is automatically switched to energy saving operation with only 1 refrigerating compressor running. This reduces power consumption by 50%.
* The capacity control temperature setting can be changed by the customer.



Secure control

- **Operating status is clear at a glance**
Status of the dryer's operation and dew point are clearly displayed on the electronic operation panel.
- **Faults are diagnosed easily**
Fault diagnosis is made easy with the alarm lights and error codes that will appear on the operation panel.
- **When to replace element is indicated**
Filter element replacement light will flash when the filter element on the dryer primary side needs to be replaced.
- **Dust filter is installed as standard (on air cooling machine)**
Dust filter for the condenser is installed as standard. An error code will appear when the filter needs to be cleaned.
- **Air pressure gauge is installed as standard**
Air pressure gauge is installed on the operation panel.
- **Centralized control of the plant is possible**
Terminals for remote operation and for extracting operation and alarm signals are equipped as standard. This makes centralized control of the plant possible.
- **Air filter to install on the primary side is available as an option**



⚠ Always refer to "Pneumatic, vacuum and auxiliary components CB-024SA" before starting use.

GTA (air cooling) series

Specifications

Model no.		GTA2200	GTA2900	GTA3300	GTA4300
Working range	Working fluid	Compressed air			
	Inlet air temperature °C	10 to 60			
	Inlet air pressure MPa	0.29 to 1.0			
	Ambient temperature °C	2 to 45			
Rated condition	Air processing capacity m ³ /min (Note 2)	23.0	31.0	35.0	45.0
	Inlet air temperature °C	50			
	Inlet air pressure MPa	0.7			
	Ambient temperature °C	35			
Performance	Outlet air pressure dew point °C	10 (Note 3)			
Power supply voltage		3 phase 380 VAC 50 Hz			
Electric specification (Note 4)	Power consumption kW	5.6	10	10	12
	Current consumption A	10.5	18	18	21
Refrigerant		R-407C			
Weight kg		323	385	380	470

Note 1: Standard paint color Outer panel: Munsell no. 7.5Y7.5/0.5, Base: Zinc steel plate (base material)

Note 2: Value is when converted to conditions where 32°C atmospheric pressure and relative humidity 75%.

Note 3: Please contact us regarding the performance guarantee value.

Note 4: Both values for power consumption and current consumption are reference value in the rated conditions, and are not ensured values.

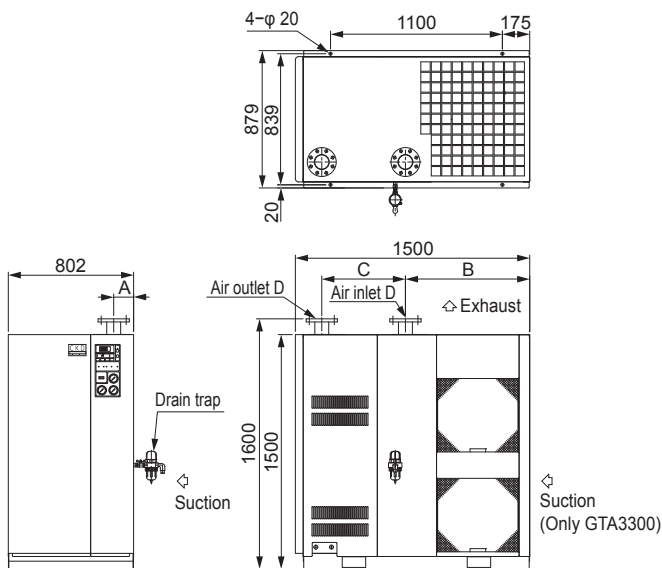
How to order

GTA **2200** - **U** - AC380V

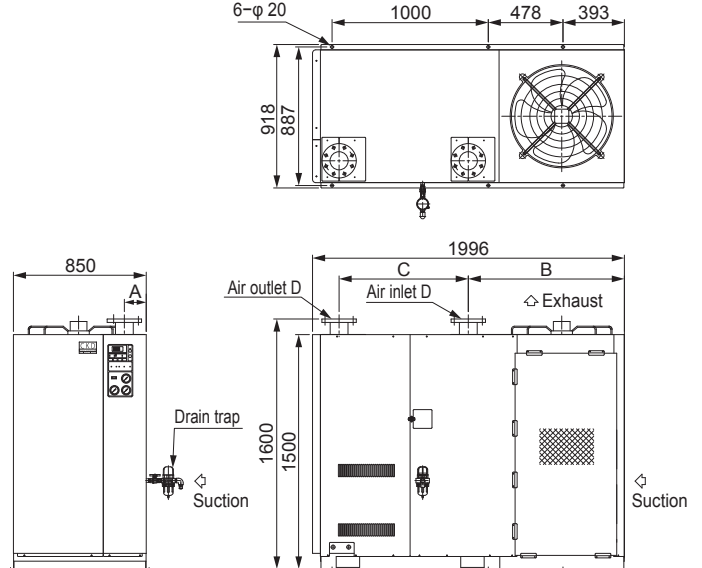
A Flow rate code		B Option	
2200	23.0 m ³ /min	Blank	Standard products
2900	31.0 m ³ /min	U	Air filter attached
3300	35.0 m ³ /min		
4300	45.0 m ³ /min		

Dimensions

■GTA2200 to GTA3300



■GTA4300



Model no.	A	B	C	D
GTA2200	125	828	470	Flange 2 1/2 B
GTA2900, GTA3300	128	796	535	Flange 3 B
GTA4300	140	999	827	Flange 4 B

Note: Flange is 10K type.

GTA*W (water cooling) series

Specifications

Model no.		GTA2700W	GTA3900W	GTA5000W	GTA7000W
Working range	Working fluid	Compressed air			
	Inlet air temperature °C	10 to 60			
	Inlet air pressure MPa	0.29 to 1.0			
	Inlet cooling water pressure MPa	0.3 to 0.7			
	Inlet cooling water temperature °C	2 to 34			
	Ambient temperature °C	2 to 45			
Rated condition	Air processing capacity m ³ /min (Note 2)	29.0	41.0	53.0	74.0
	Inlet air temperature °C	45			
	Inlet air pressure MPa	0.7			
	Inlet cooling water temperature °C	32			
	Cooling water flow m ³ /h	4.8	5.2	5.4	9.0
Performance	Outlet air pressure dew point °C	10 (Note 3)			
Power supply voltage		3 phase 380 VAC 50 Hz			
Electric specification (Note 4)	Power consumption kW	4.2	6.8	9.5	12.5
	Current consumption A	8.0	12.5	17.5	21.0
Refrigerant		R-407C			R-410A
Weight kg		278	350	395	495

Note 1: Standard paint color Outer panel: Munsell no. 7.5Y7.5/0.5, Base: Zinc steel plate (base material)

Note 2: Value is when converted to conditions where 32°C atmospheric pressure and relative humidity 75%.

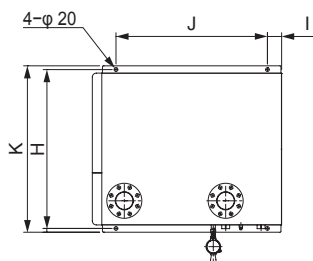
Note 3: Please contact us regarding the performance guarantee value.

Note 4: Both values for power consumption and current consumption are reference value in the rated conditions, and are not ensured values.

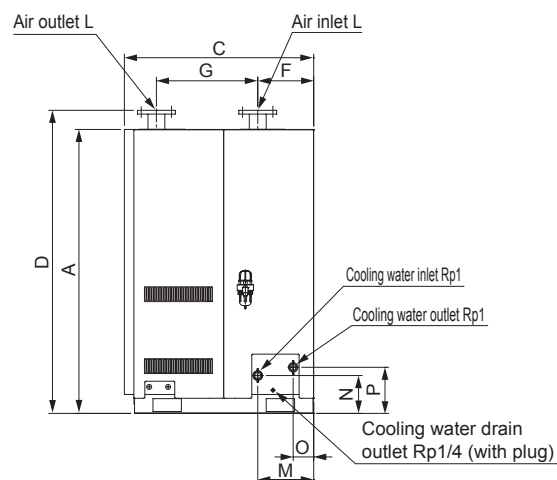
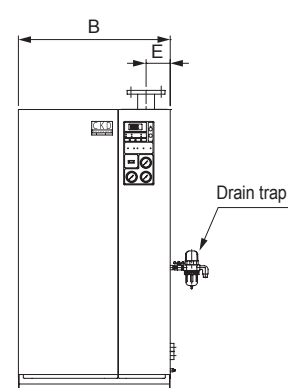
How to order

GTA 2700 W - U - AC380V

A Flow rate code		B Option	
2700	29.0 m ³ /min	Blank	Standard products
3900	41.0 m ³ /min	U	Air filter attached
5000	53.0 m ³ /min		
7000	74.0 m ³ /min		



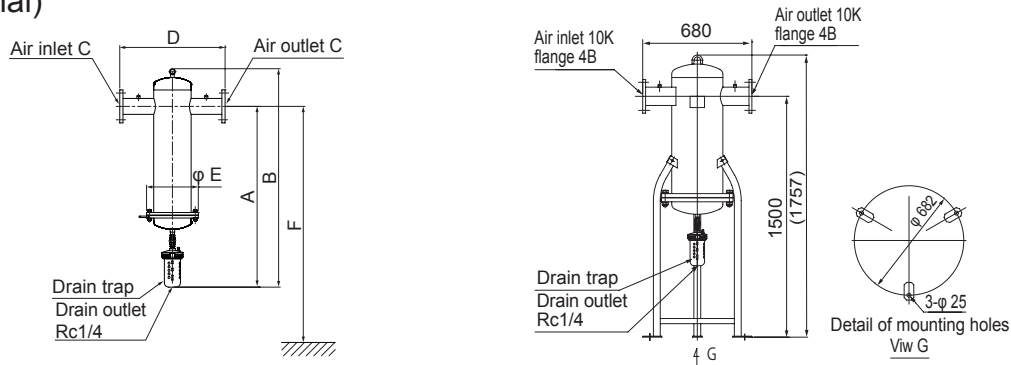
Dimensions



Model no.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
GTA2700W	1500	802	1000	1600	125	328	470	839	75	800	879	Flange 2 1/2 B	296	200	109	244
GTA3900W	1500	802	1000	1600	128	296	535	839	75	800	879	Flange 3 B	296	200	109	244
GTA5000W	1500	850	1199	1600	140	202	827	887	74.5	1000	918	Flange 4 B	296	200	109	244
GTA7000W	1520	877	1654	1620	439	423	680	895	357.5	890	935	Flange 4 B	455	220	268	270

Note: Flange is 10K type.

Air filter (optional)



Product no.	Applicable model	A	B	C	D	E	F
AF6027P-65	GTA 2200-U-AC380V GTA2700W-U-AC380V	855	1066	10K Flange 2 1/2 B	590	290	At least 1000
AF6033P-80	GTA2900-U-AC380V GTA3300-U-AC380V	1012	1223	10K Flange 3 B	590	290	At least 1200
AF6039P-80	GTA3900W-U-AC380V	1012	1223	10K Flange 3 B	590	290	At least 1200
AF6050P-100	GTA4300-U-AC380V GTA5000W-U-AC380V	1053	1298	10K Flange 4 B	640	352	At least 1200

Product no.	Applicable model
AF6075P-100	GTA7000W-U-AC380V

Note 1: Make sure to install a filter (filtration: 5 μm) on the primary side of the dryer, to prevent foreign materials from entering. Also, install the filter as close as possible to the dryer.

Selection guide

(1) Standard air processing capacity m³/min

Air cooling models

Model no.	GTA2200	GTA2900	GTA3300	GTA4300
Air processing capacity	23.0	31.0	35.0	45.0

Water cooling models

Model no.	GTA2700W	GTA3900W	GTA5000W	GTA7000W
Air processing capacity	29.0	41.0	53.0	74.0

(2) Temperature correction coefficient

Air cooling models

Inlet air temperature °C	40			45			50			55			60			
	pressure dew point °C	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
Ambient temperature °C	30	0.85	1.15	1.37	0.83	1.12	1.35	0.78	1.06	1.27	0.67	0.88	1.04	0.62	0.80	0.92
	32	0.82	1.12	1.34	0.80	1.09	1.31	0.76	1.03	1.24	0.64	0.85	1.01	0.60	0.75	0.89
	35	0.79	1.09	1.30	0.77	1.06	1.28	0.73	1.00	1.21	0.62	0.81	0.98	0.57	0.70	0.86
	40	0.60	0.81	0.98	0.58	0.80	0.96	0.55	0.75	0.91	0.47	0.62	0.75	0.44	0.56	0.66

Water cooling models

Inlet air temperature °C	40			45			50			55			60		
	pressure dew point °C	5	10	15	5	10	15	5	10	15	5	10	15	5	10
Correction coefficient	0.88	1.14	1.14	0.77	1.00	1.14	0.66	0.91	1.10	0.59	0.83	0.98	0.54	0.75	0.89

(3) Pressure correction coefficient

Inlet air pressure (MPa)	0.29	0.40	0.50	0.60	0.70	0.80	0.90	1.0
Correction coefficient	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.20

(4) Coefficient limit

Air cooling models

Operating Conditions (inlet air pressure MPa)	0.29	0.40	0.50	0.60	0.70	0.80	0.90	1.0
Coefficient	1.00	1.09	1.19	1.27	1.37	1.46	1.54	1.64

Water cooling models

Operating Conditions (inlet air pressure MPa)	0.29	0.40	0.50	0.60	0.70	0.80	0.90	1.0
Coefficient	0.83	0.91	0.99	1.06	1.14	1.21	1.28	1.36

If the air consumption is less than the value resulted from calculations below, select that model.

The dryer quantity of handling air = (1) rated quantity of handling air × (2) temperature correction coefficient × (3) pressure coefficient

Note: Select a model under condition where the value of ((2) temperature coefficient × (3) pressure coefficient) doesn't exceed the (4) coefficient limit. In case the value of ((2) temperature coefficient × (3) pressure coefficient) exceeds the (4) coefficient limit, calculate with (4) coefficient limit.

<Example of calculation>

Find the treating flow rate in a condition of GTA2200: inlet air temperature 50°C, ambient temperature 40°C, outlet pressure dew point temperature 15°C, and air pressure 0.80 MPa. ((2) temperature coefficient × (3) pressure coefficient) = 0.91 × 1.07 = 0.97

As the result doesn't exceed (4) coefficient limit 1.46 in a condition of GTA2200 air pressure 0.80 MPa, then the dryer quantity of handling air is

23.0 (1) rated quantity of handling air) × 0.97 = 22.3 m³/min

If the air consumption is less than this value, select GTA2200.

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