

# CKD

## Refrigerating Type Air Dryer GX7000 Series



CKD Corporation

CC-1453A 1



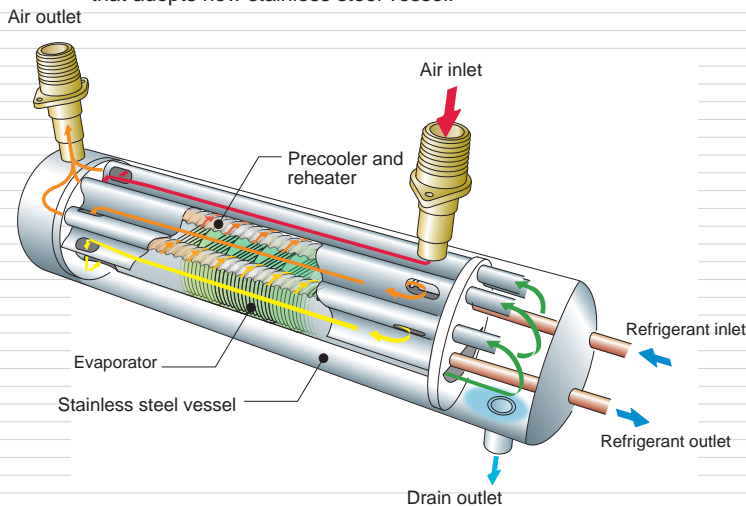
# GX7000 Series

with easy use and easy maintenance

Refrigerating type air dryer GX7000 Series / 3.7 to 140kW

## Point 1 High quality and high reliability

- ❖ **Stainless steel heat exchanger**  
compatible with oil-free air.  
Dust can be prevented with heat exchanger that adopts new stainless steel vessel.



- ❖ **Increased weathering performance**  
Corrosion resistance has been improved significantly with application of nickel plating on the copper refrigerant piping inside the heat exchanger unit.

- ❖ **Highly reliable snap drain is installed**  
With installation of a highly reliable snap drain, condensate can be drained completely. Manual drainage can be made without stopping the dryer.

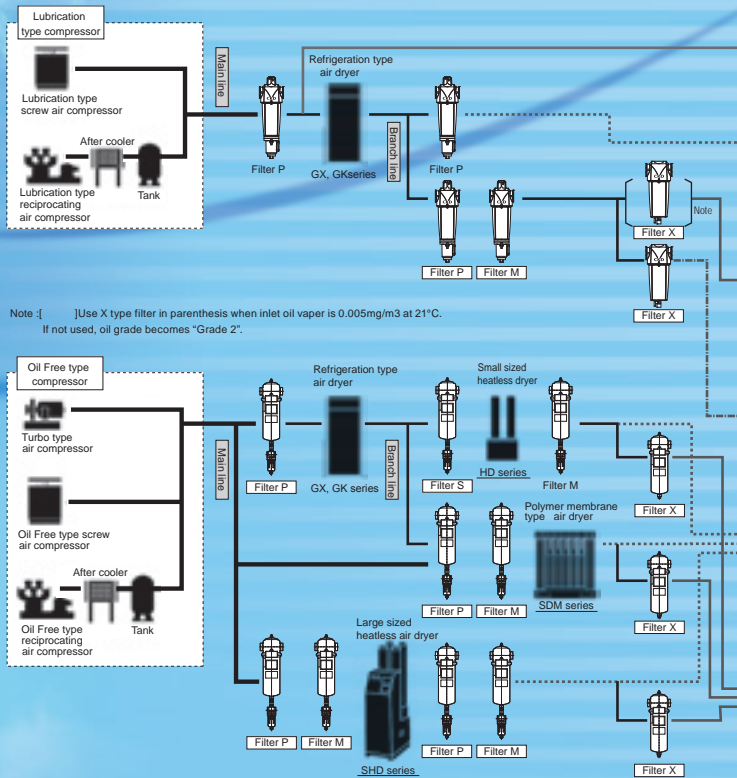
- ❖ **No drain blockage**  
Adoption of full bore type drain valve prevents blockage of drain piping.

## Point 2 Energy Saving

- ❖ **Adoption of drain system that has less air loss**  
Although the previous solenoid valve type suffered air loss when the loads were lower, air loss is minimized by the adoption of the float type. There is no air loss since the condensate is drained from time to time when collected from the dryer.

- ❖ **Minimal pressure loss**  
Pressure loss of less than 0.04MPa during rated operation was realized.

[Recommended Equipment Configuration]



Note: [ ] Use X type filter in parenthesis when inlet oil vapor is 0.005mg/m<sup>3</sup> at 21°C. If not used, oil grade becomes "Grade 2".

Air quality	Applications	Grade
Water drip removal air Large particle dust removal air	Construction, civil engineering machine Clean air (which does not need to be dry)	2:-
General dry air	Standard pneumatic components Standard pneumatic tools Labor saving components Pneumatic jigs and tools Air chuck	2:6:3
	Air vice Air for cleaning precision components	2:5:3
Dry air (oil free)	Instrumentation Measurement Logic control Luxury painting	1:6:1
		1:5:1
Dry air (odorless)	Food product industry (where air is not directly blown onto food) Pharmaceutical industry Stirring/transportation/dry/package/air for brewing	1:6:1
		1:5:1
Ultra dry air (oil free)	Ozone generator Powder transportation Drying furnace gas Drying the insulation gas of high-voltage generator Drying computer room Central control instrumentation	1:3:1
		1:2:1
		1:2:1
Ultra dry air (odorless)	Food product industry (where air is not directly blown onto food) Pharmaceutical industry Stirring/transportation/dry/package/brewing	1:3:1
		1:2:1
		1:2:1

**Point 3 Eco friendly refrigerant**

❖ **R-134a and R-410A refrigerant are adopted**

An environmentally friendly refrigerant which does not destroy the ozone layer.

**Point 4 Easy maintenance**

❖ **Only look at the operation panel for checking.**

Operating status can be checked at a glance of the refrigerant pressure gauge and operating light.



❖ **External drain discharger**

Drain discharger requires a daily check. Easy maintenance without stopping the dryer by the adoption of an external drain discharger that requires a daily check.

❖ **Dust filter equipped as standard**

Dirt adhering to the dust filter can be cleaned as that of an air conditioner. Easy care and cleaning.

❖ **Enables central control in the factory**

Remote control, operation, and alarm output functions are installed as standard in models GX7075D, GX7095D and GX7140D.

[Compressed air quality grade JIS B 8392-1: 2012]

Grade	Solid particles			Mass concentration Cp mg/m <sup>3</sup>	Temperature and moisture		Oil Total oil concentration mg/m <sup>3</sup>
	Max. number of particles in 1 m <sup>3</sup> according to the particle size d (μm)	Pressure dew point °C	Water concentration Cw g/m <sup>3</sup>				
0	Conditions stricter than Class 1 to be determined by 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	-	Cp>10	>5

Details have changed due to revision of JIS B 8392-1:2003 to JIS B 8392-1: 2012.

For example, "Grade 1:2:1" means:

- Solid particles 0.1 to 0.5 μm are 20,000 particles or less, 0.5 to 1.0 μm are 400 particles or less, and 1.0 to 5.0 μm are 10 particles or less
- Pressure dew point -40°C or less
- Oil concentration 0.01 mg/m<sup>3</sup> or less

\* Use corrosion resistant piping materials such as galvanized steel lining applied or stainless steel pipes. Install an air filter just before the dryer depending on piping material if abnormal objects such as rust or peeling may arise inside the piping.

\* Install an filter that removes contaminating substances inside piping just before installed equipment.

\* Note for oil Grade 1 : If the inlet oil paper exceeds 0.005mg/m<sup>3</sup>, install an X type filter additionally.

[Configuration of main line system (Inlet air temperature 35°C, Ambient temperature 30°C)]

Air compressor Output (kW)	Standard treated flow rate (m <sup>3</sup> /min)	Refrigerating type air dryer	Air filter (3μm or 5μm)	Micro alesscer		
				Oil removal	High performance oil removal	Micro alesscer for odor removal
3.7	0.46	GX7004	F3000-10-W-F1	M4000-15-W-F1S	M4000-15-W-F1	M4000-15-W-X
7.5	1.0	GX7008	F4000-15-W-F1	M6000-20-W-F1S	M6000-20-W-F1	M6000-20-W-X
15	2.3	GX7015	F6000-25-W-F1	M8000-25-W-F1S	M8000-25-W-F1	M8000-25-W-X
22	4.0	GX7022	AF2-05P25A	AF2-05M25A		AF2-05X25A
37	6.4	GX7037	AF2-08P40A	AF2-08M40A		AF2-08X40A
55	9.0	GX7055	AF2-11P40A	AF2-11M40A		AF2-11X40A
65	12.0	GX7065	AF2-13P50A	AF2-13M50A		AF2-13X50A
75	13.0	GX7075D	AF2-20P50A	AF2-20M50A		AF2-20X50A
95	19.0	GX7095D	AF2-20P50A	AF2-20M50A		AF2-20X50A
140	26.0	GX7140D	AF6033P-80	AF6033M-80		AF6033X-80

Note: This system can not be used for high pressure specifications (1.0 to 1.6MPa). Please consult with CKD.

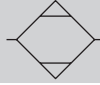


## Refrigerating Type Air Dryer

# GX7000 Series

- Applicable air compressors : 3.7kW, 7.5kW, 15kW, 22kW, 37kW, 55kW, 65kW, 75kW, 95kW, 140kW.

JIS symbol



## Specifications

Model No.		GX7004	GX7008	GX7015	GX7022	GX7037	GX7055	GX7065	GX7075D	GX7095D	GX7140D
Applicable air compressor	kW	3.7	7.5	15	22	37	55	65	75	95	140
Usage range	Working fluid	Compressed air									
	Inlet air temperature (Note 3) °C	10 to 50									
	Inlet air pressure MPa	0.2 to 1.0									
	Ambient temperature °C	2 to 43									
Rated	Treated flow rate (Note 2) m <sup>3</sup> /min	0.46	1.0	2.3	4.0	6.4	9.0	12.0	13.0	19.0	26.0
	Inlet air temperature °C	35									
	Inlet air pressure MPa	0.7									
	Ambient temperature °C	30									
Performance	Outlet air pressure dew point °C	10 (Note 5)									
	Pressure drop (Note 4) MPa	0.021	0.012	0.013	0.029	0.038	0.020	0.013	0.022	0.030	0.039
Power supply	V	Single phase AC220V 50Hz						3 phase AC380V 50Hz			
Electric specification	Power consumption kW	0.26	0.27	0.36	0.68	1.7	1.7	1.7	2.9	3.3	3.6
	Operating current A	1.4	1.4	2.1	4.4	8.0	8.1	8.1	5.5	6.2	7.7
	Starting current A	6	6	8	20	43	43	43	51	51	72
Refrigerant		R-134a				R-410A					
Air inlet/outlet port size		R1/2	R3/4	R1		R1-1/2		R2		R2-1/2	
Drain discharger		DT3010-15-W	DT3000-15-W			DT4000-15-W				5100-4C-FL445314	
Product mass	kg	18	26	35	44	83	94	106	140	171	238
Exhaust heat	kW	0.56	0.58	1.2	2.3	4.6	4.8	5.7	7.8	9.7	13.1

Note 1: Standard paint color. Outlet panel: Munsell No. 7.5Y7.5/0.5. Base: Galvanized steel plate (base metal).

Note 2: Treated flow rates are based on ANR and adjusted to atmospheric pressure, 32°C, 75%RH. The treated flow rate referred to the electric frequency at 50Hz.

Note 3: If both of the inlet air temperature and ambient temperature are maximum 50°C and 43°C respectively, use according to the rated flow is not guaranteed.

Operating life is shortened if operated continuously.

Note 4: The pressure drop is a typical value and not a guaranteed value.

Note 5: For guaranteed performance values, please contact us.

## How to order

**GX7** **015** - **AC220V**

**A** Classification of capacity

**B** Voltage

Symbol	Descriptions
<b>A Classification of capacity</b>	
004	3.7kW
008	7.5kW
015	15kW
022	22kW
037	37kW
055	55kW
065	65kW
075D	75kW
095D	95kW
140D	140kW
<b>B Voltage</b>	
AC220V	GX7004, GX7008, GX7015, GX7022, GX7037, GX7055, GX7065
AC380V	GX7075D, GX7095D, GX7140D

### Coefficients for model selection in GX7000 Series

#### ① Standard air flow (m<sup>3</sup>/min)

Model No.	GX7004	GX7008	GX7015	GX7022	GX7037	GX7055	GX7065	GX7075D	GX7095D	GX7140D
Air flow rate	0.46	1.0	2.3	4.0	6.4	9.0	12.0	13.0	19.0	26.0

#### ② Temperature correction coefficient

Inlet air temperature (°C)	35			40			45			50			
Pressure dew point (°C)	5	10	15	5	10	15	5	10	15	5	10	15	
Ambient temperature (°C)	25	0.87	1.10	1.31	0.72	0.86	1.05	0.60	0.72	0.86	0.55	0.69	0.76
	30	0.80	1.00	1.20	0.66	0.79	0.96	0.55	0.66	0.79	0.50	0.63	0.70
	35	0.78	0.94	1.15	0.63	0.74	0.92	0.51	0.62	0.74	0.46	0.57	0.65
	40	0.73	0.88	1.08	0.58	0.65	0.86	0.47	0.56	0.68	0.40	0.51	0.58

#### ③ Pressure correction coefficient

Air pressure (Mpa)	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Correction coefficient	0.67	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.20

#### ④ Maximum coefficient (Maximum value of ②)

Model No.	GX7004	GX7008	GX7015	GX7022	GX7037	GX7055	GX7065	GX7075D	GX7095D	GX7140D
Maximum coefficient	1.15	1.26	1.24	1.28	1.17	1.34	1.34	1.24	1.27	1.24

Please select model that has value of used air content calculation result below.

Dryer processing air flow = ① Standard air flow × ② Temperature correction coefficient (In inlet air temperature, pressure dew point, ambient temperature) × ③ Pressure correction coefficient

Note: Because an overflow may cause moisture to leak on the secondary side, be sure that the temperature compensation coefficient ② does not exceed the maximum coefficient ④ during use.

#### <Calculation example>

For GX7015 with Inlet temperature 35°C • Ambient temperature 35°C • Outlet pressure dew point 10°C • Air pressure 0.7MPa, calculate process amount:

② Temperature correction coefficient = 0.94

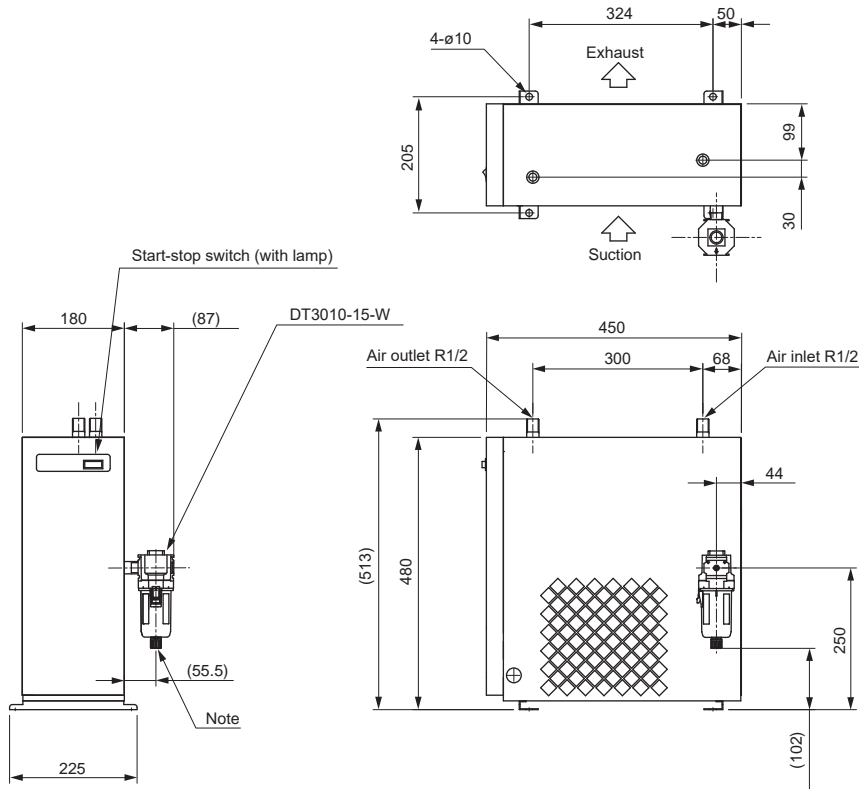
Since it does not surpass GX7015's maximum coefficient of ④ 1.24, dryer processing air flow is:

2.3 (Standard air flow) × 0.94 × 1.00 = 2.162m<sup>3</sup>/min.

# GX7000 Series

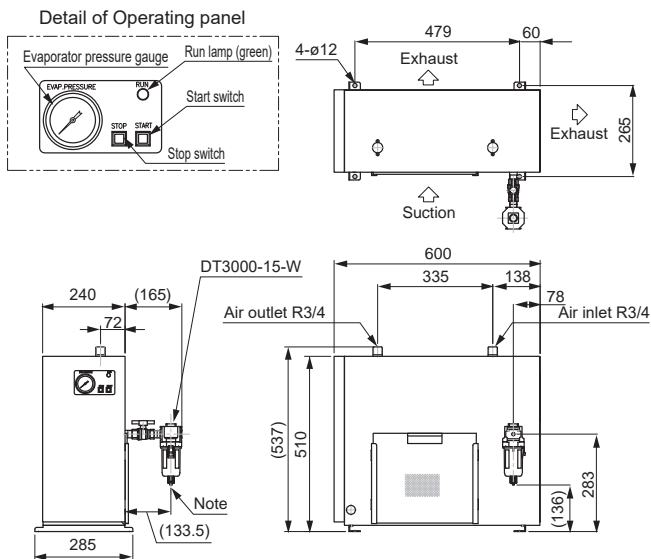
## Dimensions

### • GX7004



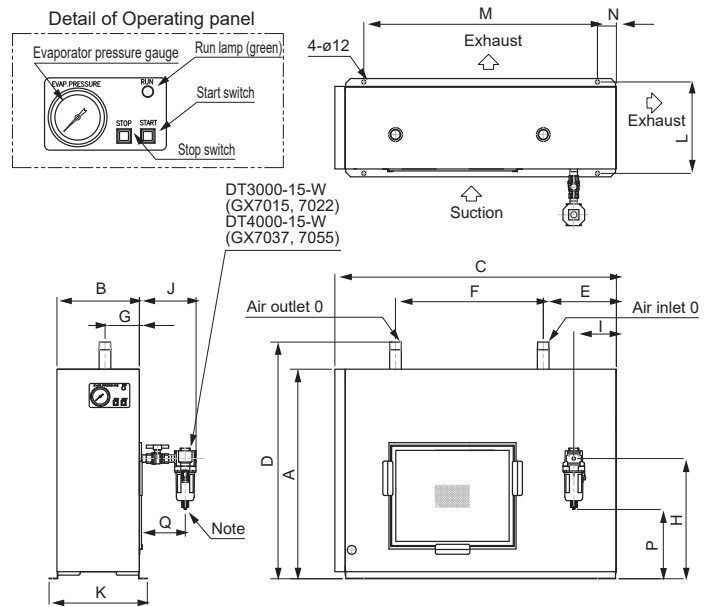
Note  
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

### • GX7008



Note  
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

### • GX7015 to GX7055

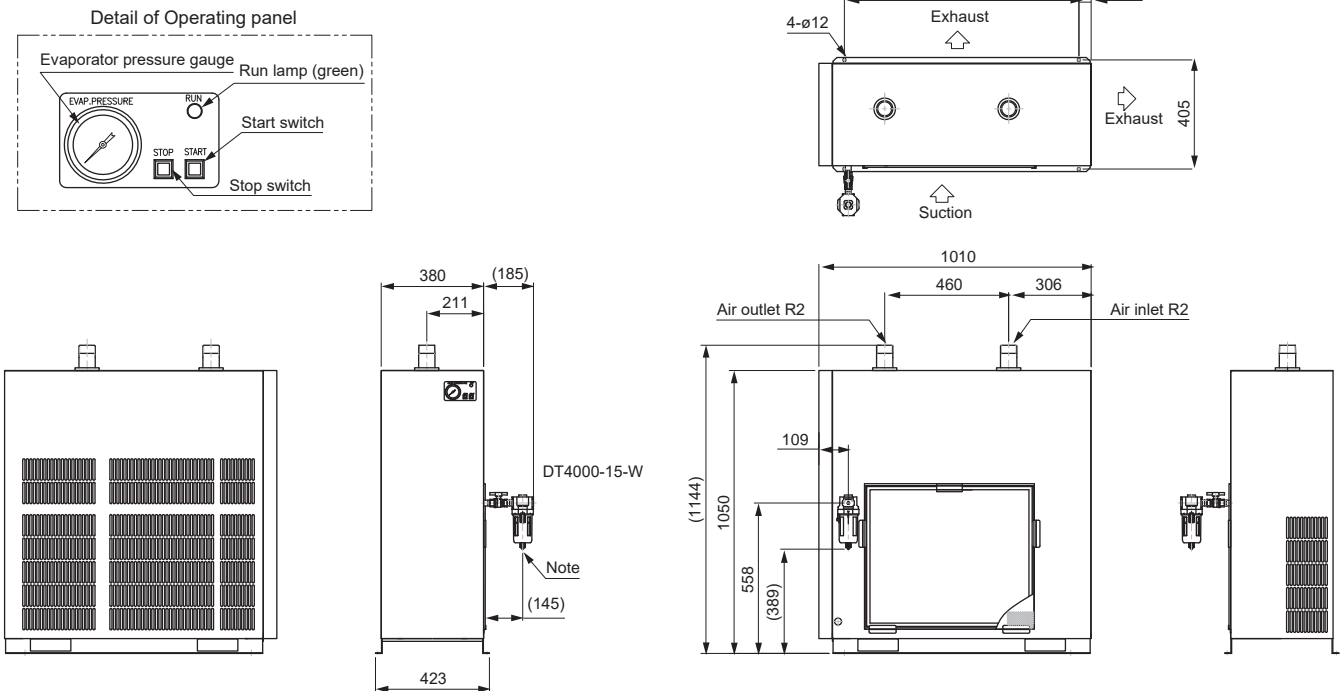


Note  
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
GX7015	610	240	820	(689)	213	430	100	350	124	(165)	286	266	680	55	R1	(203)	(133.5)
GX7022	610	240	820	(685)	226	430	100	346	137	(165)	286	266	680	55	R1	(199)	(133.5)
GX7037	900	300	960	(1004)	631	108	163	456	142	(185)	343	325	840	45.4	R1½	(287)	(145)
GX7055	990	300	980	(1070)	628	122	146	490	191	(185)	343	325	840	45.3	R1½	(321)	(145)

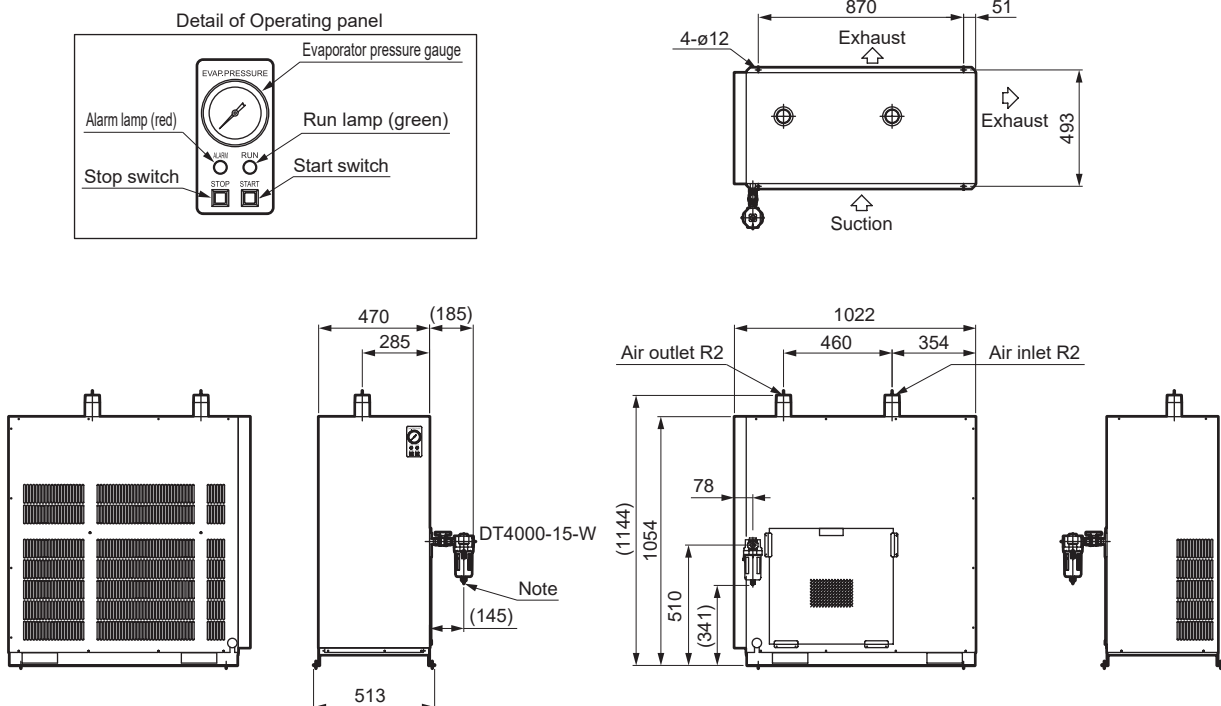
### Dimensions

• GX7065



Note  
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

• GX7075D



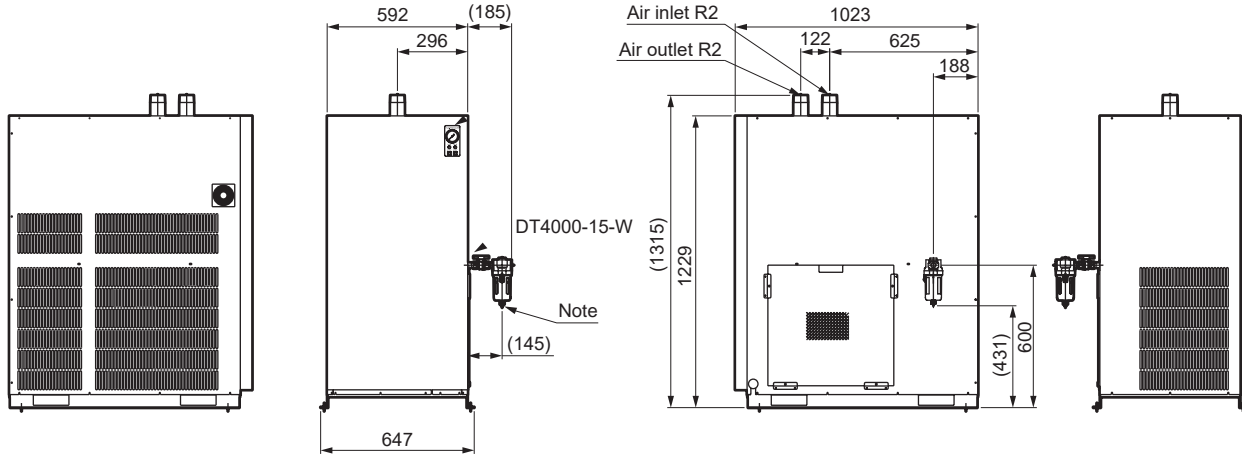
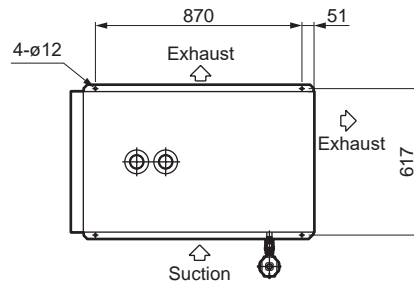
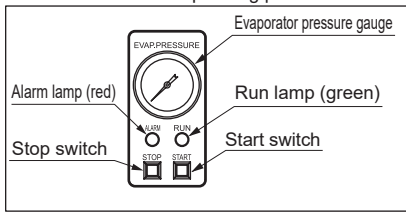
Note  
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.



## Dimensions

### • GX7095D

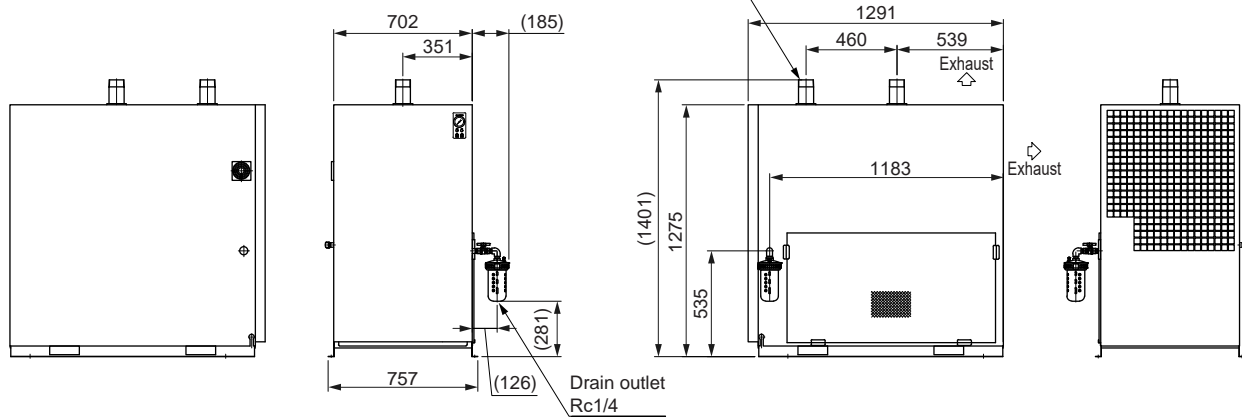
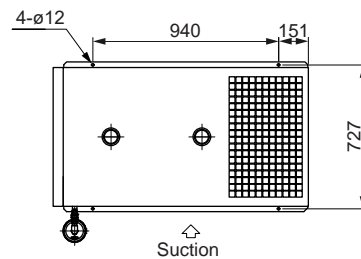
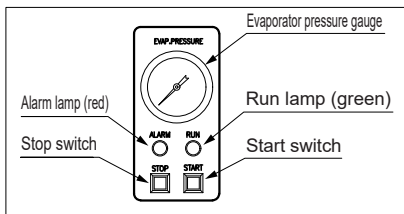
Detail of Operating panel



Note  
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

### • GX7140D

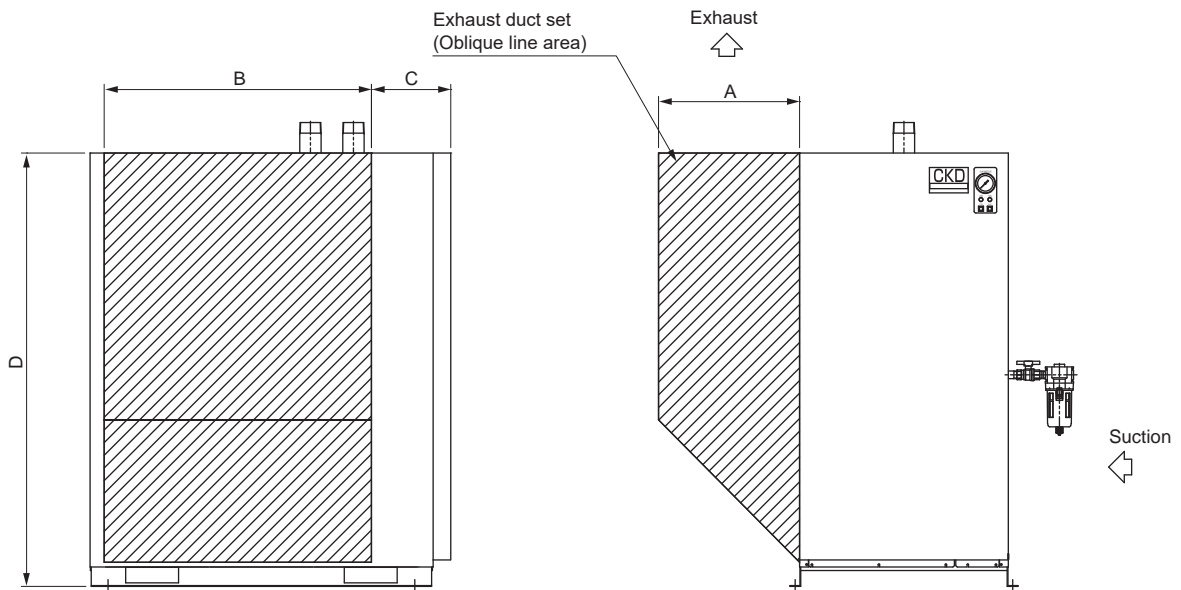
Detail of Operating panel





## Accessories (Optional)

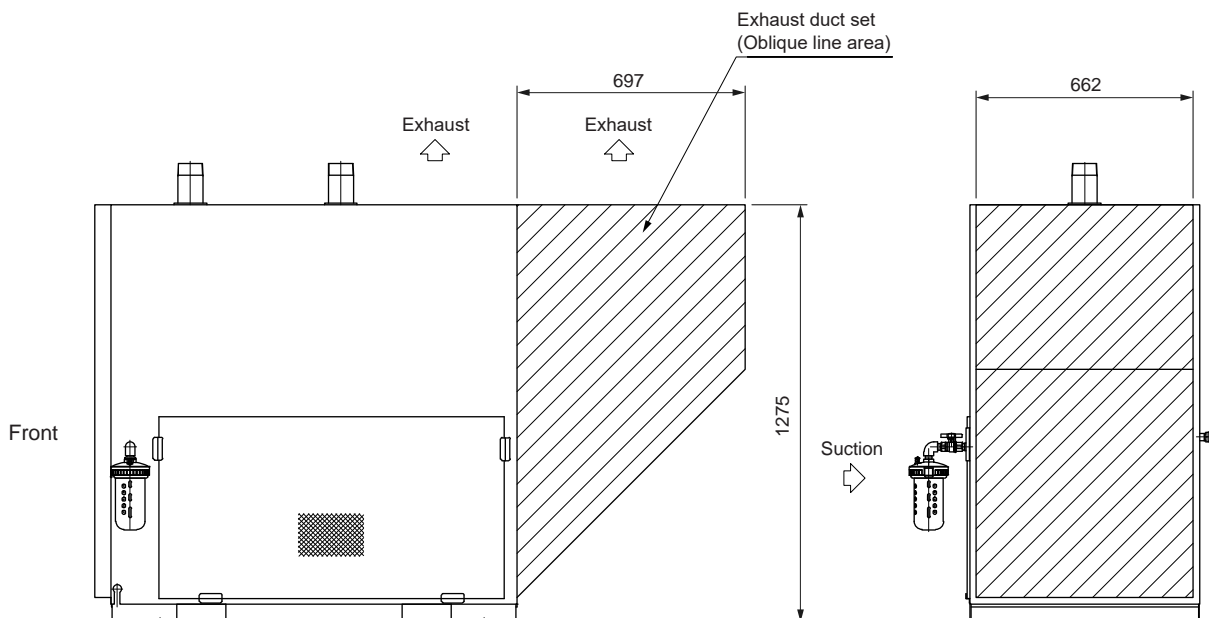
Exhaust duct set (Optional)



Note  
The above figure shows a state in which mounted the exhaust duct to the dryer body.  
The exhaust duct and mounting screw set are available.

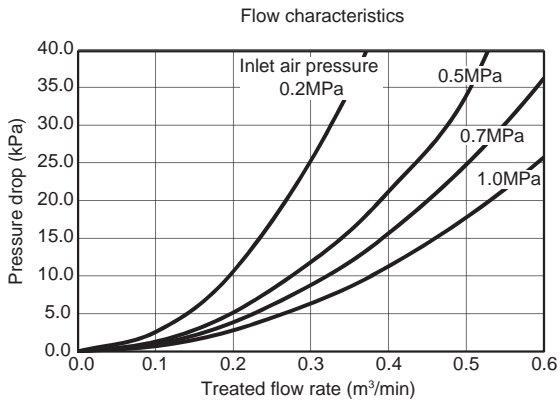
Model No.	Applicable model	Dimension (mm)			
		A	B	C	D
GX-KFL-614457	GX7075D	350	872	98	1054
GX-KFL-614458	GX7095D	400	758	225	1229

• GX-KFL-614725 (Applicable model GX7140D)

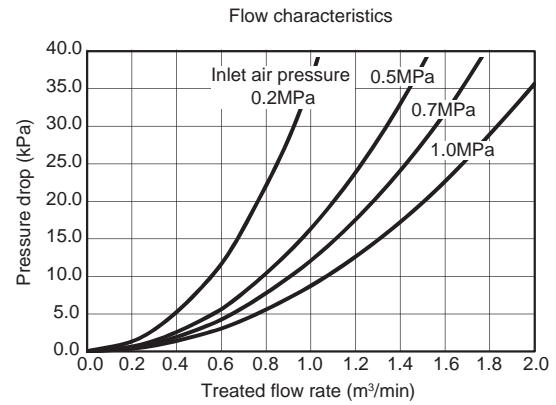


## Flow characteristics

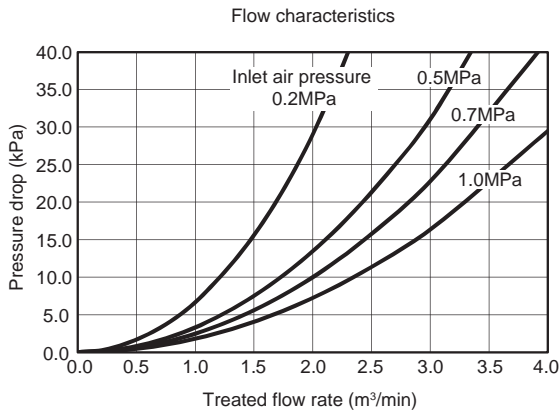
### • GX7004



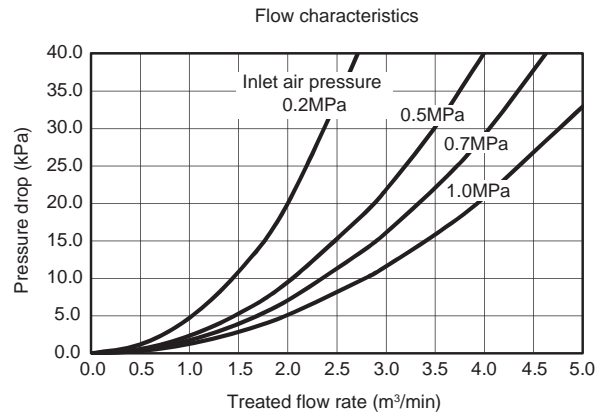
### • GX7008



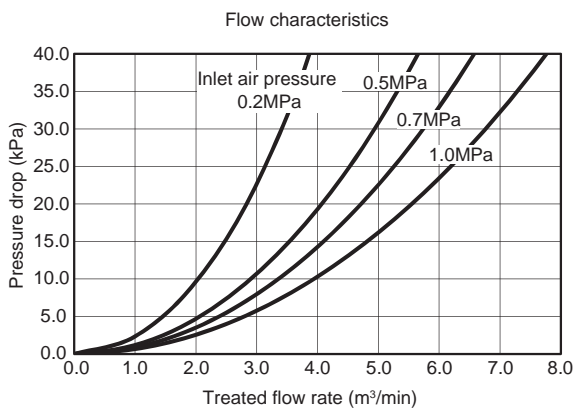
### • GX7015



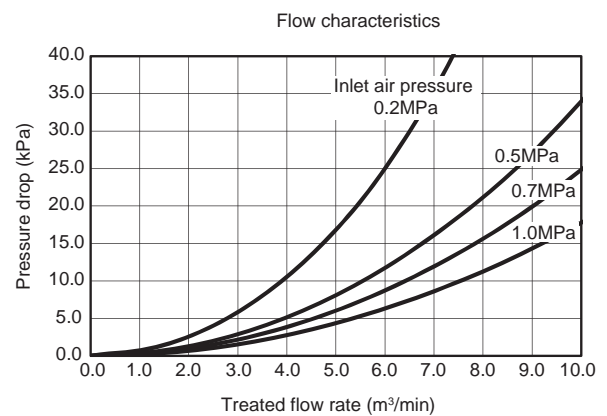
### • GX7022



### • GX7037

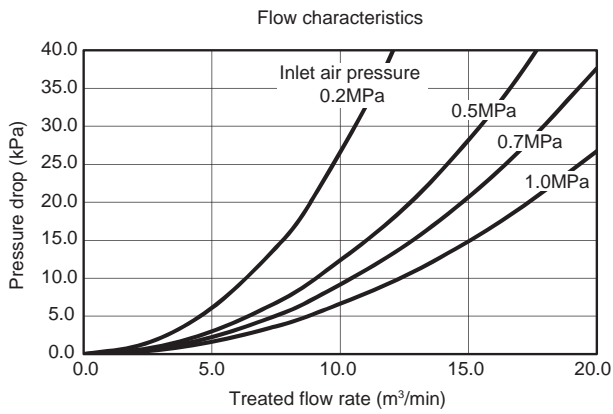


### • GX7055

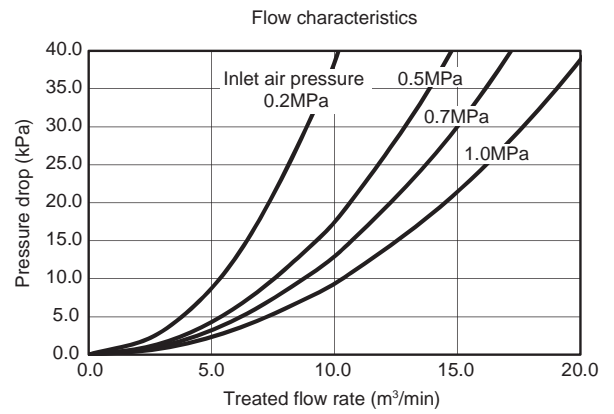


## Flow characteristics

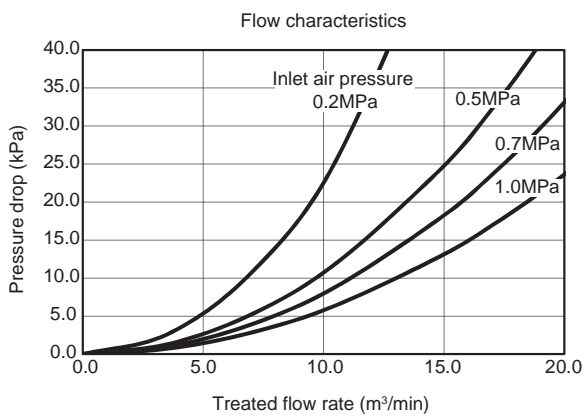
• GX7065



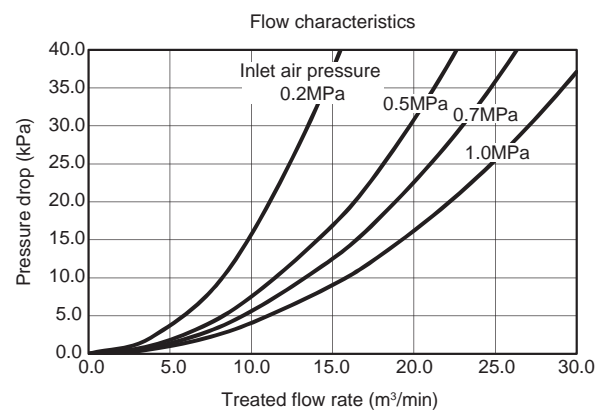
• GX7075D



• GX7095D



• GX7140D



# Main line unit

Saturated vapor rate table (relative humidity 100%)

(Unit: g/m<sup>3</sup>)

		Temperature at 1°C unit									
		0	1	2	3	4	5	6	7	8	9
Temperature at 10°C unit	90	418	433	449	465	481	498	515	532	551	569
	80	291	302	313	325	337	350	363	376	390	404
	70	197	205	213	222	231	240	250	259	270	280
	60	130	135	141	147	154	160	167	174	182	189
	50	82.8	86.7	90.8	95.0	95.5	104	109	114	119	124
	40	51.1	53.7	56.4	59.3	62.2	65.3	68.5	71.9	75.4	79.0
	30	30.3	32.0	33.7	35.6	37.6	39.6	41.7	43.9	46.2	48.6
	20	17.2	18.3	19.4	20.6	21.8	23.0	24.4	25.8	27.2	28.7
	10	9.39	10.0	10.7	11.3	12.1	12.8	13.6	14.5	15.4	16.3
	0	4.85	5.19	5.56	5.94	6.36	6.79	7.26	7.75	8.27	8.81
	-0	4.84	4.48	4.13	3.82	3.52	3.24	2.99	2.75	2.53	2.33
	-10	2.14	1.96	1.80	1.65	1.51	1.39	1.27	1.16	1.06	0.967
	-20	0.882	0.804	0.732	0.667	0.607	0.551	0.501	0.454	0.412	0.373
	-30	0.338	0.305	0.276	0.249	0.225	0.203	0.183	0.164	0.148	0.133
	-40	0.119	0.107	0.0955	0.0854	0.0763	0.0681	0.0608	0.0541	0.0482	0.0428
	-50	0.0381	0.0338	0.0299	0.0265	0.0234	0.0207	0.0183	0.0161	0.0142	0.0125
	-60	0.0109	0.00959	0.00840	0.00734	0.00642	0.00560	0.00488	0.00425	0.00369	0.00320
	-70	0.00277	0.00240	0.00207	0.00179	0.00154	0.00133	0.00114	0.000977	0.000836	0.000715
	-80	0.000610	0.000520	0.000442	0.000376	0.000318	0.000269	0.000228	0.000192	0.000162	0.000136
	-90	0.000114	0.0000952	0.0000795	0.0000663	0.0000551	0.0000458	0.0000379	0.0000313	0.0000259	0.0000213

## Reading saturated vapor rate table

The temperature in 10°C units is shown in the vertical column, and the temperature in 1°C units is shown in the horizontal row. (E.g.) Find saturated vapor rate for 32°C.

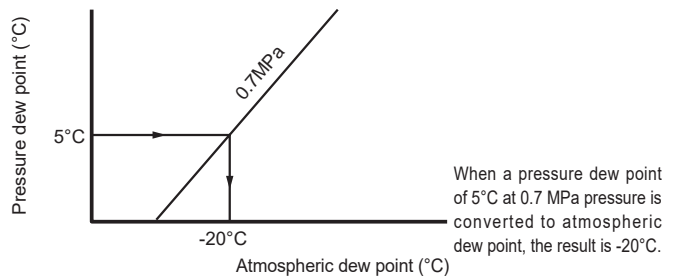
		Temperature at 1°C unit				
		0	1	2	3	
Temperature at 10°C unit	40					
	30			33.7		
	20					

33.7 g/m<sup>3</sup> can be selected from the above table.

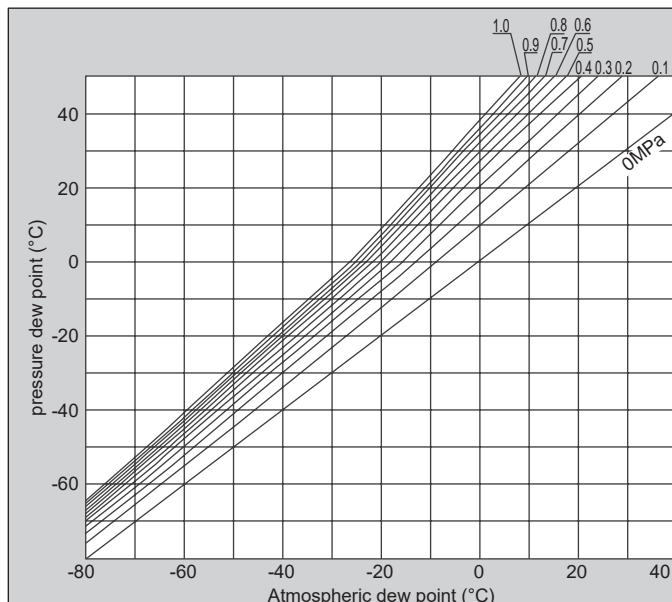
## Reading pressure dew point - atmospheric dew point conversion table

This table is used to convert the pressure dew point at each pressure to the atmospheric pressure dew point, or vice versa.

(E.g.) Find the atmospheric dew point where pressure is 0.7MPa and pressure dew point 5°C.



## Pressure dew point - atmospheric dew point conversion table





# Safety Precautions

Be sure to read this section before use.

When designing and manufacturing a device using CKD products, the manufacturer is obligated to check that device safety mechanism, pneumatic control circuit, or water control circuit and the system operated by electrical control that controls the devices is secured.

It is important to select, use, handle and maintain the product appropriately to ensure that the CKD product is used safely.


Observe warnings and precautions to ensure device safety.


Check that device safety is ensured, and manufacture a safe device.




## WARNING

- 1** This product is designed and manufactured as a general industrial machine part. It must be handled by an operator having sufficient knowledge and experience.
  - 2** Use this product in accordance with specifications.  
This product must be used within its stated specifications. In addition, never modify or additionally machine this product. This product is intended for use in general industrial machinery equipment or parts. It is not intended for use outdoors (except for products with outdoor specifications) or for use under the following conditions or environments. (Note that this product can be used when CKD is consulted prior to its usage and the customer consents to CKD product specifications. The customer should provide safety measures to avoid danger in the event of problems.)
    - ①** Use for applications requiring safety, including nuclear energy, railways, aircraft, marine vessels, vehicles, medical devices, devices or applications in contact with beverages or foodstuffs, amusement devices, emergency cutoff circuits, press machines, brake circuits, or safety devices or applications.
    - ②** Use for applications where life or assets could be significantly affected, and special safety measures are required.
  - 3** Observe organization standards and regulations, etc., related to the safety of device design and control, etc. ISO4414, JIS B 8370 (Pneumatics fluid power - General rules and safety requirements for systems and their components) JFPS2008 (Principles for pneumatic cylinder selection and use) Including the High Pressure Gas Safety Act, Industrial Safety and Health Act, other safety rules, organization standards and regulations, etc.
  - 4** Do not handle, pipe, or remove devices before confirming safety.
    - ①** Inspect and service the machine and devices after confirming safety of all systems related to this product.
    - ②** Note that there may be hot or charged sections even after operation is stopped.
    - ③** When inspecting or servicing the device, turn OFF the energy source (air supply or water supply), and turn OFF power to the facility. Discharge any compressed air from the system, and pay attention to possible water leakage and leakage of electricity.
    - ④** When starting or restarting a machine or device that incorporates pneumatic components, make sure that the system safety, such as pop-out prevention measures, is secured.
  - 5** Observe warnings and cautions in the following pages to prevent accidents.
- The precautions are ranked as "DANGER", "WARNING" and "CAUTION" in this section.

 **DANGER:** When a dangerous situation may occur if handling is mistaken leading to fatal or serious injuries, and when there is a high degree of emergency to a warning.

 **WARNING:** If handled incorrectly, a dangerous situation may occur, resulting in death or serious injury.

 **CAUTION:** When a dangerous situation may occur if handling is mistaken leading to minor injuries or physical damage.

Note that some items described as "CAUTION" may lead to serious results depending on the situation. Every item provides important information and must be observed.

## Warranty

- 1** **Warranty period**  
The product specified herein is warranted for one (1) year from the date of delivery to the location specified by the customer.
- 2** **Warranty coverage**  
If the product specified herein fails for reasons attributable to CKD within the warranty period specified above, CKD will promptly provide a replacement for the faulty product or a part thereof or repair the faulty product at one of CKD's facilities free of charge. However, following failures are excluded from this warranty:
  - 1) Failure caused by handling or use of the product under conditions and in environments not conforming to those stated in the catalog, the Specifications, or the Instruction Manual.
  - 2) Failure caused by use of the product exceeding its durability (cycles, distance, time, etc.) or caused by consumable parts.
  - 3) Failure not caused by the product.
  - 4) Failure caused by use not intended for the product.
  - 5) Failure caused by modifications/alterations or repairs not carried out by CKD.
  - 6) Failure caused by reasons unforeseen at the level of technology available at the time of delivery.
  - 7) Failure caused by acts of nature and disasters beyond control of CKD.The warranty stated herein covers only the delivered product itself. Any loss or damage induced by failure of the delivered product is excluded from this warranty.  
Note: For details on the durability and consumable parts, contact your nearest CKD sales office.
- 3** **Compatibility check**  
The customer is responsible for confirming the compatibility of CKD products with the customer's systems, machines and equipment.



Main line component

## Safety precautions

Always read this section before starting use.

Refer to Pneumatic, Vacuum and Auxiliary Components No.CB-024SA for general precautions.

Refrigerated air dryer GX7000 Series

### Manufacturer's Liability

#### ⚠ WARNING

- The manufacturer cannot be held liable in the following cases:
  - Serious errors in use occur due to the operator.

- Illegal modifications or repairs using nonstandard parts by user.

### Design & Selection

#### Applications

#### ⚠ WARNING

- Use for applications other than dehumidifying compressed air is prohibited.
- This product must not be used for medical devices for caisson shields or breathing devices.

#### ⚠ CAUTION

- Do not mount and use this device onto transportation equipment such as vehicles or ships.
- In case of using the air dryer in the compressed air line with rapid compressor fluctuation, be sure to install the air tank after the air dryer so that the pressure fluctuation becomes 0.34MPa/min or less. If the pressure fluctuation is rapid, it may result in malfunction.
- Sudden burden changes may result in dew point's specification value changes. Hence, in case that dew point efficiency must be strictly controlled, please select model that has flexibility on ability.

#### Quality of air

#### ⚠ CAUTION

- Do not use this product if inlet air contains corrosive gases, chemicals, organic solvents, or combustible gases.

#### Air temperature

#### ⚠ CAUTION

- Do not use air that exceeds the maximum inlet temperature.
- If the inlet temperature is high, install an after cooler, etc., and lower air to the maximum inlet temperature (or less). Drainage generated in the after cooler must be removed before the dryer.
- Refer to the example of system selection for details on the model no. of filter used on the secondary side of the product.

### Transportation

#### ⚠ WARNING

- This product is filled with less than 12kg of refrigerant (R-134a, R-410A). Always follow respective laws and ordinances when transporting this product (by land, sea or air).

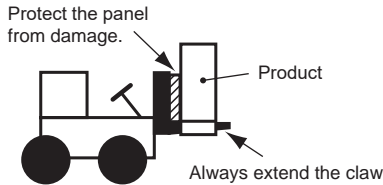
## Transportation

### ⚠ WARNING

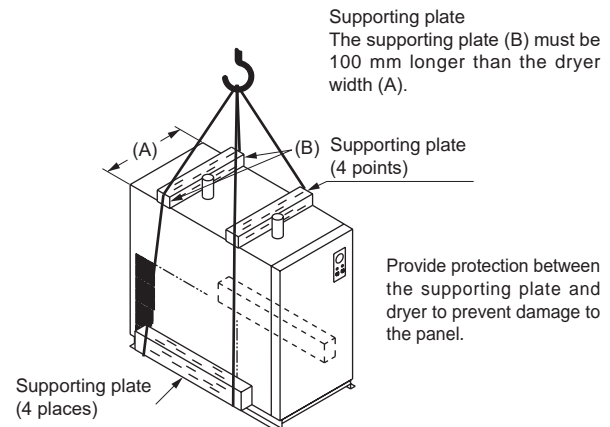
■ During transport, this product shall not be laid on its side, and vibration and impact shall not be applied.

■ Transportation by forklift

(Series GX7065, GX7075D, GX7095D, GX7140D)



■ Transportation by crane



## Installation & Adjustment

### Electric wiring

### ⚠ WARNING

■ Use this product within the power voltage range on specifications.

### Adjustment and operation

### ⚠ CAUTION

- Do not start/stop frequently. A failure is caused.
- Start/stop the dryer 10 or less times/hour, and after restarting, wait at least 5 minutes before stopping again. The stop time must be 3 minutes or longer.
- Install an overload protection ground-fault circuit breaker on the main power supply to provide isolated overload protection and to prevent electrical shock from current leakage.

■ Ground the GND.

### Ambient temperature

### ⚠ CAUTION

- Do not use this product in a place exceeding the maximum working temperature.
- Do not install the product where it is subjected to radiated heat.
- If maximum working pressure is exceeded, install a ventilation fan or air inlet, etc.
- Do not use this product where the temperature is lower than the minimum working temperature.

### Location

### ⚠ CAUTION

- Install this product indoors.
- Install the product in a well-ventilated place free of dirt and dust.
- Do not install to a splashed location of rain water.
- Do not install the product where high levels of humidity or dew could condense.
- Avoid using the product in direct sunlight or where heat is generated.
- Avoid use in the area containing corrosive gas.

### Floor

### ⚠ CAUTION

- Install the product on a vibration-free floor.
- Install this product on a flat surface.
- Provide foundation work if the ground is soft.
- The anchor bolt position and hole dimensions are given in the outline drawing.

### Vibration

### ⚠ CAUTION

- When using a reciprocating compressor, use a flexible tube or high-pressure rubber hose in part of piping with the air dryer to absorb vibration.



## Maintenance space

### CAUTION

- Ensure the following space to provide good ventilation and make maintenance and inspection easier. GX7004 to GX7065  
4 surrounding directions: 600mm and over in each direction  
Top: 600mm and over
- GX7075D to GX7140D  
4 surrounding directions: 1000mm and over in each direction  
Top: 1000mm and over

## Air pipe method

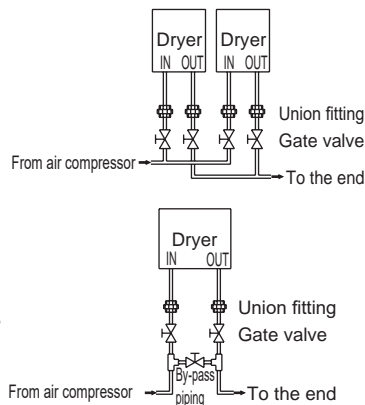
### CAUTION

- Pipe the dryer as the following diagram.

24 hour operation:  
A parallel installation for emergencies is recommended.

Use a unit for normal operation and the other as a spare.

Intermittent operation:  
Install the bypass pipe for maintenance.



- Install the filter if necessary to prevent dirt in piping from entering the dryer.
- Design piping so that pipe weight is not applied on the product.

- Use piping that sufficiently withstands working pressure. Check that air does not leak from connections.

- Galvanized steel pipes (white pipes) are recommended for pipe materials. Use stainless steel pipes according to specifications and applications.

## Drain piping method

### CAUTION

- Insert the nylon drain tube piping of 5.7 to 6.0mm inner diameter directly into the drain cock of the drain discharger.
- Keep the tube length within 5m, and leave the discharge end open to the atmosphere.
- If the drain piping slopes upward or if piping is too long, drainage may not be discharged. Pipe with a downward slope so that drainage is flows naturally.
- If oil enters drainage, it must be drained and treated. Contact an industrial waste specialist for treatment.
- Securely fix the drain discharge tube, etc., so that it does not sway during drain discharge.
- Fully open the ball valve installed before the drain discharger during normal operation. Operate the ball valve during maintenance.

## During Use & Maintenance

## Freon collection

### WARNING

- This product complies with the Japanese “Law for practice for Freon collection and destruction on specific products (Freon recovery and destruction law)”. Ensure to recover Freon gas for environmental protection during disposal or repair even in a country where this law is not applicable.

## Repair parts

### CAUTION

- To ensure use for a long time, always periodically inspect the wear state, and replace the parts. Refer to the Instruction Manual enclosed with the product for details.

## Periodical maintenance part

### CAUTION

- To ensure long use, regularly inspect maintenance parts and replace them based on the standard replacement cycle.  
Refer to the Instruction Manual enclosed with the product for details.

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## Related products

### Flow sensor for compressed air : PFD Series

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- Alarm output at 2 points according to selection of either NPN or PNP.
- One alarm output can be converted to an accumulated pulse output with an easy operation.
- Complies with the RoHS directive.
- Monitoring system can be established based on SAVE NET.

Catalog no. CB-024SA

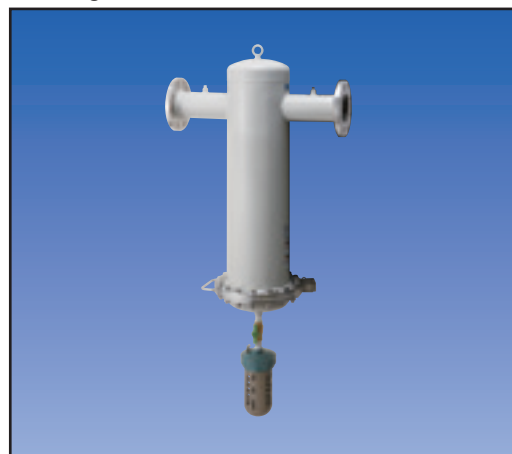


### Main line filter : AF6000 Series

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- Stainless steel Vessel without rust forming
- Various filter-elements are available
- Anti-dropping mechanism of the bottom cover provides safe during maintenance

Catalog no. CC-1218A



### Refrigeration air dryer : GTA Series

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- High quality and reliability
- Energy saving
- Secure control

Catalog no. CC-1199A





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