

Xeroaqua Dryer GT9000(D)

Compatible air compressors: 75, 90, 120, 150, 190, 240, 300, 380, 450, 710, 960 kW
■ Main Line Components / Refrigeration Air Dryer



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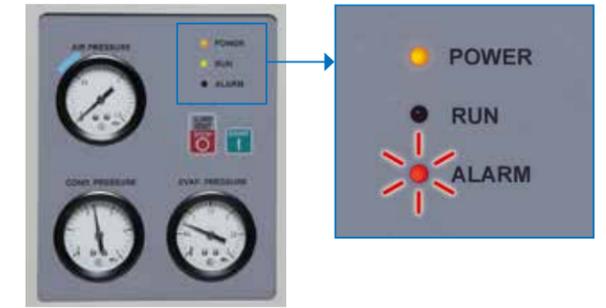
"Xeroaqua dryer GT Series" Meeting Customer Needs such as Reliability and Ease of Use



Easy maintenance

Inspection via control panel

Regular inspection can be performed by simply looking at the control panel. The refrigerant pressure gauge and operation lamp make operating status visible at a glance.



Easy error diagnostics

They can be identified by the flashing pattern of the alarm lamp.

When ON	Refrigerant circuit pressure error
2 blinks	Refrigerant circuit temperature error
3 blinks	Current error

Air pressure gauge provided as standard

All models are equipped with pressure gauges on the operation panel.

Centralized control possible

Central control within the plant is possible with remote operation and operation/error signal output takeout.

Equipped with dust filter

Equipped with dust filter for condenser. It can also be attached/detached easily without tools.



Space saving

Space saving realized with top surface exhaust

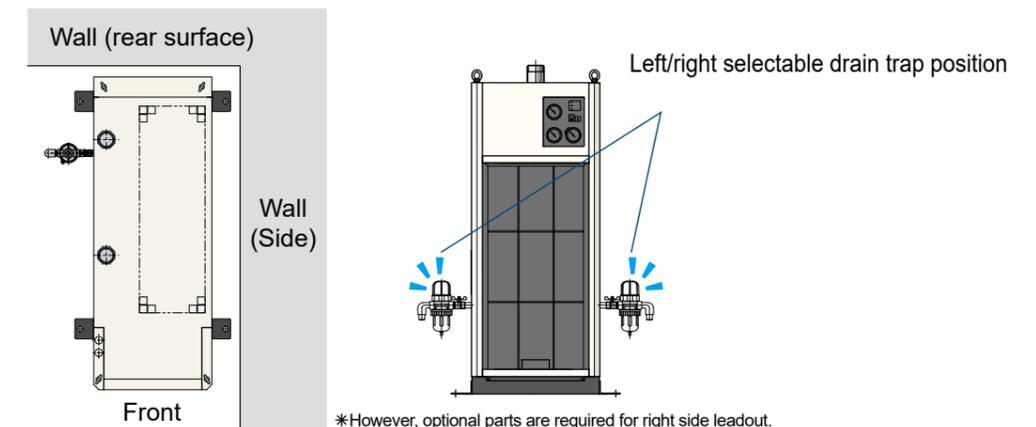
Top surface exhaust allows the unit to be mounted flush against a wall.

Flush-mounting and freely installable

Select drain trap left or right mounting: depending on the environment, installation is possible flush with the rear and either left or right walls.

*GT9150D(WD) and 9190D(WD) can only be installed flush against the right side wall.

*Right side mount of the drain trap is available as an option.



*However, optional parts are required for right side leadout.

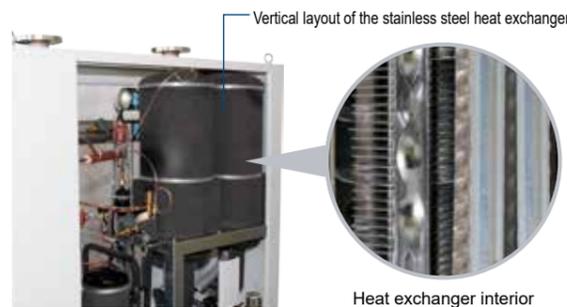
High quality, High reliability

Keeps working even at high temperatures

Operation won't stop even in hot summers. (Max. ambient temperature 48°C)

Heat exchanger with excellent climate resistance

The use of a stainless steel vessel prevents dust generation from the heat exchanger. The refrigerant pipes (copper pipes) within the heat exchanger are nickel plated for improved corrosion resistance. Stainless steel piping specifications are also available. Contact CKD for details.



Heat exchanger interior

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Ending

Ending

Improved Energy-Saving, Ease of Use, and Environmental Friendliness



High quality, High reliability

Stainless steel heat exchanger compatible with oil-free areas

The heat exchanger uses a stainless steel vessel, preventing dust generation from the heat exchanger.

High weather resistance

The refrigerant pipes (copper pipes) within the heat exchanger are nickel plated for improved corrosion resistance. Stainless steel piping specifications are also available. Contact CKD for details.

No abnormal stop under high load

When operating with high load, self-protection control is activated to reduce the rotation speed of the compressor. This enables continuous operation without abnormal stoppage.

Easy maintenance

The operation status is visible at a glance

The electronic operation panel makes the operating status, dew point and failure status of the dryer visible at a glance.

Air pressure gauge provided as standard

All models are equipped with pressure gauges on the operation panel.

Centralized control possible

Central control within the plant is possible with return operation and operation/error signal output takeout.

Equipped with dust filter (GT9240 to 9450)

Equipped with dust filter for condenser. It can also be attached/detached easily without tools.



GT9960WV2



GT9300(W) to 9450(W)

Space saving

Space saving realized with top surface exhaust (GT9240 to 9450)

An exhaust duct is mounted on the top of the body to save floor layout space.

Energy saving

Operation with 50% energy-saving by limiting the numbers of unit (GT9300 to 9450, GT9300W to 9450W)

Equipped with a two-stage switching refrigerant system, it automatically switches to energy-saving operation with one stage at low load. Power can be reduced by up to 50%.

Energy-saving operation with 60% decreased power through inverter control (GT9000WV2 Series)

Compressor inverter control enables optimum energy-saving operation according to the load. Power savings up to 60%.

Dew point temperature setting is available (GT9000WV2 Series)

Pressure dew point can be set within a range of 10 to 18°C. If condensation inside the piping does not easily occur, such as in summer, setting the temperature to 10°C or more will result in significantly energy-saving operation.

* The dew point is lower than the set value with small load.

Dew point temperature is linked to ambient temperature (GT9000WV2 Series)

A function is provided to automatically control the pressure dew point by linking it with the ambient temperature. The dew point automatically changes to a dew point temperature that does not condense according to the ambient temperature, saving time in manually changing the dew point setting value and enabling ideal energy-saving operation.

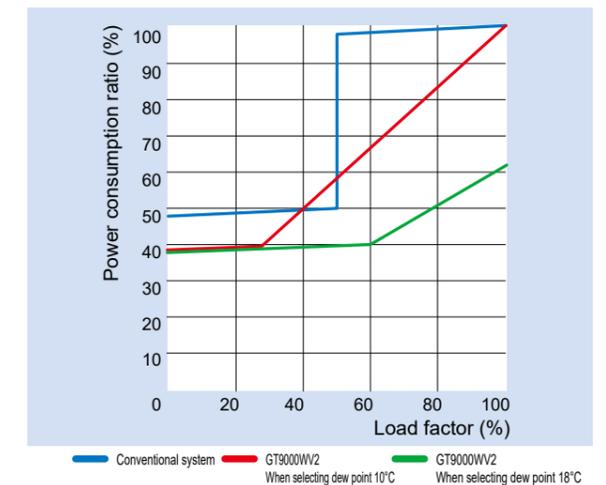
Same capacity at 50/60Hz (GT9000WV2 Series)

The inverter control of the compressor achieves the same capacity in the 50/60Hz area.

[Series variation]

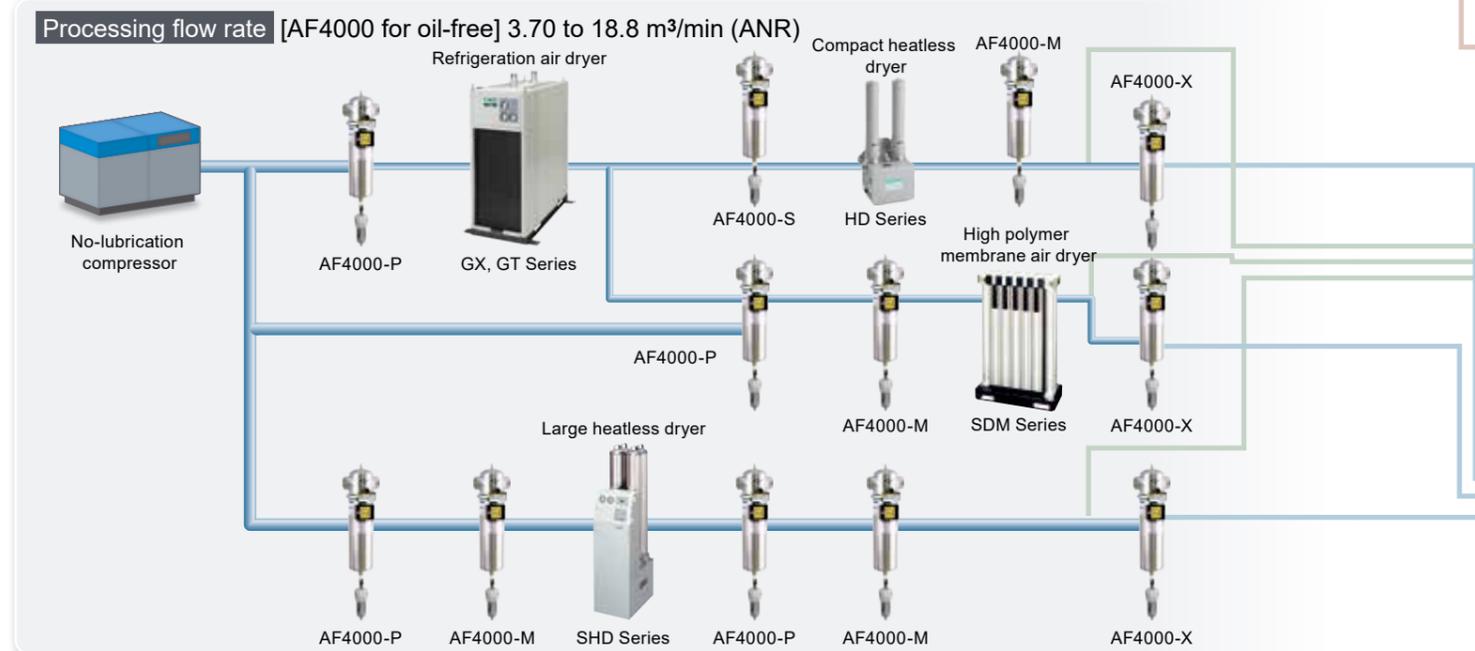
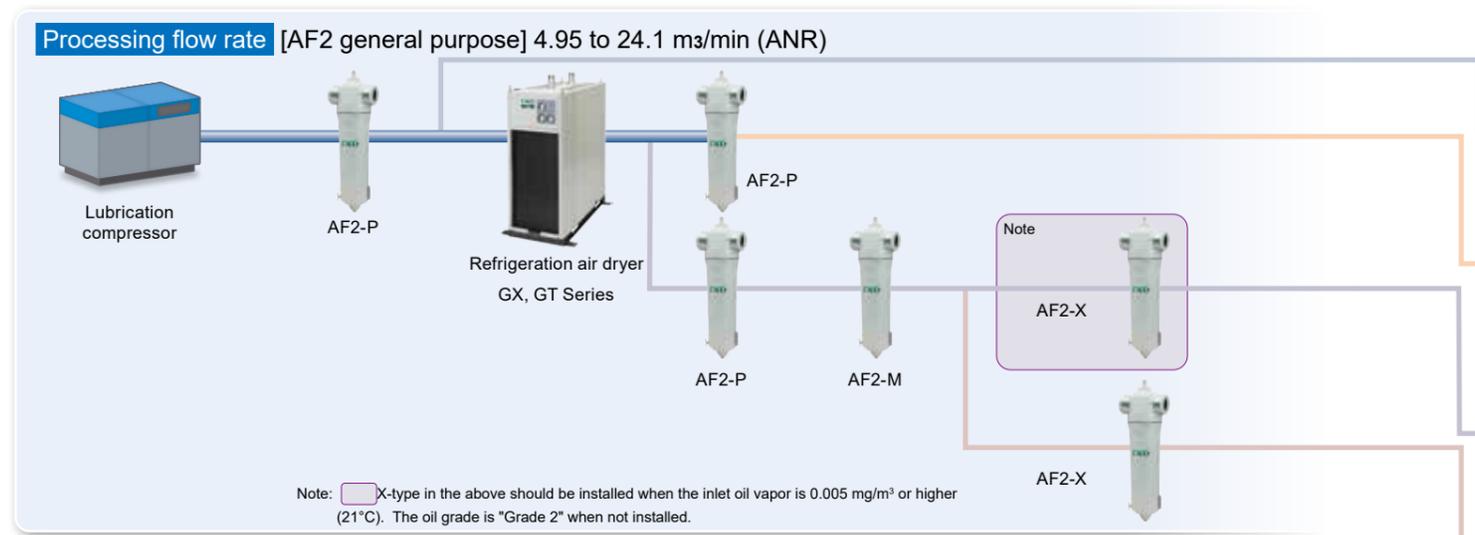
	Rated conditions					Applicable air compressor (kW)											
	Pressure dew point (°C)	Inlet air pressure (MPa)	Ambient temperature (°C)	Inlet air temperature (°C)	Cooling water inlet temperature (°C)	75	90	120	150	190	240	300	380	450	710	980	
Standard inlet/air cooling GT9000 (D)	10	0.7	32	40	-	●	●	●	●	●	●	●	●	●	●	●	
Standard inlet/water cooling GT9000W (D)	10	0.7	32	40	32	●	●	●	●	●	●	●	●	●	●	●	
Inverter-controlled/water-cooling type GT9000WV2	10	0.7	32	40	32											●	●

Load factor and power consumption of GT9000WV2 Series



Example of system selection list

Example of system selection list



Air Quality	Applications	Impurities in the Air			ISO 8573-1 compressed air purity grade
		Individual particles	Moisture	Oil content	
Dewatered Air Coarse dust removed air	Air for cleaning (dry air not required)	1 µm	-	-	2: -: -
General Dry Air	General Pneumatic Components General Pneumatic Tools Labor-Saving Components Pneumatic Jigs and Tools Air Chuck	1 µm	Pressure dew point 10°C	0.6 mg/m³	2.6.3
			Pressure dew point 7°C		2.5.3
Dry Air (oil-free)	Instrumentation Measurement Sequence control Painted	0.01 µm	Pressure dew point 10°C	0.01 mg/m³ (0.003 mg/m³)	1.6.1
			Pressure dew point 7°C		1.5.1
Dry air (odorless)	Food and Pharmaceutical Processes (Stirring, dry blowing, packaging, brewing, pressure-feeding, filling) Cosmetic Manufacturing Processes *If the product directly contacts the workpiece, it is recommended to install a bacteria-removing filter.	0.01 µm	Pressure dew point 10°C	0.003 mg/m³	1.6.1
			Pressure dew point 7°C		1.5.1
Ultra dry air (oil-free)	Ozone generator Powder transfer Drying furnace gas Drying the insulation gas of a high-voltage generator Drying computer rooms Centralized control instrumentation Liquid crystal panel manufacturing Chemical plants Painted	0.01 µm	Pressure dew point -20°C	0.01 mg/m³	1.3.1
			Pressure dew point -40°C		1.2.1
			Pressure dew point -60°C		1.2.1
Ultra-Dry Air (odorless)	Food and Pharmaceutical Processes (Stirring, dry blowing, packaging, brewing, pressure-feeding, filling) Cosmetic Manufacturing Processes *If the product directly contacts the workpiece, it is recommended to install a bacteria-removing filter.	0.01 µm	Pressure dew point -20°C	0.003 mg/m³	1.3.1
			Pressure dew point -40°C		1.2.1
			Pressure dew point -60°C		1.2.1

*1. The system No. is based on the class below. X not found in the table indicates odor removal; and "-" indicates no specification.

Table of system selections

Rating (ambient temperature: 32°C, inlet temperature: 40°C, pressure dew point: 10°C)

Air Compressor		Refrigeration Air Dryers		Main Line Filters P-type (1 µm or 3 µm)	Main Line Filters M-type (0.01 µm)	Main Line Filters X-type (deodorizing)
Output kW	Reference processing air rate m³/min (ANR)	Air cooling	Water cooling			
75	10.4/12.3	GT9075D	GT9075WD	AF2-13P50A AF4013S-50	AF2-13M50A AF4013M-50	AF2-13X50A AF4013X-50
90	14.8/17.5	GT9090D	GT9090WD	AF2-20P65A AF4020S-50	AF2-24M50A AF4020M-50	AF2-20X50A AF4020X-50
120	18.7/22.0	GT9120D	GT9120WD	AF2-24P65A	AF2-24M-65A	AF2-24X65A
150	23.8/28.0	GT9150D	GT9150WD	AF5032P-80	AF5032M-80	AF5032X-80
190	27.5/32.4	GT9190D	GT9190WD	AF5048P-100	AF5048M-100	AF5048X-100
240	36.5/43.0	GT9240	GT9240W	AF5048P-100	AF5048M-100	AF5048X-100
300	44.2/52.0	GT9300	GT9300W	AF5064P-100	AF5064M-100	AF5064X-100
380	55.2/65.0	GT9380	GT9380W	AF5080P-150	AF5080M-150	AF5080X-150
450	70.3/82.8	GT9450	GT9450W	AF5096P-150	AF5096M-150	AF5096X-150
710	139.1	-	GT9710WV2	AF5160P-200	AF5160M-200	AF5160X-200
960	184.2	-	GT9960WV2	AF5192P-200	AF5192M-200	AF5192X-200

ISO 8573-1: 2010 Compressed air purity grade

Grade	Solid Particles			Mass Concentration Cp mg/m³	Humidity and Water Content		Oil Total Oil Concentration mg/m³
	Max. number of particles per 1 m³ for particle diameter d (µm)				Pressure dew point °C	Water Concentration Cw g/m³	
	0.1 < d ≤ 0.5	0.5 < d ≤ 1.0	1.0 < d ≤ 5.0				
0	Conditions stricter than Grade 1, is to be specified by the user or supplier						
1	≤ 20,000	≤ 400	≤ 10	-	≤ -70	-	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40	-	≤ 0.1
3	-	≤ 90,000	≤ 1,000	-	≤ -20	-	≤ 1
4	-	-	≤ 10,000	-	≤ +3	-	≤ 5
5	-	-	≤ 100,000	-	≤ +7	-	-
6	-	-	-	0 < Cp ≤ 5	≤ +10	-	-
7	-	-	-	5 < Cp ≤ 10	-	Cw ≤ 0.5	-
8	-	-	-	-	-	0.5 < Cw ≤ 5	-
9	-	-	-	-	-	5 < Cw ≤ 10	-
X	-	-	-	Cp > 10	-	Cw > 10	> 5

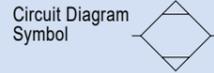
For example, "Grade 1: 2: 1" means:
 ● Solid particles of 0.1 to 0.5 µm are ≤20,000 particles; 0.5 to 1.0 µm are ≤400 particles; and 1.0 to 5.0 µm are ≤10 particles
 ● Pressure dew point -40°C or less
 ● Indicates a grade of oil concentration of 0.01 mg/m³ or less.



Refrigeration Air Dryer Xeroaqua Air Cooling

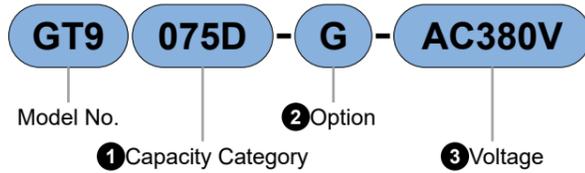
GT9000(D) Series

For direct air compressor connection, standard inlet air
Applicable air compressor: 75, 90, 120, 150, 190, 240, 300, 380, 450 kW



GT9000(D) Series Specifications

Model No. Notation (air-cooling)



*1: The instruction manual and nameplates are provided in Japanese and English. However, the proof pressure certificate (GT9240 and higher) is available as Japanese text only. Contact CKD when an English version is required.
*2: Contact CKD if a photo of the completed product is required.
*3: Contact CKD to designate the color of the body panel.

① Capacity Category

Code	Description
075D	75 kW
090D	90 kW
120D	120 kW
150D	150 kW
190D	190 kW
240	240kW
300	300kW
380	380kW
450	450kW

② Option

Code	Description
Blank	Standard product
G	Different voltages supported
H2	Stainless steel nameplate
H3	Simple export packaging
N1	Copper tube rust proof coating
Q1	Drain piping right (GT9075D to GT9190D only)

*1: Indicate options in alphabetical order.
*2: Specify the voltage of ③ even when the model is a standard product. Example) GT9090D-AC200V
*3: Option "H3" is packaged in plywood is attached.

③ Voltage

Code	Description
AC200V	200 VAC
AC220V	220 VAC (standard 60Hz only)
AC230V	230 VAC
AC240V	240 VAC
AC380V	380 VAC
AC400V	400 VAC
AC415V	415 VAC
AC440V	440 VAC
AC480V	480 VAC

Note: Be sure to also indicate if you have selected the ② option as a standard product.
Example) GT9090D-AC200V

Optional accessory model No.

● Foundation bolt set

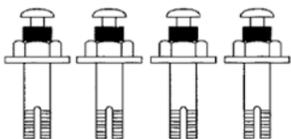
Core rod implant foundation bolts: Set of 4, made of stainless steel

Part No.	Compatibility	Size
RD-QFL-436465	GT9075D, GT9090D, GT9120D, GT9150D, GT9190D, GT9240, GT9300, GT9380, GT9450	M16×L100

● Mating flange

Insert welded flange, Hexagon head bolt, Nut, Gasket set

Part No.	Compatibility	Size
RD-KFL-436467	GT9120D	Flange 2 1/2B
RD-KFL-436468	GT9150D, GT9190D	Flange 3B
RD-KFL-436469	GT9240	Flange 4B
RD-KFL-436470	GT9300, GT9380	Flange 5B
RD-KFL-436471	GT9450	Flange 6B



Specifications

Item	GT9075D	GT9090D	GT9120D	GT9150D	GT9190D	GT9240	GT9300	GT9380	GT9450	
Applicable air compressor	kW	75	90	120	150	190	240	300	380	450
Working range	Working fluid	Compressed air								
	Inlet air temperature °C	5 to 60								
	Inlet air pressure MPa	0.29 to 0.98					0.1 to 0.98	0.29 to 0.93		
	Ambient temperature °C	2 to 48					2 to 40			
Rating	Processing air rate m ³ /min (ANR) 50/60Hz (*2)	11.4/12.6	16.3/18.9	20.8/23.8	25.9/30.1	32.1/38.1	36.5/43.0	44.2/52.0	55.2/65.0	70.3/82.8
	Processed air volume m ³ /min (Compressor intake condition) 50/60Hz (*3)	12.1/13.4	17.3/20.1	22.1/25.3	27.5/32.0	34.1/40.5	38.3/45.2	46.4/54.6	58.0/68.3	73.8/87.0
	Inlet air temperature °C	40								
	Inlet air pressure MPa	0.7								
	Ambient temperature °C	32								
Performance: Outlet air pressure dew point °C	10 (*4)									
Power Supply	Three-phase 200/200, 220 VAC 50/60 Hz									
Electrical Specifications	Power consumption kW 50/60Hz (*5)	2.5/3.0, 3.0	3.0/3.9, 3.9	3.0/3.9, 3.9	4.1/5.2, 5.2	5.7/7.5, 7.4	4.6/5.7, 5.6	5.9/6.8, 6.8	8.6/10.1, 10.0	9.3/11.2, 11.9
	Current consumption A 50/60Hz (*5)	9.5/9.5, 9.4	11.5/12.0, 12.0	11.5/12.0, 12.0	14.0/16.5, 15.5	20.5/24.5, 22.5	17.9/19.2, 19.1	19.9/22.3, 21.2	26.4/29.4, 28.9	36.3/38.3, 38.2
	Starting current A 50/60Hz	110/100	110/115	110/115	140/155	165/190	135/135	83/77	98/91	135/135
Refrigerant	R-410A					R-407C				
Air inlet and outlet port size (*6)	R2	R2	Flange 2 1/2 B	Flange 3B	Flange 4B	Flange 5B	Flange 6B			
Weight kg	146	186	205	279	286	555	790	870	970	
Released heat kW 50/60Hz	8.4/9.4	11.3/13.2	13.6/15.7	17.2/20.2	21.7/25.9	18.8/22.1	20.8/24.5	26.7/31.3	33.0/39.0	

*1: Outer panel: Quality cool white (Munsell No.5GY7.5/0.5) Base: Munsell No.N3.0
*2: ANR shows conditions of 20°C atmospheric pressure and relative humidity 65%.
*3: This is a value converted to the intake condition of the air compressor in an environment of 32°C with a relative humidity of 75%.
*4: Contact CKD for information on the dew point performance guarantee.
*5: The power consumption and current consumption are both reference values under the rated conditions, and are not guaranteed
*6: The flange is JIS 10K FF or equivalent.

For maintenance parts, refer to CKD Components Product Website
(<https://www.ckd.co.jp/kiki/en/>) → "Model No." → Maintenance Parts

Selection guide (GT9075D to 9190D)

As the max. processing air rate of each model is affected by the outlet air pressure dew point temperature, inlet air temperature, ambient temperature and inlet air pressure, compensation is required if it differs from the rated conditions in the usage section.

- STEP 1** Confirm the working conditions and the rated values listed in the specifications. Working conditions: Required processing air rate, required outlet air pressure dew point temperature, inlet air temperature, ambient temperature, inlet air pressure
- STEP 2** Check the correction coefficient for the processing air rate according to the required outlet air pressure dew point temperature, inlet air temperature, and ambient temperature.

(1) Temperature Compensation Coefficient
GT9075D, GT9090D, GT9120D

Inlet air temperature (°C)	35			40			45			50			55			60			
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	
Ambient temperature (°C)	25	0.77	1.15	1.15	0.65	1.06	1.15	0.53	0.88	0.95	0.39	0.71	0.80	0.25	0.61	0.71	0.13	0.51	0.62
	30	0.70	1.15	1.15	0.58	1.02	1.11	0.47	0.85	0.93	0.35	0.68	0.75	0.23	0.59	0.66	0.11	0.49	0.58
	32	0.68	1.15	1.15	0.57	1.00	1.09	0.46	0.83	0.90	0.34	0.67	0.72	0.22	0.58	0.65	0.10	0.48	0.55
	35	0.65	1.12	1.15	0.54	0.95	1.04	0.44	0.79	0.85	0.32	0.64	0.70	0.21	0.55	0.64	0.10	0.46	0.53
	40	0.57	0.98	1.07	0.48	0.83	0.90	0.39	0.69	0.74	0.29	0.56	0.63	0.19	0.48	0.54	0.09	0.40	0.48
	45	0.23	0.83	0.92	0.20	0.70	0.85	0.15	0.58	0.68	0.14	0.47	0.56	0.14	0.41	0.44	0.08	0.34	0.42
	48	0.19	0.73	0.89	0.17	0.62	0.80	0.12	0.51	0.65	0.11	0.42	0.50	0.11	0.36	0.36	0.07	0.30	0.35

GT9150D

Inlet air temperature (°C)	35			40			45			50			55			60			
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	
Ambient temperature (°C)	25	0.77	1.15	1.15	0.65	1.06	1.15	0.53	0.88	0.95	0.39	0.71	0.80	0.25	0.61	0.71	0.13	0.51	0.62
	30	0.70	1.15	1.15	0.58	1.02	1.11	0.47	0.85	0.93	0.35	0.68	0.75	0.23	0.59	0.66	0.11	0.49	0.58
	32	0.68	1.15	1.15	0.57	1.00	1.09	0.46	0.83	0.90	0.34	0.67	0.72	0.22	0.58	0.65	0.10	0.48	0.55
	35	0.65	1.12	1.15	0.54	0.95	1.04	0.44	0.79	0.85	0.32	0.64	0.70	0.21	0.55	0.64	0.10	0.46	0.53
	40	0.57	0.98	1.07	0.48	0.83	0.90	0.39	0.69	0.74	0.29	0.56	0.63	0.19	0.48	0.54	0.09	0.40	0.48
	45	0.22	0.79	0.88	0.17	0.58	0.70	0.14	0.50	0.59	0.13	0.45	0.54	0.13	0.38	0.41	0.08	0.33	0.38
	48	0.17	0.65	0.79	0.13	0.48	0.62	0.10	0.40	0.51	0.09	0.35	0.42	0.09	0.31	0.35	0.07	0.27	0.32

GT9190D

Inlet air temperature (°C)	35			40			45			50			55			60			
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	
Ambient temperature (°C)	25	0.77	1.15	1.15	0.65	1.06	1.15	0.53	0.88	0.95	0.39	0.71	0.80	0.25	0.61	0.71	0.13	0.51	0.62
	30	0.70	1.15	1.15	0.58	1.02	1.11	0.47	0.85	0.93	0.35	0.68	0.75	0.23	0.59	0.66	0.11	0.49	0.58
	32	0.68	1.15	1.15	0.57	1.00	1.09	0.46	0.83	0.90	0.34	0.67	0.72	0.22	0.58	0.65	0.10	0.48	0.55
	35	0.65	1.12	1.15	0.54	0.95	1.04	0.44	0.79	0.85	0.32	0.64	0.70	0.21	0.55	0.64	0.10	0.46	0.53
	40	0.57	0.98	1.07	0.48	0.83	0.90	0.39	0.69	0.74	0.29	0.56	0.63	0.19	0.48	0.54	0.09	0.40	0.48
	45	0.23	0.83	0.92	0.20	0.70	0.85	0.15	0.58	0.68	0.14	0.47	0.56	0.14	0.41	0.44	0.08	0.34	0.42
	48	0.17	0.65	0.79	0.13	0.48	0.62	0.10	0.40	0.51	0.09	0.35	0.42	0.09	0.31	0.35	0.07	0.27	0.32

- STEP 3** Check the compensation coefficient for processing air rate by inlet air pressure.

(2) Inlet air pressure coefficient

Inlet air pressure (MPa)	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.98
Coefficient	0.80	0.80	0.86	0.92	0.96	1.00	1.04	1.08	1.12

- STEP 4** Confirming upper limit coefficient

It is checked whether the value of the product of each coefficient ((1)×(2)) exceeds the upper limit coefficient. If not, find the max. processing air rate by the product of each coefficient ((1)×(2)). When this value is exceeded, find the maximum processing air rate by using the upper limit coefficient (3).

(3) Ceiling coefficient

Working conditions (inlet air pressure (MPa))	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.98
Coefficient	0.92	0.92	0.98	1.05	1.10	1.15	1.19	1.24	1.28

- STEP 5** Find the maximum processing air rate from each model rated processing air rate. Max. air processing rate = Rated processing air rate × Compensation coefficient determined by STEP 4
Select the model so that the required processing air rate is less than the maximum processing air rate.

Example of Calculation

Conditions	Working Conditions	Selecting Conditions	Coefficient
Inlet air temperature	30 to 38 °C	40°C	(1) 0.95
Pressure dew point	10°C	10°C	
Ambient temperature	25 to 33 °C	35°C	
Inlet air pressure	0.55 to 0.75 MPa	0.5 MPa	(2) 0.92
Frequency	50Hz	50Hz	50Hz

Substitute the above conditions into the equation above to obtain the max. processing air rate when using the GT9150D.

Product of each coefficient ((1)×(2)) = 0.95×0.92 = 0.87

As the (3) ceiling coefficient of 1.05 is not exceeded when the inlet air pressure of the working conditions is 0.5 MPa, the max. processing air rate will be 25.9 (rated processing air rate) × 0.87 = 22.5 m³/min (ANR). If the required processing flow rate is less than or equal to this value, select that model.

Selection guide (GT9240 to GT9450)

As the max. processing air rate of each model is affected by the outlet air pressure dew point temperature, inlet air temperature, ambient temperature and inlet air pressure, compensation is required if it differs from the rated conditions in the usage section.

- STEP 1** Confirm the working conditions and the rated values listed in the specifications. Working conditions: Required processing air rate, required outlet air pressure dew point temperature, inlet air temperature, ambient temperature, inlet air pressure
- STEP 2** Check the correction coefficient for the processing air rate according to the required outlet air pressure dew point temperature, inlet air temperature, and ambient temperature.

(1) Temperature Compensation Coefficient

Inlet air temperature (°C)	35		40		45		50		55		60		
	10	15	10	15	10	15	10	15	10	15	10	15	
Ambient temperature (°C)	25	1.29	1.29	1.14	1.24	0.91	0.99	0.69	0.75	0.46	0.50	0.23	0.25
	30	1.25	1.29	1.04	1.13	0.83	0.91	0.62	0.68	0.42	0.45	0.21	0.23
	32	1.20	1.29	1.00	1.09	0.80	0.87	0.60	0.65	0.40	0.44	0.20	0.22
	35	1.13	1.23	0.94	1.02	0.75	0.82	0.56	0.61	0.38	0.41	0.19	0.20
	40	1.01	1.10	0.84	0.92	0.67	0.73	0.50	0.55	0.34	0.37	0.17	0.18

- STEP 3** Check the compensation coefficient for processing air rate by inlet air pressure.

(2) Inlet air pressure coefficient

Inlet air pressure (MPa)	0.10	0.20	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.93	0.98
Coefficient	0.60	0.66	0.72	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.15	1.19

*1: GT9300 to GT9450 working pressure range is 0.29 to 0.93 MPa.

- STEP 4** Confirming upper limit coefficient

It is checked whether the value of the product of each coefficient ((1)×(2)) exceeds the upper limit coefficient. If not, find the max. processing air rate by the product of each coefficient ((1)×(2)). When this value is exceeded, find the maximum processing air rate by using the upper limit coefficient.

(3) Ceiling coefficient

Working conditions (inlet air pressure (MPa))	0.10	0.20	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.93	0.98
Coefficient	0.77	0.85	0.92	0.94	1.03	1.12	1.19	1.29	1.38	1.45	1.48	1.53

- STEP 5** Find the maximum processing air rate from each model rated processing air rate.

Max. air processing rate = Rated processing air rate × Compensation coefficient determined by STEP 4
Select the model so that the required processing air rate is less than the maximum processing air rate.

Example of Calculation

Conditions	Working Conditions	Selecting Conditions	Coefficient
Inlet air temperature	30 to 38 °C	40°C	(1) 0.94
Pressure dew point	10°C	10°C	
Ambient temperature	25 to 33 °C	35°C	
Inlet air pressure	0.55 to 0.75 MPa	0.5 MPa	(2) 0.87
Frequency	50Hz	50Hz	50Hz

Substitute the above conditions into the equation above to obtain the processing air rate when using the GT9240.

Product of each coefficient

(1) × (2) = 0.94 × 0.87 = 0.81

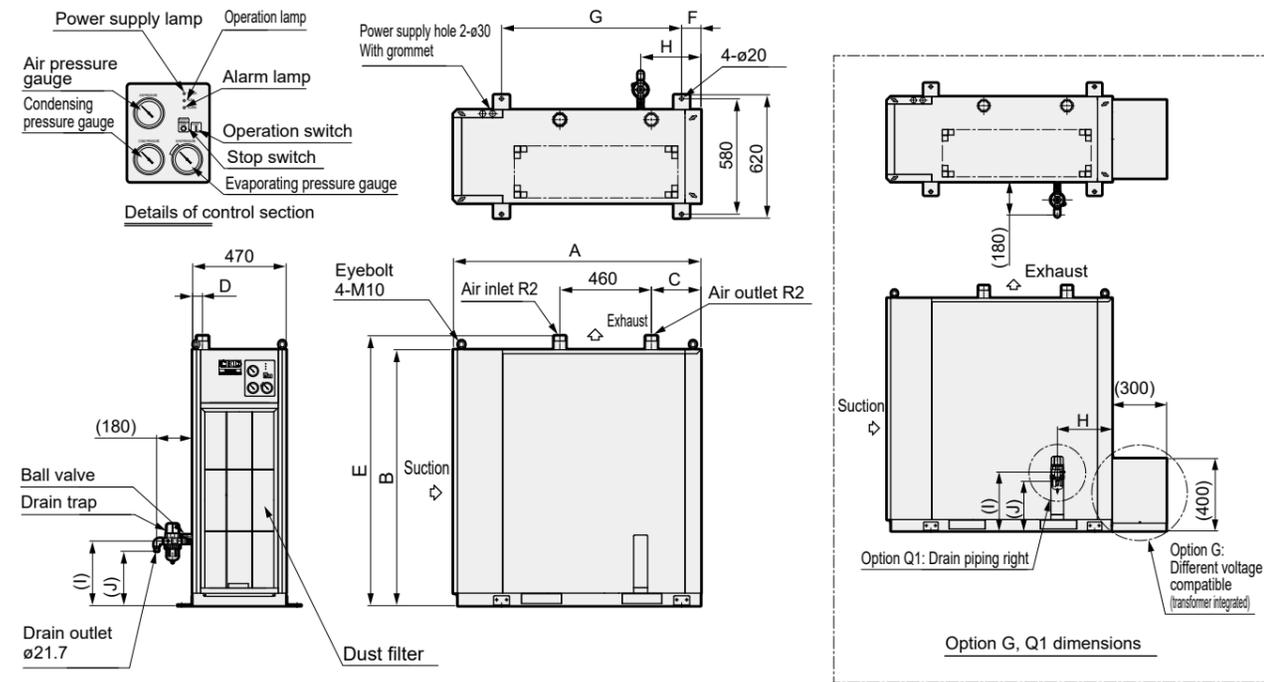
As the ceiling coefficient of 1.12 is not exceeded when the inlet air pressure of the working conditions is 0.5 MPa, the max. processing air rate will be 23.8 (reference processing air rate) × 0.81 = 19.2 m³/min (ANR).

If the used air quantity is less than or equal to this value, select that model.

Note: Contact CKD for compatibility with pressure dew points of less than 10°C.

Dimensions

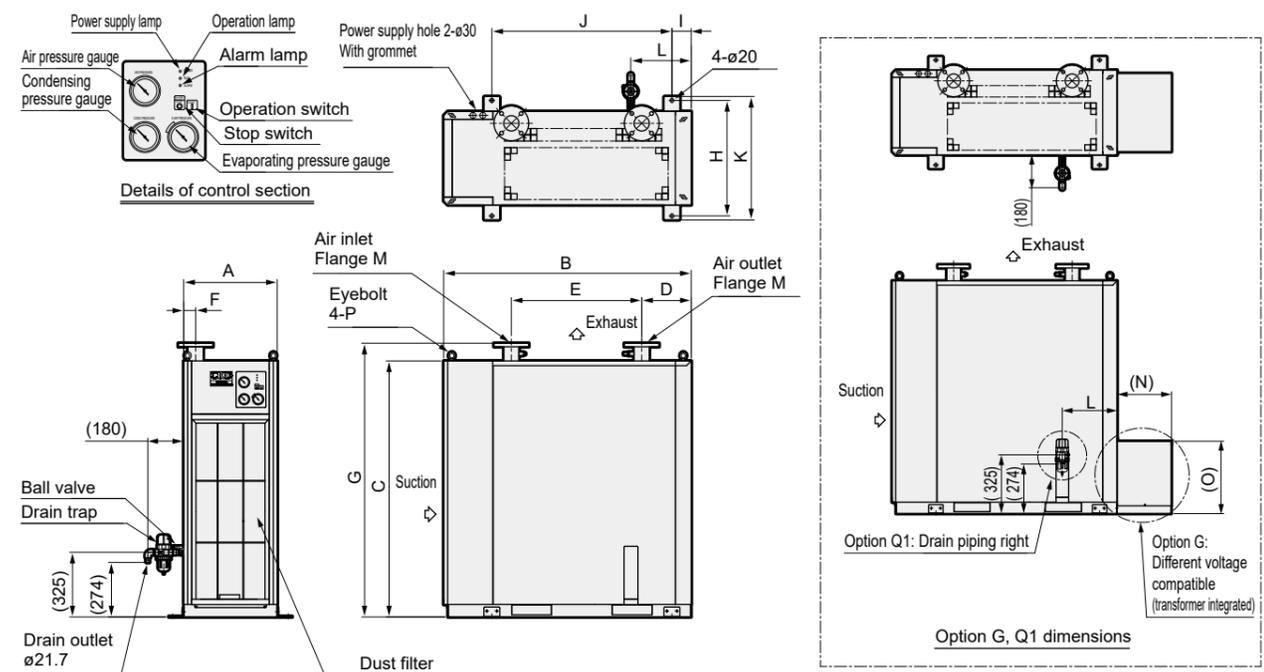
●GT9075D, GT9090D



Note: The drain trap and ball valve are attachments.

Model No.	A	B	C	D	E	F	G	H	I	J
GT9075D	1081	1140	287	235	1204	67	868	287	320	269
GT9090D	1244	1286	249	55	1356	97	905	303	325	274

●GT9120D, GT9150D, GT9190D

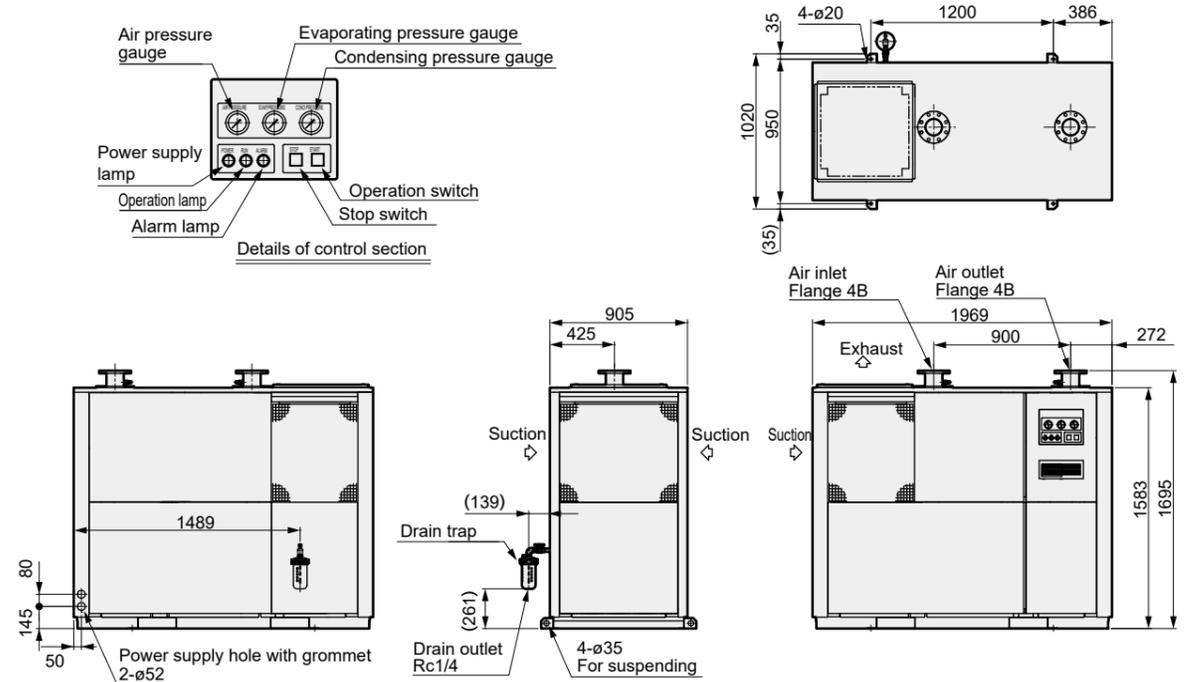


Note: The drain trap and ball valve are attachments.

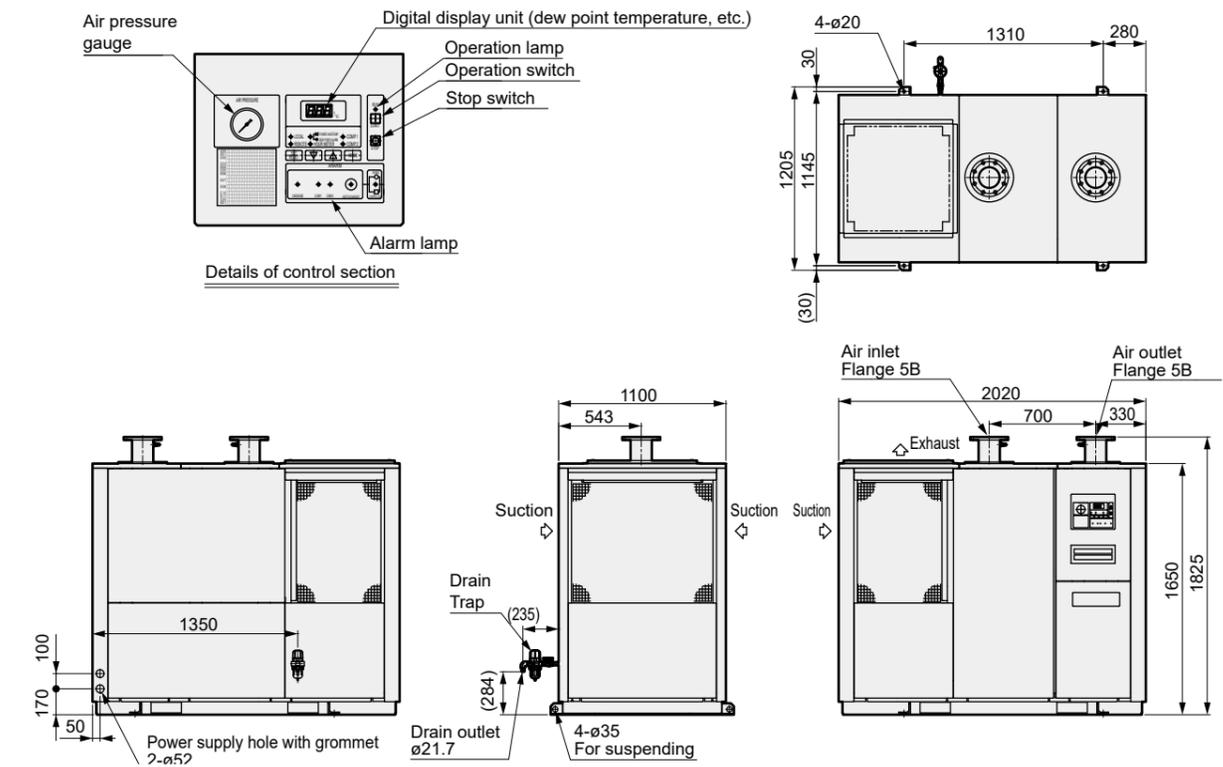
Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
GT9120D	470	1244	1286	249	655	60	1375	580	97	905	620	303	2 1/2 B	300	400	M10
GT9150D	700	1290	1332	305	720	225	1432	810	67	1030	850	325	3B	350	420	M16
GT9190D	700	1290	1332	107	860	225	1432	810	67	1030	850	325	3B	350	420	M16

Dimensions

●GT9240



●GT9300, GT9380



Note: The dew point display value is a guide, and is not the actual dew point. To measure the actual dew point, measure the secondary side air with a dew point gauge.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

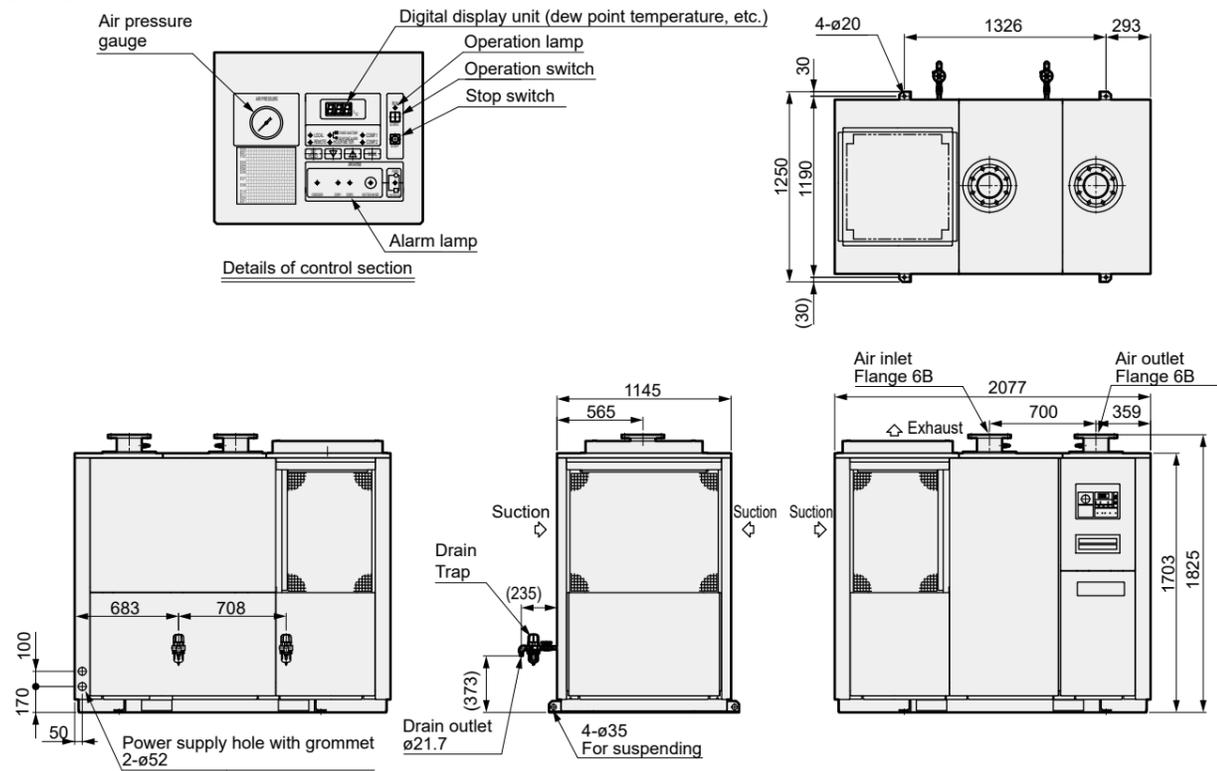
Ending

Ending

GT9000(D) Series

Dimensions

●GT9450



Note: The dew point display value is a guide, and is not the actual dew point. To measure the actual dew point, measure the secondary side air with a dew point gauge.

MEMO

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.



Refrigerated Air Dryer Xeroaqua Water Cooling type

GT9000W(D) Series

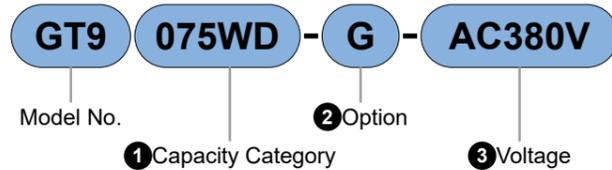
For direct air compressor connection, standard inlet air
Applicable air compressor: 75, 90, 120, 150, 190, 240, 300, 380, 450 kW

Circuit
Diagram
Symbol



GT9000W(D) Series Specifications

Model No. Notation (water-cooling)



*1: The instruction manual and nameplates are provided in Japanese and English. However, proof pressure certificates (GT9240W or higher) are only available in Japanese. Contact CKD when an English version is required.
*2: Contact CKD if a photo of the completed product is required.
*3: Contact CKD to designate the color of the body panel.

① Capacity Category

Code	Description
075WD	75 kW
090WD	90 kW
120WD	120 kW
150WD	150 kW
190WD	190 kW
240 W	240kW
300 W	300kW
380 W	380kW
450 W	450kW

② Option

Code	Description
Blank	Standard product
G	Different voltages supported
H2	Stainless steel nameplate
H3	Simple export packaging
N1	Copper tube rust proof coating
Q1	Drain piping right (GT9075WD to GT9190WD only)

*1: Indicate options in alphabetical order.
*2: Specify the voltage of ③ even when the model is a standard product. Example) GT9090WD-AC200V
*3: Option "H3" is packaged in plywood.

③ Voltage

Code	Description
AC200V	200 VAC
AC220V	220 VAC (standard 60Hz only)
AC230V	230 VAC
AC240V	240 VAC
AC380V	380 VAC
AC400V	400 VAC
AC415V	415 VAC
AC440V	440 VAC
AC480V	480 VAC

Note: Be sure to also indicate if you have selected the ② option as a standard product. Example) GT9090WD-AC200V

Optional accessory model No.

● Foundation bolt set

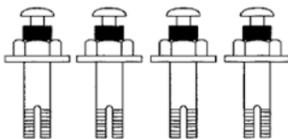
Core rod implant foundation bolts: Set of 4, made of stainless steel

Part No.	Compatibility	Size
RD-QFL-436465	GT9075WD, GT9090WD, GT9120WD, GT9150WD, GT9190WD, GT9240W, GT9300W, GT9380W, GT9450W	M16×L100

● Companion flange

Insert welded flange, Hexagon head bolt, Nut, Gasket set

Part No.	Compatibility	Size
RD-KFL-436467	GT9120WD	Flange 2-1/2B
RD-KFL-436468	GT9150WD, GT9190WD	Flange 3B
RD-KFL-436469	GT9240W	Flange 4B
RD-KFL-436470	GT9300W, GT9380W	Flange 5B
RD-KFL-436471	GT9450W	Flange 6B



Specifications

Item	GT9075WD	GT9090WD	GT9120WD	GT9150WD	GT9190WD	GT9240W	GT9300W	GT9380W	GT9450W	
Applicable air compressor	kW	75	90	120	150	190	240	300	380	450
Working range	Working fluid	Compressed air								
	Inlet air temperature °C	5 to 60								
	Inlet air pressure MPa	0.29 to 0.98			0.1 to 0.98			0.29 to 0.93		
	Cooling water inlet pressure MPa	0.2 to 0.74								
	Ambient temperature °C	2 to 48				2 to 45				
Rating	Processing air rate m ³ /min (ANR) 50/60Hz (*2)	11.4/13.2	16.3/18.9	20.8/23.8	25.9/30.1	32.9/38.6	39.9/47.0	48.4/57.0	60.3/71.0	79.0/93.0
	Processed air volume m ³ /min (Compressor intake condition) 50/60Hz (*3)	12.1/14.0	17.3/20.1	22.1/25.3	27.5/32.0	35.0/41.0	41.9/49.4	50.8/59.9	63.3/74.6	83.0/97.7
	Inlet air temperature °C	40								
	Inlet air pressure MPa	0.7								
	Cooling water inlet temperature °C	32								
	Cooling water volume m ³ /h 50/60Hz	1.5/1.7	2.4/2.8	2.5/2.9	2.7/3.0	3.0/3.2	3.6/3.8	3.4/4.0	4.3/5.0	6.0/7.1
	Ambient temperature °C	32								
	Outlet air pressure dew point °C	10 (*4)								
	Power Supply	Three-phase 200/200, 220 VAC 50/60 Hz								
	Electrical Specifications	Power Consumption kW 50/60Hz (*5)	1.7/2.0, 2.0	2.1/2.6, 2.5	2.1/2.6, 2.5	3.5/4.2, 4.2	4.7/6.2, 6.1	3.5/4.4, 4.3	5.1/5.7, 5.7	6.5/7.6, 7.5
Current consumption A 50/60Hz (*5)		8.0/8.0, 8.0	8.6/9.4, 8.9	8.6/9.4, 8.9	11.5/12.0, 11.0	15.5/17.0, 16.0	14.8/15.0, 14.9	17.6/18.9, 18.4	22.5/25.0, 24.5	29.6/32.0, 31.4
Starting current A 50/60Hz		110/100	110/115	110/115	140/155	165/190	135/135	83/77	98/91	135/135
Refrigerant	R-410A				R-407C					
Air inlet and outlet port size (*6)	R2	R2	Flange 2 1/2 B	Flange 3B	Flange 4B	Flange 5B	Flange 6B			
Weight kg	140	183	203	270	277	532	790	870	940	

*1: Outer panel: Quality Cool White (Munsell No.5GY7.5/0.5) Base: Munsell No.N3.0

*2: ANR shows conditions of 20°C atmospheric pressure and relative humidity 65%.

*3: This is a value converted to the intake condition of the air compressor in an environment of 32°C with a relative humidity of 75%.

*4: Contact CKD for information on the dew point performance guarantee.

*5: The power consumption and current consumption are both reference values under the rated conditions, and are not guaranteed

*6: The flange is JIS 10K FF or equivalent.

For maintenance parts, refer to CKD Components Product Website
(<https://www.ckd.co.jp/kiki/en/>) → "Model No." → Maintenance Parts

Selection Guide (GT9075WD to 9190WD)

As the max. processing air rate of each model is affected by the outlet air pressure dew point temperature, inlet air temperature, ambient temperature and inlet air pressure, compensation is required if it differs from the rated conditions in the usage section.

- STEP 1** Confirm the working conditions and the rated values listed in the specifications. Working conditions: Required processing air rate, required outlet air pressure dew point temperature, inlet air temperature, ambient temperature, inlet air pressure
- STEP 2** Check the correction coefficient for the processing air rate according to the required outlet air pressure dew point temperature, inlet air temperature, and ambient temperature.

(1) Temperature Compensation Coefficient
GT9075WD, GT9090WD, GT9120WD

Inlet air temperature (°C)	35			40			45			50			55			60		
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
Coefficient	0.68	1.15	1.15	0.57	1.00	1.09	0.46	0.83	0.90	0.34	0.67	0.72	0.22	0.58	0.65	0.10	0.48	0.55

GT9150WD

Inlet air temperature (°C)	35			40			45			50			55			60		
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
Coefficient	0.68	1.15	1.15	0.57	1.00	1.09	0.46	0.83	0.90	0.34	0.67	0.72	0.22	0.58	0.65	0.10	0.48	0.55

GT9190WD

Inlet air temperature (°C)	35			40			45			50			55			60		
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
Coefficient	0.68	1.15	1.15	0.57	1.00	1.09	0.46	0.83	0.90	0.34	0.67	0.72	0.22	0.58	0.65	0.10	0.48	0.55

- STEP 3** Check the compensation coefficient for processing air rate by inlet air pressure.

(2) Inlet air pressure coefficient

Inlet air pressure (MPa)	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.98
Coefficient	0.80	0.80	0.86	0.92	0.96	1.00	1.04	1.08	1.12

- STEP 4** Confirming upper limit coefficient

It is checked whether the value of the product of each coefficient ((1)×(2)) exceeds the upper limit coefficient .
If not, find the max. processing air rate by the product of each coefficient ((1)×(2)).
When this value is exceeded, find the maximum processing air rate by using the upper limit coefficient (3).

(3) Ceiling coefficient

Working conditions (inlet air pressure (MPa))	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.98
Coefficient	0.92	0.92	0.98	1.05	1.10	1.15	1.19	1.24	1.28

- STEP 5** Find the maximum processing air rate from each model rated processing air rate. Max. air processing rate = Rated processing air rate × Compensation coefficient determined by STEP 4
Select the model so that the required processing air rate is less than the maximum processing air rate.

Example of calculation

Conditions	Working Conditions	Selecting Conditions	Coefficient
Inlet air temperature	30 to 33 °C	35°C	(1) 1.15
Pressure dew point	10°C	10°C	
Inlet air pressure	0.55 to 0.75 MPa	0.5 MPa	(2) 0.92
Frequency	50Hz	50Hz	50Hz

Substitute the above conditions into the equation above to obtain the processing air rate when using the GT9150WD.

Product of each coefficient

(1) × (2) = 1.15 × 0.92 = 1.05

As the (3) ceiling coefficient of 1.05, when the inlet air pressure of the working conditions is 0.5 MPa, is not exceeded, the max. processing air rate will be 25.9 (reference processing air rate) × 1.05 = 27.1 m³/minis (ANR).

If the used air quantity is less than or equal to this value, select that model.

Selection guide (GT9240W to GT9450W)

As the max. processing air rate of each model is affected by the outlet air pressure dew point temperature, inlet air temperature, ambient temperature and inlet air pressure, compensation is required if it differs from the rated conditions in the usage section.

- STEP 1** Confirm the working conditions and the rated values listed in the specifications. Working conditions: Required processing air rate, required outlet air pressure dew point temperature, inlet air temperature, ambient temperature, inlet air pressure
- STEP 2** Check the correction coefficient for the processing air rate according to the required outlet air pressure dew point temperature, inlet air temperature, and ambient temperature.

(1) Temperature Compensation Coefficient

Inlet air temperature (°C)	35		40		45	
	10	15	10	15	10	15
Coefficient	1.20	1.29	1.00	1.09	0.80	0.87

Inlet air temperature (°C)	50		55		60	
	10	15	10	15	10	15
Coefficient	0.60	0.65	0.40	0.44	0.20	0.22

- STEP 3** Check the compensation coefficient for processing air rate by inlet air pressure.

(2) Inlet air pressure coefficient

Inlet air pressure (MPa)	0.10	0.20	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.93	0.98
Coefficient	0.60	0.66	0.72	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.15	1.19

*1:GT9300W to GT9450W working pressure range is 0.29 to 0.93MPa.

- STEP 4** Confirming upper limit coefficient

It is checked whether the value of the product of each coefficient ((1)×(2)) exceeds the upper limit coefficient .
If not, find the max. processing air rate by the product of each coefficient ((1)×(2)).
When this value is exceeded, find the maximum processing air rate by using the upper limit coefficient (3).

(3) Ceiling coefficient

Working conditions (inlet air pressure (MPa))	0.10	0.20	0.29	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.93	0.98
Coefficient	0.77	0.85	0.92	0.94	1.03	1.12	1.19	1.29	1.38	1.45	1.48	1.53

- STEP 5** Find the maximum processing air rate from each model rated processing air rate. Max. air processing rate = Rated processing air rate × Compensation coefficient determined by STEP 4
Select the model so that the required processing air rate is less than the maximum processing air rate.

Example of calculation

Conditions	Working Conditions	Selecting Conditions	Coefficient
Inlet air temperature	30 to 33 °C	35°C	(1) 1.20
Pressure dew point	10°C	10°C	
Inlet air pressure	0.55 to 0.75 MPa	0.5 MPa	(2) 0.87
Frequency	50Hz	50Hz	50Hz

Substitute the above conditions into the equation above to obtain the processing air rate when using the GT9240W.

Product of each coefficient

(1) × (2) = 1.20 × 0.87 = 1.04

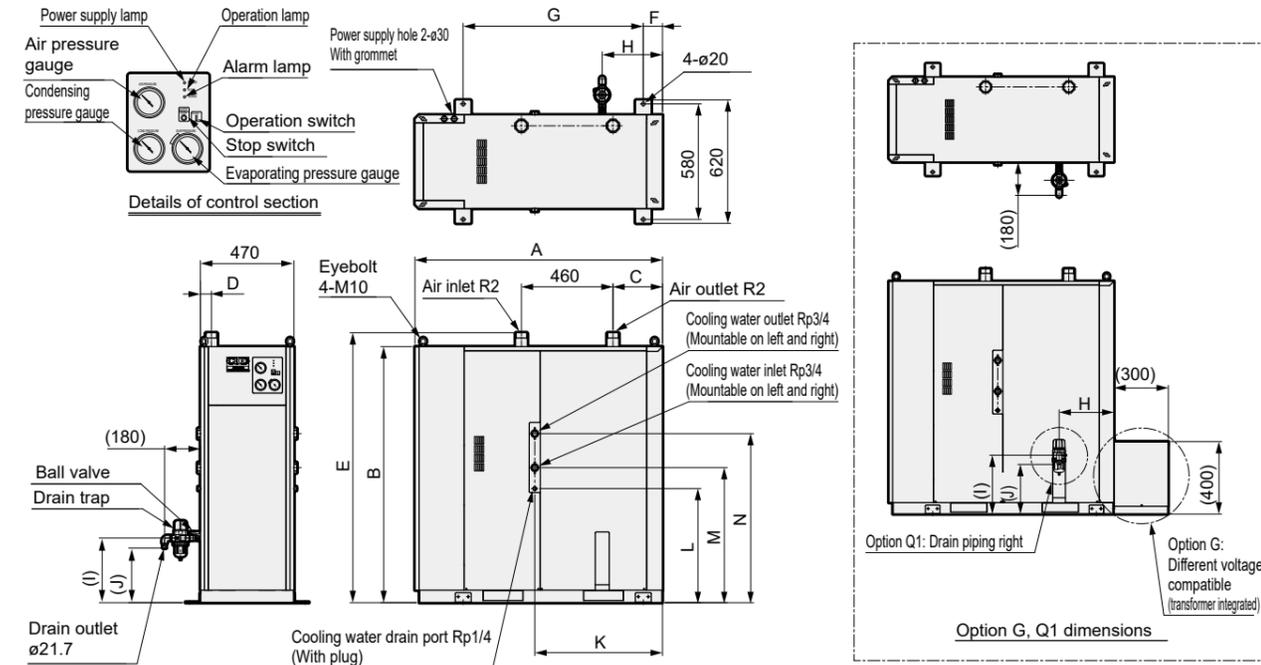
As the ceiling coefficient of 1.12 is not exceeded when the inlet air pressure of the working conditions is 0.5 MPa, the max. processing air rate will be 39.9 (reference processing air rate) × 1.04 = 41.4 m³/min (ANR).

If the used air quantity is less than or equal to this value, select that model.

Note: Contact CKD for compatibility with pressure dew points of less than 10°C.

Dimensions

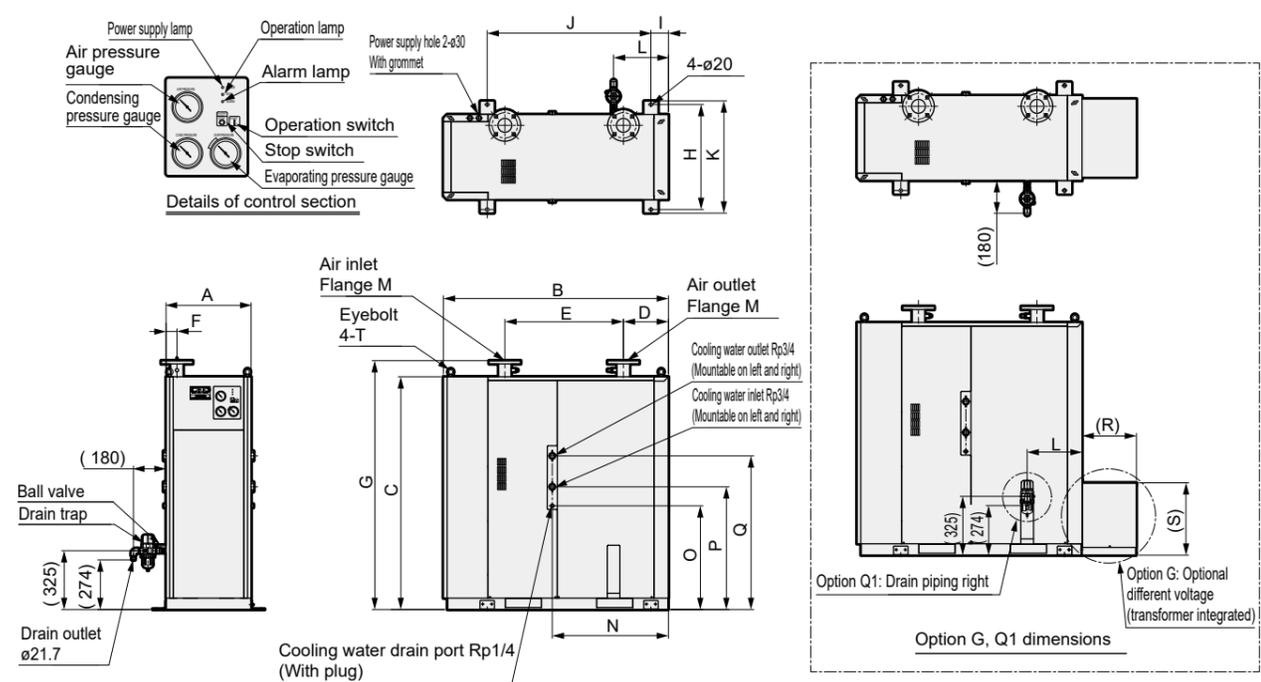
●GT9075WD, GT9090WD



*1: The drain trap and ball valve are attachments.
*2: Select either the right or left panel for installation of the cooling water piping. The installation position will be symmetrical on both the right and left side panels.

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N
GT9075WD	1081	1140	287	235	1204	67	868	287	320	269	486	505	665	778
GT9090WD	1244	1286	249	55	1356	97	905	303	325	274	642	573	678	849

●GT9120WD, GT9150WD, GT9190WD

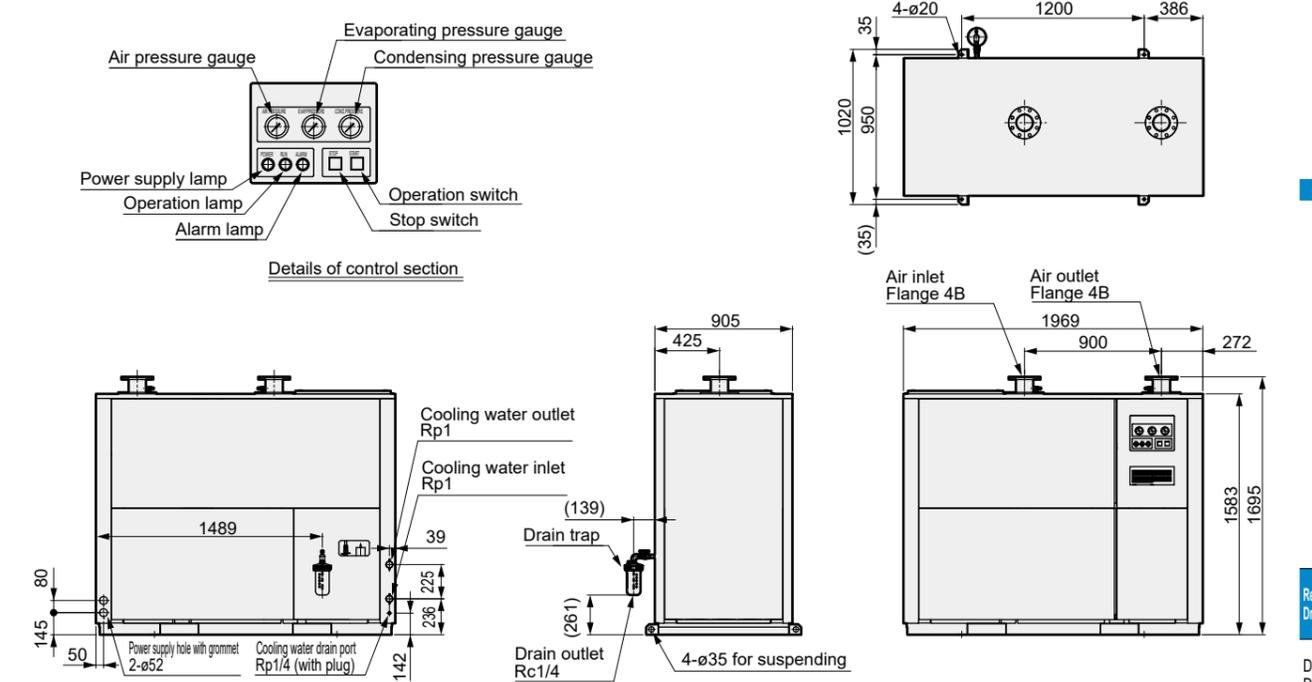


*1: The drain trap and ball valve are attachments.
*2: Select either the right or left panel for installation of the cooling water piping. The installation position will be symmetrical on both the right and left side panels.

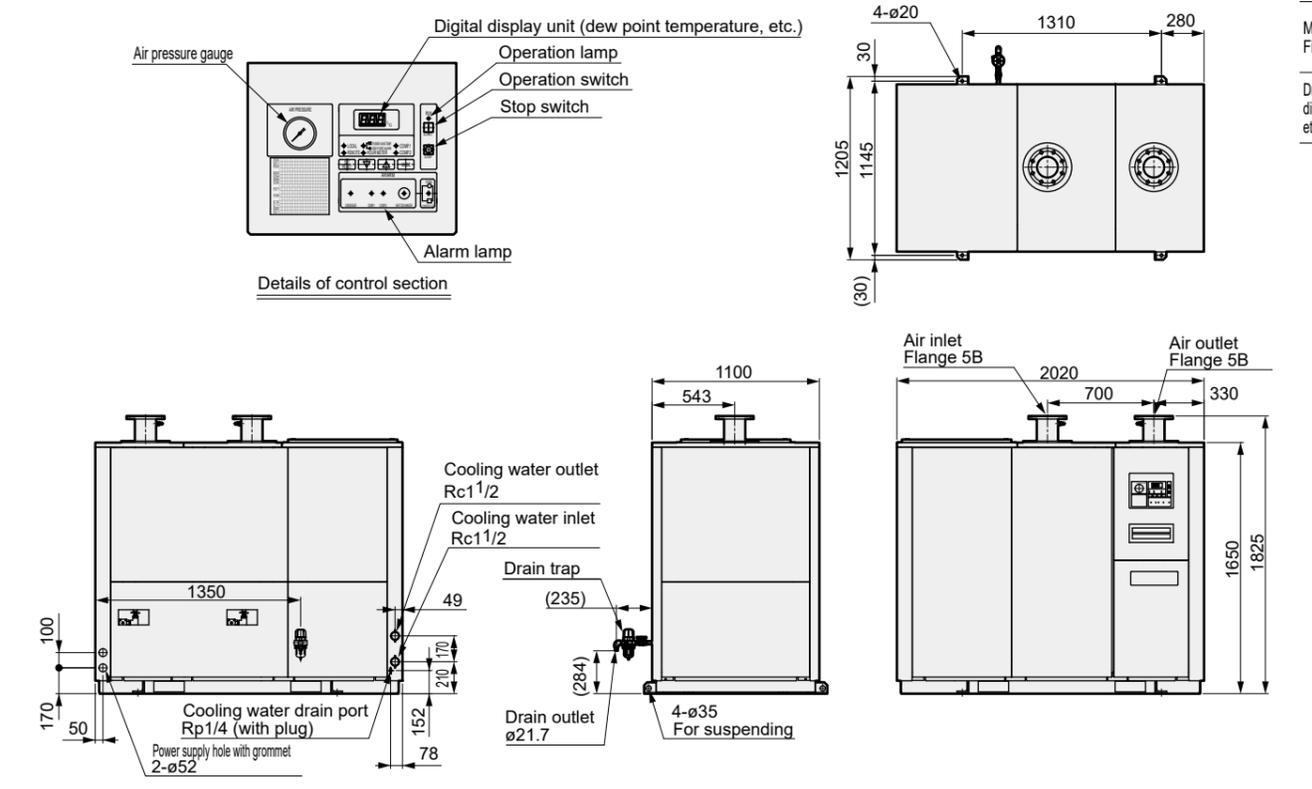
Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
GT9120WD	470	1244	1286	249	655	60	1375	580	97	905	620	303	2 1/2 B	642	573	678	849	300	400	M10
GT9150WD	700	1290	1332	305	720	225	1432	810	67	1030	850	325	3B	1000	120	190	563	350	420	M16
GT9190WD	700	1290	1332	107	860	225	1432	810	67	1030	850	325	3B	1000	120	190	563	350	420	M16

Dimensions

●GT9240W



●GT9300W, GT9380W



*1: The dew point display value is a guide, and is not the actual dew point. To measure the actual dew point, measure the secondary side air with a dew point gauge.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

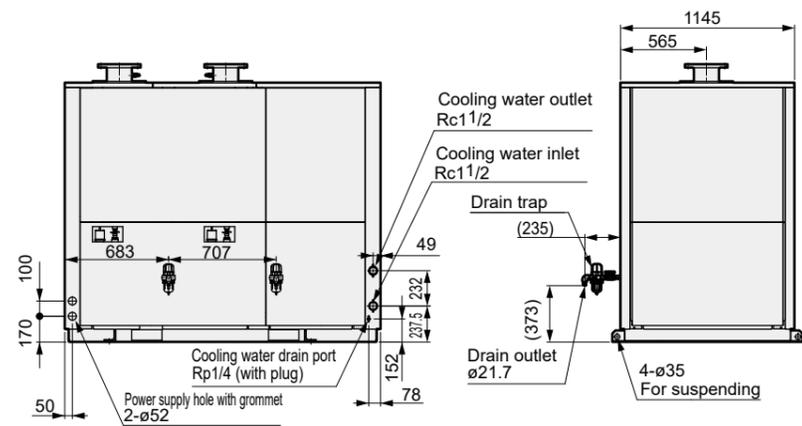
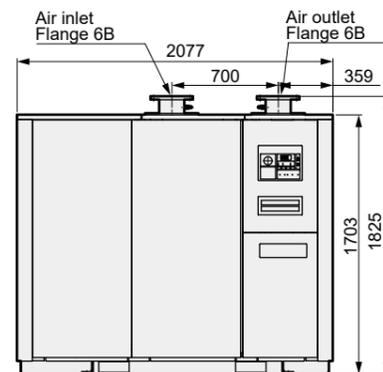
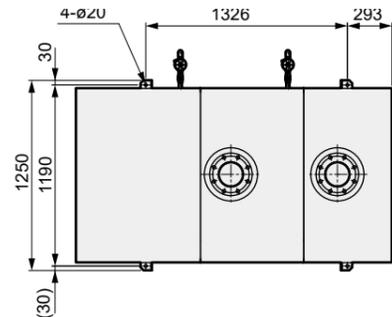
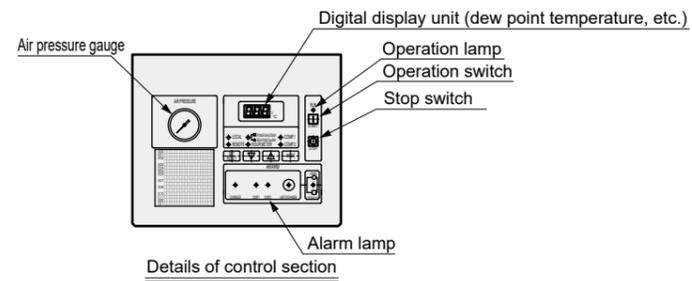
Ending

Ending

GT9000W(D) Series

Dimensions

●GT9450W



*1: The dew point display value is a guide, and is not the actual dew point. To measure the actual dew point, measure the secondary side air with a dew point gauge.

MEMO

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Ending

129

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Ending

128



Refrigerated air dryer Xeroaqua (Inverter-controlled water cooling)

GT9000WV2 Series

For direct air compressor connection, standard inlet air

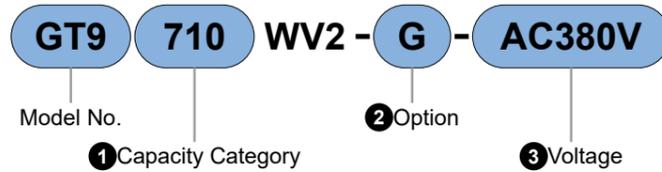
●Applicable air compressor: 710, 960 kW

Circuit
Diagram
Symbol



GT9000WV2 Series Specifications

Model No. Notation (inverter controlled water-cooling)



*1: The instruction manual and nameplates are provided in Japanese and English. However, the proof pressure certificate is available as Japanese text only. Contact CKD when an English version is required.

*2: Contact CKD if a photo of the completed product is required.

*3: Contact CKD to designate the color of the body panel.

① Capacity Category

Code	Description
710	710 kW
960	960 kW

② Option

Code	Description
Blank	Standard product
G	Different voltages supported
H2	Stainless steel nameplate
H3	Simple export packaging
N1	Copper tube rust proof coating

*1: Indicate options in alphabetical order.

*2: Specify the voltage of ③ even when the model is a standard product. Example) GT9710WV2-AC200V

*3: Option "H3" is packaged in plywooddis attached.

③ Voltage

Code	Description
AC200V	200 VAC
AC220V	220 VAC (standard 60Hz only)
AC230V	230 VAC
AC240V	240 VAC
AC380V	380 VAC
AC400V	400 VAC
AC415V	415 VAC
AC440V	440 VAC
AC480V	480 VAC

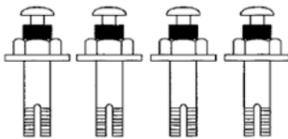
Note: Be sure to also indicate if you have selected the ② option as a standard product. Example) GT9710WV2-AC200V

Optional accessory model No.

●Foundation bolt set

Core rod implant foundation bolts: Set of 4, made of stainless steel

Part No.	Compatibility	Size
RD-QFL-436465	GT9710WV2	M16×L100
RD-QFL-436466	GT9960WV2	M20×L130



●Companion flange

Insert welded flange, Hexagon head bolt, Nut, Gasket set

Part No.	Compatibility	Size
RD-KFL-436472	GT9710WV2, GT9960WV2	Brandi 8B

Specifications

Item	GT9710WV2	GT9960WV2	
Applicable air compressor	kW	710	960
Working range	Working fluid	Compressed air	
	Inlet air temperature °C	5 to 60	
	Inlet air pressure MPa	0.1 to 0.93	
	Cooling water inlet pressure MPa	0.2 to 0.74	
	Ambient temperature °C	2 to 50	
Rating	Processing flow rate m ³ /min (ANR) 50/60Hz (*2)	139.1	184.2
	Processing flow rate m ³ /min (Compressor intake condition) 50/60Hz (*3)	146.1	193.4
	Inlet air temperature °C	40	
	Inlet air pressure MPa	0.7	
	Cooling water inlet temperature °C	32	
	Cooling water volume m ³ /h 50/60Hz	10.7	14.2
	Ambient temperature °C	32	
	Outlet air pressure dew point °C	10 (*4)	
	Outlet air pressure dew point switching range °C	10 to 18 (Manual setting/outside temperature linkage switching function equipped)	
	Power Supply	Three-phase 200/200, 220 VAC 50/60 Hz (*5)	
Electrical Specifications	Power consumption kW 50/60 Hz (*6)	14.8	19.6
	Operating current A 50/60Hz (*6)	49.0	68.6
Refrigerant	R-407C		
Air outlet/inlet piping bore size (*7)	Flange 8B		
Weight	kg	1330	2200

*1: Outer panel: Quality Cool White (Munsell No.5GY7.5/0.5)
Base: Munsell No.N3.0

*2: ANRshows conditions of 20°C atmospheric pressure and relative humidity 65%.

*3: This is a value converted to the intake condition of the air compressor in an environment of 32°C with a relative humidity of 75%.

*4: Contact CKD for information on the dew point performance guarantee.

*5: Make sure that the imbalance between phases of the power supply voltage is within ±2%.

*6: The power consumption and operation current are both reference values under the rated conditions, and are not guaranteed.

*7: Flange is 10K flange.

*8: GT9960WV2 is only available in Japan. Contact CKD if export is required.

For maintenance parts, refer to CKD Components Product Website
(<https://www.ckd.co.jp/kiki/en/>) → "Model No." → Maintenance Parts

Selection Guide

As the max. processing air rate of each model is affected by the outlet air pressure dew point temperature, inlet air temperature, ambient temperature and inlet air pressure, compensation is required if it differs from the rated conditions in the usage section.

- STEP 1** Confirm the working conditions and the rated values listed in the specifications. Working conditions: Required processing air rate, required outlet air pressure dew point temperature, inlet air temperature, ambient temperature, inlet air pressure
- STEP 2** Check the correction coefficient for the processing air rate according to the required outlet air pressure dew point temperature, inlet air temperature, and ambient temperature.

(1) Temperature Compensation Coefficient

Inlet air temperature (°C)	35		40		45	
Pressure dew point (°C)	10	18	10	18	10	18
Coefficient	1.20	1.20	1.00	1.20	0.80	0.96
Inlet air temperature (°C)	50		55		60	
Pressure dew point (°C)	10	18	10	18	10	18
Coefficient	0.60	0.72	0.40	0.48	0.20	0.24

- STEP 3** Check the compensation coefficient for processing air rate by inlet air pressure.

(2) Inlet air pressure coefficient

Inlet air pressure (MPa)	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.93
Coefficient	0.60	0.66	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.15

- STEP 4** Confirming upper limit coefficient

It is checked whether the value of the product of each coefficient ((1)×(2)) exceeds the upper limit coefficient (3). If not, find the max. processing air rate by the product of each coefficient ((1)×(2)).

When this value is exceeded, find the maximum processing air rate by using the upper limit coefficient (3).

(3) Ceiling coefficient

Working conditions (inlet air pressure (MPa))	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.93
Coefficient	0.72	0.79	0.87	0.96	1.04	1.11	1.20	1.28	1.35	1.38

- STEP 5** Find the maximum processing air rate from each model rated processing air rate. Max. air processing rate = Rated processing air rate × Compensation coefficient determined by STEP 4
Select the model so that the required processing air rate is less than the maximum processing air rate.

Example of calculation

Conditions	Working Conditions	Selecting Conditions	Coefficient
Inlet air temperature	38 to 43 °C	45 °C	(1) 0.80
Pressure dew point	15 °C	10 °C	
Inlet air pressure	0.55 to 0.75 MPa	0.5 MPa	(2) 0.87
Frequency	50Hz	50Hz	50Hz

Substitute the above conditions into the equation above to obtain the processing air rate when using the GT9710WV2.

Product of each coefficient

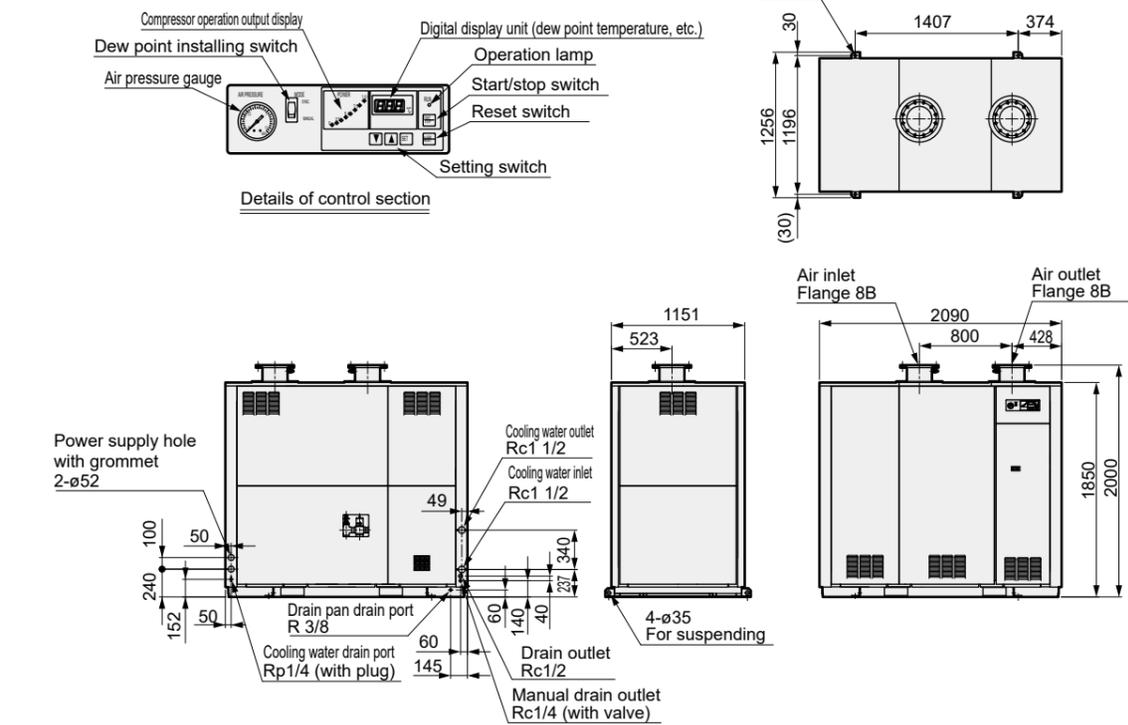
$$(1) \times (2) = 0.80 \times 0.87 = 0.69$$

As the (3) ceiling coefficient of 1.04 is not exceeded when the inlet air pressure of the working conditions is 0.5 MPa, the max. processing air rate will be 139.1 (reference processing air rate) × 0.69 = 95.9 m³/min (ANR).

If the used air quantity is less than or equal to this value, select that model.

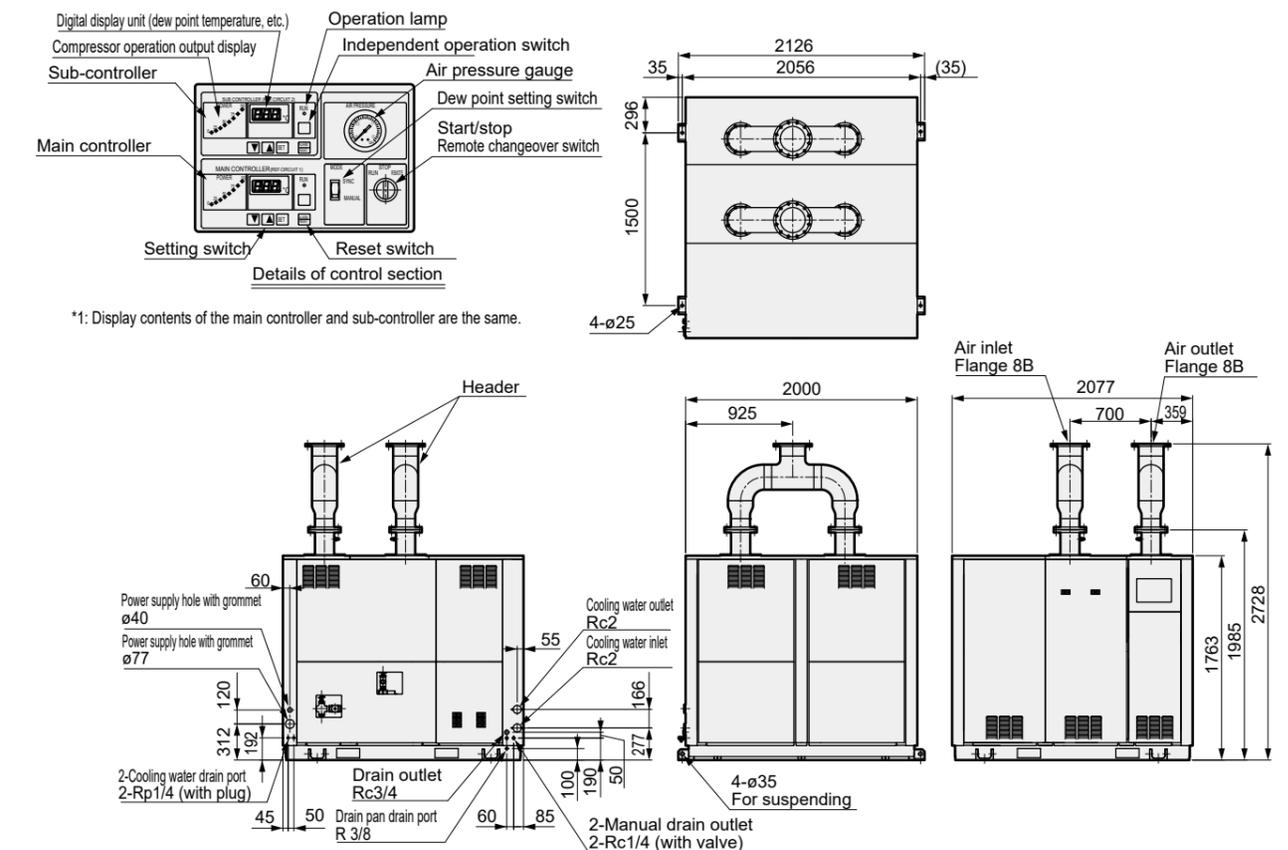
Dimensions

●GT9710WV2



*1: The dew point display value is a guide, and is not the actual dew point.
To measure the actual dew point, measure the secondary side air with a dew point gauge.

●GT9960WV2



*2: The bolts and nuts for installation of the header and gasket are included.

*3: The dew point display value is a guide, and is not the actual dew point.
To measure the actual dew point, measure the secondary side air with a dew point gauge.



Safety Precautions

Be sure to read this section before use.

For general precautions for pneumatic equipment, please refer to Intro 15.

Product-Specific Cautions: Xeroaqua Dryer GT Series

Manufacturer's Disclaimer

DANGER

The manufacturer cannot be held liable in the following cases:

- In the case where there are serious errors in the operator's use.
- Illegal modifications or repairs using non-standard parts by user.

Design / Selection

DANGER

- Do not use for applications other than removing moisture from compressed air.

CAUTION

- Do not use for caisson shields or medical devices such as breathing devices. Doing so may result in serious injury.

- Do not mount and use this device on transportation equipment such as vehicles or ships. Vibration may cause internal damage.

Air Quality

CAUTION

- Do not use when the inlet air contains corrosive gas, chemical solutions, organic solvents, or combustible gas.

- Refrigeration air dryers use copper pipes (phosphorus deoxidized copper pipes) for the refrigerant gas pipes and pipes within the heat exchanger. When corrosion causes a hole in these copper pipes, the refrigerant gas will leak and make it impossible to operate the unit, or cause failure such as water leaking from the compressed air outlet side of the air dryer. In addition, copper is also used as conductive materials for the electrical wiring, etc. Corrosion thereof may cause breakdowns such as electrical leakage accidents. In particular, copper piping in heat exchangers is subject to repeated condensation and drying, and

if corrosive components are present, they are likely to be concentrated on the copper piping surface and accelerate corrosion. Therefore, sufficient attention should be paid not only to the installation environment of air dryers but also to the intake air from air compressors. Failures caused by corrosion are not covered by the warranty. Plant exhaust may contain NOx (nitrogen oxides), SOx (sulfur oxides), CO₂ (carbon dioxide), and other substances that may promote corrosion, and consideration must be given to the installation location of air dryers and air compressors to ensure that they are not affected by factory exhaust. In rare cases, if chlorine-based organic solvents (trichloroethylene, etc.), aldehyde or alcohol (formaldehyde generated from building materials or methanol in the chemicals used) are absorbed by the air dryer and hydrolyzed, the copper piping could corrode (like an ant nest). Caution is required in these cases.

Maintenance Space

CAUTION

- Make sure that the space is well ventilated, and secure enough space for maintenance and inspection.
 - Applicable models: GT9075D(WD) to 9120D(WD)
Front: 1000 mm or more, either left or right side: 600 mm or more
 - Applicable models: GT9150D(WD), 9190D(WD)
Front: 1000 mm or more, left side: 600 mm or more
 - Applicable models: GT9240 to 9450, GT9240W to 9450W, GT9710WV2 to 9960WV2
Front surface, rear surface, and left side: 600 mm or more each

During transport

WARNING

- This product is filled with refrigerant (R-410A, R-407C). (GT9960WV2 is 12 kg and over while others are less than 12 kg) Upon transport (land, sea, air), be sure to comply with the laws and regulations applicable to each situation.

Other

WARNING

- This product is subject to the Law Concerning the Rational Use and Proper Management of Fluorocarbons (Law for CFC Emission Control). One or more simplified inspection per quarter and periodic inspections based on the law (GT9710WV2, GT9960WV2) are required. Be sure to collect the Freon gas when repairing or disposing of the product. Contact CKD for inspection and Freon gas collection.

CAUTION

- This unit is accompanied by a Class 2 Pressure Vessel Pressure Resistance Certificate. Please keep it in a safe place at your company while the unit is in use. (Applicable models: GT9240 to 9450, GT9240W to 9450W, GT9710WV2, 9960WV2) (Applications to the Labor Standards Supervision Office are no longer required in Japan.)

For precautions during mounting, installation, adjustment, use and maintenance, refer to the CKD Components Product Site (<https://www.ckd.co.jp/kiki/en/>) → "Model No. → [Instruction Manual](#)