

Refrigerating Type Air Dryer GX8200 Series





GX8200 Series

with easy use and easy maintenance

Refrigerating type air dryer

GX8200 Series / 2.2 to 95kW

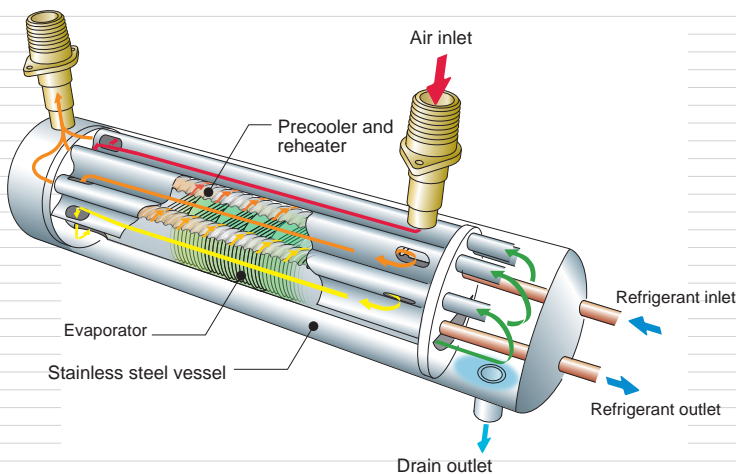
Point 1 High quality and high reliability

◆ Stainless steel heat exchanger

compatible with oil-free air.

Dust can be prevented with heat exchanger that adopts new stainless steel vessel.

Air outlet



◆ Increased weathering performance

Corrosion resistance has been improved significantly with application of nickel plating refrigerant piping by the copper 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.

◆ Extended operation range

Wide design range that is operative even under normal inlet air temperature of 35°C

Point 2 Energy Saving

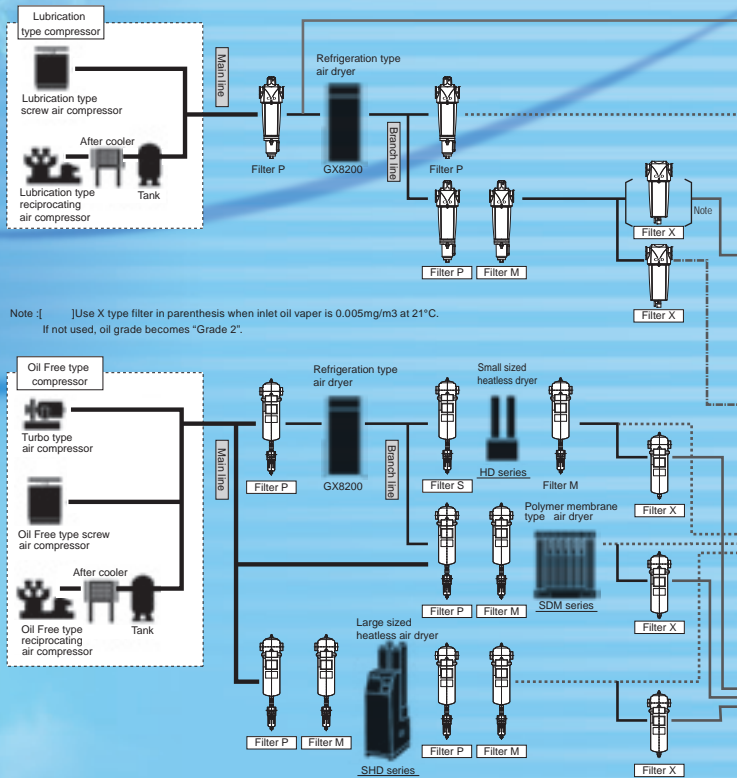
◆ Adoption of drain system that has less air loss

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.

◆ Low pressure loss

Low pressure loss of less than 0.02MPa during rated operation was realized.

[Recommended Equipment Configuration]



Note : [] Use X type filter in parenthesis when inlet oil vapor is 0.005mg/m³ at 21°C.
If not used, oil grade becomes "Grade 2".

Air quality	Application	Impurities in the air			Grade
		Solid molecule	Moisture	Oil content	
Moisture removed air Rough dust removed air	For civil and construction equipment Air for cleaning that does not require drying	5µm	—	—	4 - 1 - -
Normal dried air	Normal pressure equipment Normal pressure tools Power saving equipment Jigs and tools using air Air chuck Air vice Cleaning air for precision parts	1µm	Pressure dew point 10°C	0.6mg/m ³	3.6.3
			Pressure dew point 7°C		3.5.3
Oil free dried air	For instruments For measurement Sequence control High quality painting	0.01µm	Pressure dew point 10°C	0.01mg/m ³ [0.003mg/m ³]	2.6.1
			Pressure dew point 7°C		2.5.1
Odor free dried air	Food industry that does not blow air on food directly Pharmaceutical industry For mixing, transportation, drying, packing and brewing	0.01µm	Pressure dew point 10°C	0.003mg/m ³	2.6.1
			Pressure dew point 7°C		2.5.1
Super dried oil free air	Ozone generation devices Powder conveying Drying of furnace atmosphere gas Drying of insulation gas for high voltage generation units Drying of computer rooms For central control instruments	0.01µm	Pressure dew point -20°C	0.01mg/m ³	2.3.1
			Pressure dew point -40°C		2.2.1
			Pressure dew point -60°C		2.2.1
Super dried odor free air	Food industry that does not blow air on food directly Pharmaceutical industry For mixing, transportation, drying, packing and brewing	0.01µm	Pressure dew point -20°C	0.003mg/m ³	2.3.1
			Pressure dew point -40°C		2.2.1
			Pressure dew point 60°C		2.2.1

Point 3 Eco friendly refrigerant

R-134a, R-410A and R-407C 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 GX8265E, GX8275E and GX8295E.

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

Grade	Solid particles				Particle diameter (µm)	Density (mg/m ³)	Moisture and water content		Oil Total oil content density (Mg/m ³)
	Maximum number of particles per 1m ³						Pressure dew point (°C)	Water density (Cw g/m ³)	
	d≤0.10	0.10<d≤0.5	0.5<d≤1.0	1.0<d≤5.0					
0	To be decided by the user and supplier applying conditions more severe than Grade 1.								
1	--	100	1	0	--	--	≤-70	--	≤0.01
2	--	100,000	1,000	10	--	--	≤-40	--	≤0.1
3	--	--	10,000	500	--	--	≤-20	--	≤1
4	--	--	--	1,000	--	--	≤+3	--	≤5
5	--	--	--	20,000	--	--	≤+7	--	--
6	--	--	--	--	≤5	≤5	≤+10	--	--
7	--	--	--	--	≤40	≤10	--	Cw≤0.5	--
8	--	--	--	--	--	--	--	0.5<Cw≤5	--
9	--	--	--	--	--	--	--	5<Cw≤10	--

Content has been revised in accordance with revision of JIS B 8392-1:2003 to JIS B 8392-1:2012

For example "Grade 2.2.1" means

- 100,000 solid particles of 0.1 to 0.5µm
- Pressure dew point of -40°C or less
- Oil density of 0.01mg/m³ 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/m³, install an X type filter additionally.

[Configuration of main line system (Inlet air temperature 35°C, ambient temperature 32°C)]

Air compressor		Refrigerating type air dryer	Air filter (3µm or 5µm)	Micro alesc (Oil removal)	Micro alesc (High performance oil removal)	Micro alesc (for odor removal)
Output kW	Standard treated flow rate m ³ /min					
2.2	0.44	GX8203D	F3000-10-W-F1	M6000-10-W-F1S	M4000-15-W-F1	M4000-15-W-X
7.5	0.97	GX8204D	F6000-25-W-F	M6000-25-W-F1S	M6000-25-W-F1	M6000-25-W-X
15	2.31	GX8208D	AF2-05P25A	AF2-05M25A	AF2-05M25A	AF2-05X25A
22	3.48	GX8215D	AF2-05P25A	AF2-05M25A	AF2-05M25A	AF2-05X25A
37	6.16	GX8222D	AF2-08P32A	AF2-08M32A	AF2-08M32A	AF2-08X32A
55	8.71	GX8237D	AF2-11P40A	AF2-11M40A	AF2-11M40A	AF2-11X40A
65	11.54	GX8255D	AF2-13P50A	AF2-13M50A	AF2-13M50A	AF2-13X50A
70	12.55	GX8265E	AF2-13P50A	AF2-13M50A	AF2-13M50A	AF2-13X50A
90	18.30	GX8275E	AF6027P-65	AF6027M-65	AF6027M-65	AF6027X-65
120	25.39	GX8295E	AF6027P-65	AF6027M-65	AF6027M-65	AF6027X-65

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

[Configuration of main line system (Inlet air temperature 50°C, ambient temperature 35°C)]

Air compressor		Refrigerating type air dryer	Air filter (3µm or 5µm)	Micro alesc (Oil removal)	Micro alesc (High performance oil removal)	Micro alesc (for odor removal)
Output kW	Standard treated flow rate m ³ /min					
2.2	0.32	GX8203D	F3000-10-W-F1	M3000-10-W-F1S	M4000-15-W-F1	M4000-15-W-X
3.7	0.70	GX8204D	F4000-15-W-F	M4000-15-W-F1S	M4000-15-W-F1	M4000-15-W-X
7.5	1.10	GX8208D	F6000-25-W-F	M6000-25-W-F1S	M6000-25-W-F1	M6000-25-W-X
15	2.80	GX8215D	AF2-05P25A	AF2-05M25A	AF2-05M25A	AF2-05X25A
22	4.60	GX8222D	AF2-08P32A	AF2-08M32A	AF2-08M32A	AF2-08X32A
37	7.60	GX8237D	AF2-11P40A	AF2-11M40A	AF2-11M40A	AF2-11X40A
55	8.80	GX8255D	AF2-11P40A	AF2-11M40A	AF2-11M40A	AF2-11X40A
65	10.70	GX8265E	AF2-13P50A	AF2-13M50A	AF2-13M50A	AF2-13X50A
75	14.90	GX8275E	AF2-20P50A	AF2-20M50A	AF2-20M50A	AF2-20X50A
95	18.40	GX8295E	AF6027P-65	AF6027M-65	AF6027M-65	AF6027X-65

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

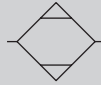


Refrigerating Type Air Dryer

GX8200 Series

•Applicable air compressors : Up to 2.2kW, 3.7kW, 7.5kW, 15kW, 22kW, 37kW, 55kW, 65kW, 75kW, 95kW.

JIS symbol



Specifications

Model No.		GX8203D	GX8204D	GX8208D	GX8215D	GX8222D	GX8237D	GX8255D	GX8265E	GX8275E	GX8295E
Applicable air compressor kW		Up to 2.2	3.7	7.5	15	22	37	55	65	75	95
Usage range	Working fluid	Compressed air									
	Inlet air temperature °C (Note 3)	10 to 80									
	Inlet air pressure MPa	0.2 to 1.0									
	Ambient temperature °C	2 to 43									
Rated	Treated flow rate m ³ /min (Note 2)	0.32	0.70	1.10	2.80	4.60	7.60	8.80	10.70	14.90 (Note 6)	18.40
	Inlet air temperature °C	50									
	Inlet air pressure	0.7									
	Ambient temperature	35									
Performance	Outlet air pressure dew point	10 (Note 5)									
	Pressure drop MPa (Note 4)	0.010	0.006	0.003	0.014	0.019	0.014	0.007	0.015	0.018	0.019
Power supply		Single phase 220V 50Hz						3 phase 380V 50Hz			
Electric specification	Power consumption kW	0.27	0.28	0.37	0.74	1.90	2.00	2.00	3.4	3.7	4.0
	Operating current A	1.5	1.5	2.2	4.7	8.8	9.2	9.2	6.1	6.7	8.2
	Starting current A	6	6	8	20	43	43	43	51	51	72
Refrigerant		R-134a				R-410A					
Air inlet/outlet port size		R ¹ / ₂	R3/4	R1		R 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		0.6	0.7	1.1	2.7	5.3	6.7	7.8	9.9	12.4	15.6

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

Note 2: Value converted into air compressor intake state at 32°C atmospheric pressure and relative humidity 75%.

Note 3: If both of the inlet air temperature and ambient temperature are maximum 80°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.

Note 6: If the ambient temperature exceeds 40°C, the treated flow rate should be 12.5 m³/min or less.

How to order

GX82 **15D** - **AC220V**

Ⓐ Classification of capacity

Ⓑ Voltage

Symbol	Descriptions
Ⓐ Classification of capacity	
03D	2.2kW
04D	3.7kW
08D	7.5kW
15D	15kW
22D	22kW
37D	37kW
55D	55kW
65E	65kW
75E	75kW
95E	95kW
Ⓑ Voltage	
AC220V	GX8203D, GX8204D, GX8208D, GX8215D GX8222D, GX8237D, GX8255D
AC380V	GX8265E, GX8275E, GX8295E

Coefficients for model selection in GX8200 Series

① Standard air flow (m³/min)

Model No.	GX8203D	GX8204D	GX8208D	GX8215D	GX8222D	GX8237D	GX8255D	GX8265E	GX8275E	GX8295E
Processing air flow	0.32	0.70	1.10	2.80	4.60	7.60	8.80	10.70	14.90	18.40

② Correction coefficient for each model (Applicable to inlet temperatures of, 35°C, 40°C and 45°C)

Model No.	GX8203D	GX8204D	GX8208D	GX8215D	GX8222D	GX8237D	GX8255D	GX8265E	GX8275E	GX8295E	
Inlet air temperature (°C)	35	1.00	1.00	1.52	0.90	0.97	0.83	0.95	0.85	0.89	1.00
	40	0.98	1.00	1.20	0.91	0.97	0.87	0.95	0.88	0.91	1.00
	45	0.98	1.00	1.10	0.97	0.98	0.94	0.95	0.95	0.96	1.00

③ Temperature correction coefficient

Inlet air temperature (°C)	35			40			45			50			55			60			70			80			
Pressure dew point (°C)	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	
Ambient temperature (°C)	30	1.16	1.42	1.70	1.03	1.35	1.62	0.89	1.21	1.46	0.78	1.08	1.29	0.69	0.92	1.10	0.62	0.80	0.94	0.53	0.68	0.82	0.48	0.63	0.77
	32	1.12	1.38	1.66	0.98	1.29	1.55	0.85	1.16	1.40	0.76	1.03	1.25	0.65	0.87	1.03	0.60	0.75	0.89	0.50	0.64	0.78	0.45	0.60	0.73
	35	1.10	1.34	1.62	0.94	1.25	1.50	0.82	1.13	1.35	0.73	1.00	1.21	0.62	0.82	0.98	0.57	0.70	0.86	0.47	0.60	0.74	0.41	0.55	0.69
	40	1.05	1.25	1.52	0.85	1.07	1.22	0.66	0.86	1.02	0.55	0.75	0.91	0.48	0.62	0.75	0.44	0.56	0.66	0.37	0.46	0.55	0.33	0.42	0.51
	43	0.84	1.02	1.29	0.63	0.82	1.03	0.50	0.66	0.84	0.42	0.59	0.74	0.38	0.51	0.63	0.35	0.46	0.56	0.30	0.38	0.47	0.26	0.32	0.40

④ Pressure correction coefficient

Air pressure (MPa)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Correction coefficient	0.67	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.2

⑤ Maximum coefficient (Maximum value of (② × ③))

Model No.	GX8203D	GX8204D	GX8208D	GX8215D	GX8222D	GX8237D	GX8255D	GX8265E	GX8275E	GX8295E
Maximum coefficient	1.40	1.70	2.59	1.53	1.65	1.41	1.62	1.44	1.51	1.67

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

Processing air flow of dryer = ① Standard air flow × [② Correction coefficient for each model × ③ Temperature correction coefficient (In air temperature • Pressure dew point • Ambient temperature)] × ④ Pressure correction coefficient

Note: (② Correction coefficient for each model × ③ Temperature correction coefficient)'s maximum value is ⑤ Maximum coefficient.
 In case (② Correction coefficient for each model × ③ Temperature correction coefficient) exceeds this value, please calculate by ⑤ Maximum coefficient.

<Calculation example>

For GX8215D with Inlet temperature 35°C • Ambient temperature 32°C • Outlet pressure dew point 10°C • Air pressure 0.7MPa, calculate process amount:

$$(② \text{ Correction coefficient for each model} \times ③ \text{ Temperature correction coefficient}) = 0.9 \times 1.38 = 1.242$$

Since it does not surpass GX8215D's maximum coefficient of ⑤ 1.53, dryer processing air flow is:

$$2.80 \text{ (Standard processing air flow)} \times 1.242 \times 1.0 = 3.47 \text{ m}^3/\text{min}$$

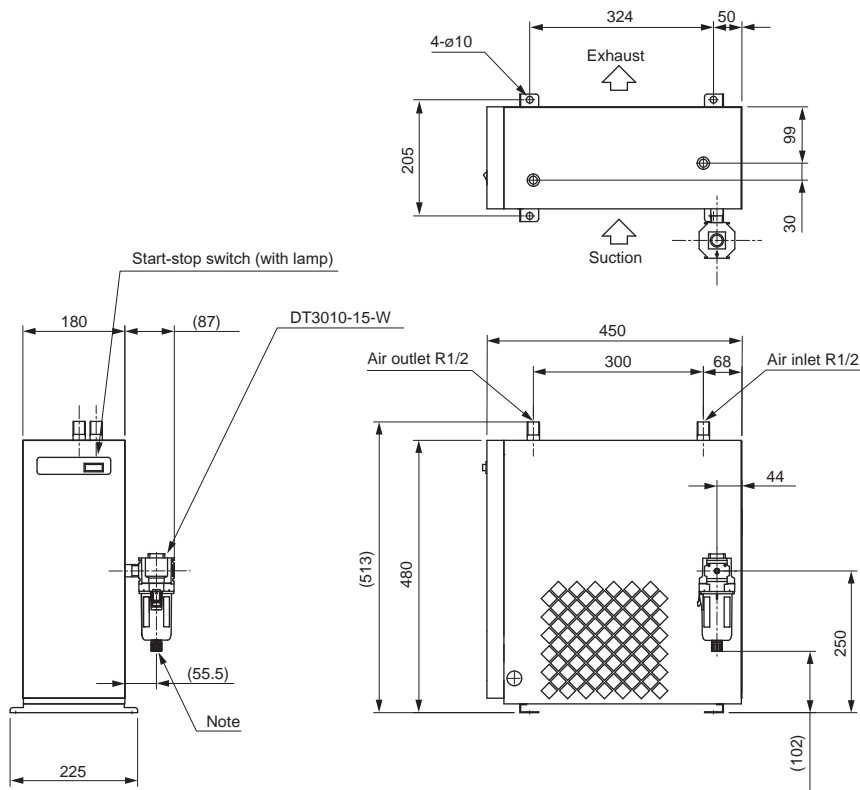
Flow rate with Inlet temperature 35°C, Ambient temperature 32°C, Air pressure 0.7 MPa, Pressure dew point 10°C (m³/min)

Model No.	GX8203D	GX8204D	GX8208D	GX8215D	GX8222D	GX8237D	GX8255D	GX8265E	GX8275E	GX8295E
Processing air flow	0.44	0.97	2.31	3.48	6.16	8.71	11.54	12.55	18.30	25.39

GX8200 Series

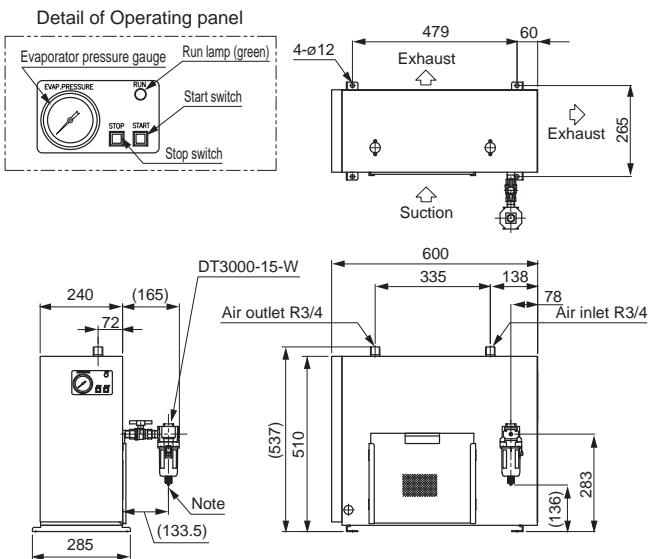
Dimensions

• GX8203D



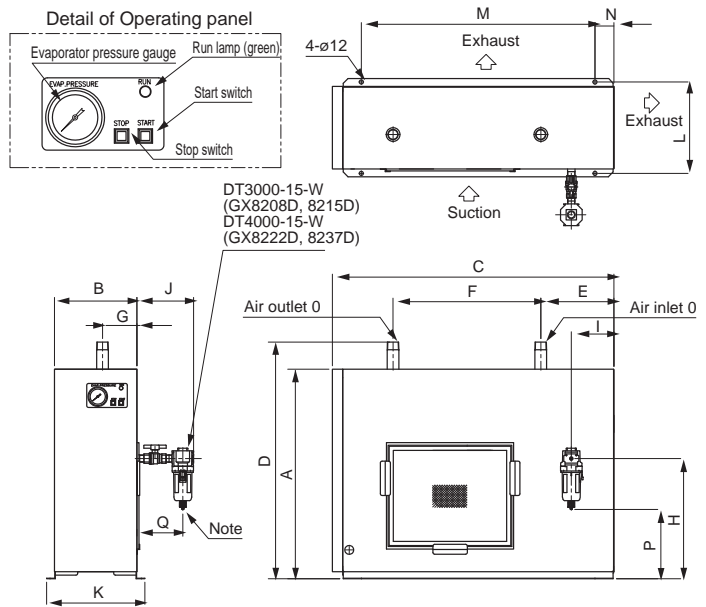
Note
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

• GX8204D



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

• GX8208D to GX8237D

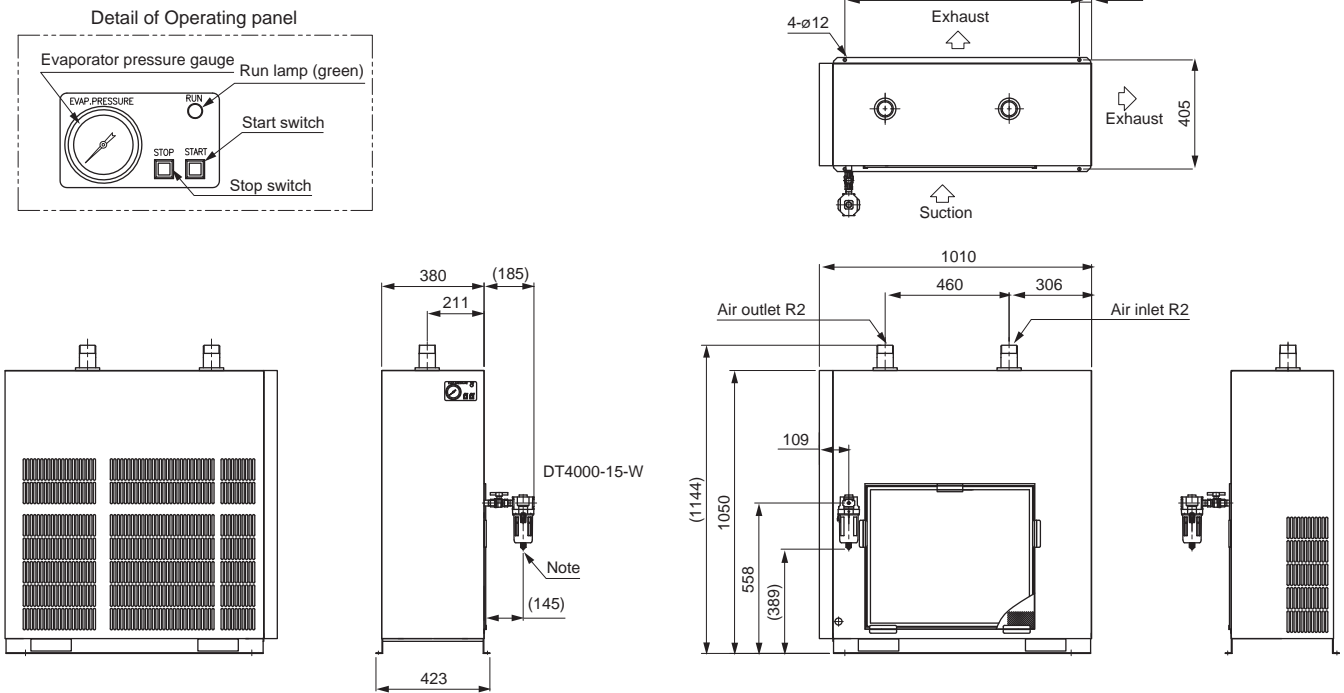


Note
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
GX8208D	610	240	820	(689)	213	430	100	350	124	(165)	286	266	680	55	R1	(203)	(133.5)
GX8215D	610	240	820	(685)	226	430	100	346	137	(165)	286	266	680	55	R1	(199)	(133.5)
GX8222D	900	300	960	(1004)	631	108	163	456	142	(185)	343	325	840	45.4	R1½	(287)	(145)
GX8237D	990	300	980	(1070)	628	122	146	490	191	(185)	343	325	840	45.3	R1½	(321)	(145)

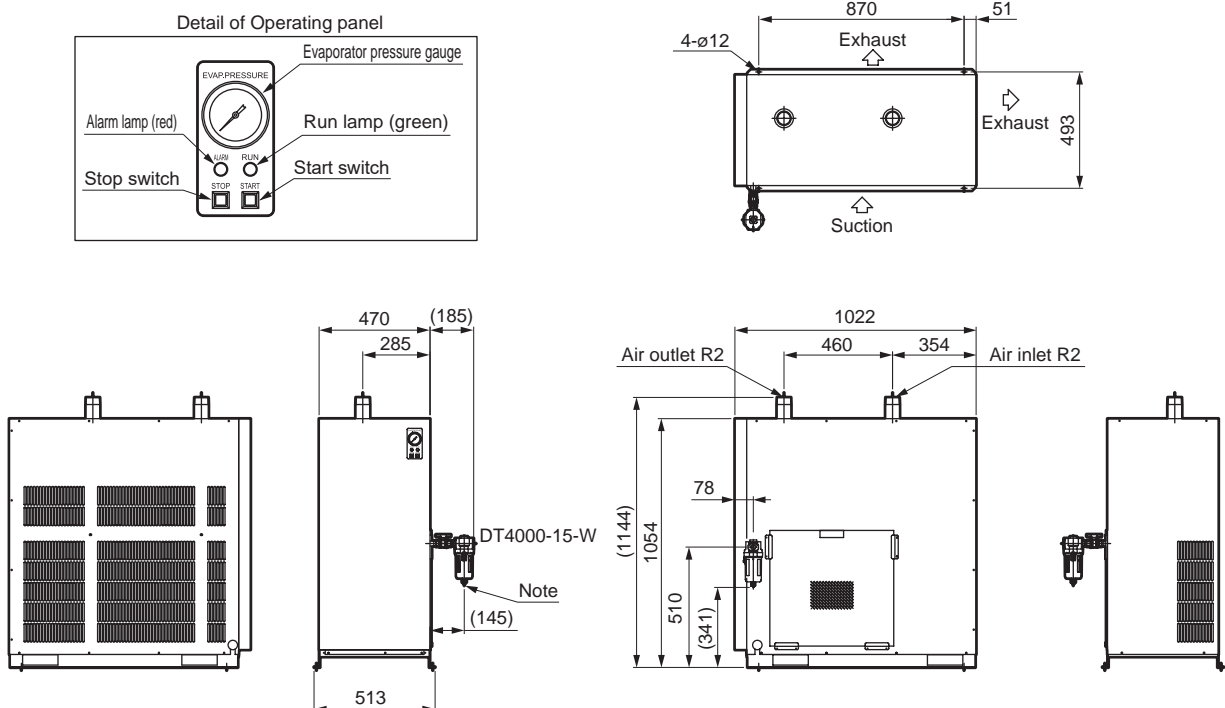
Dimensions

• GX8255D



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

• GX8265E

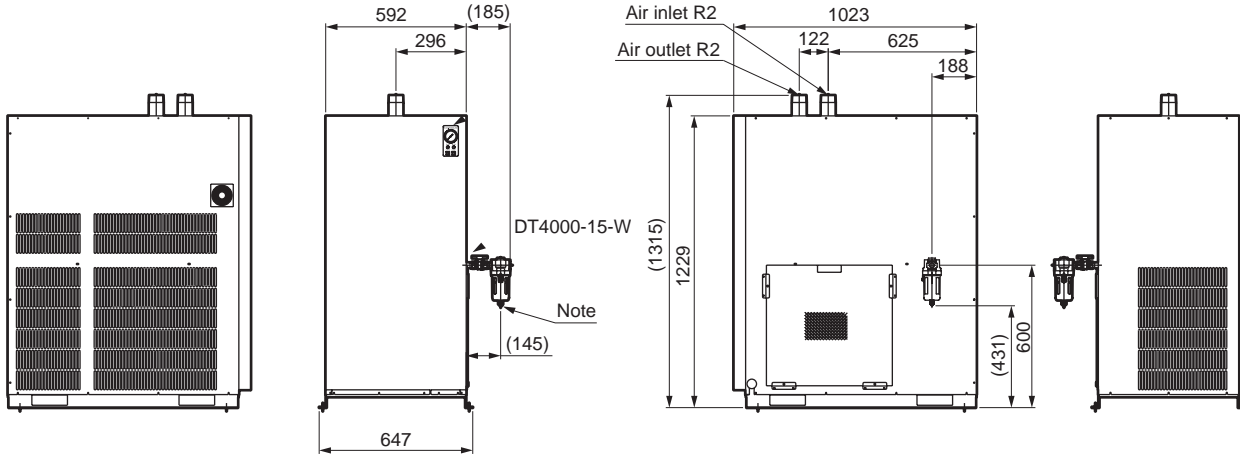
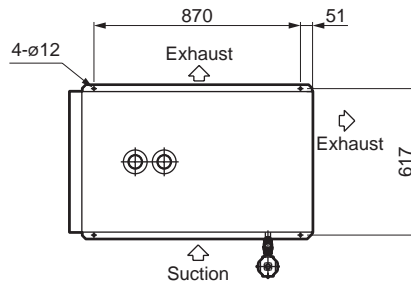
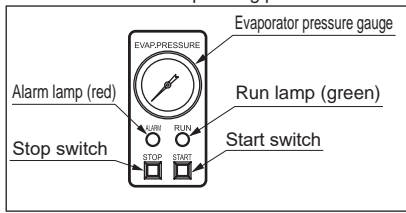


Note
Insert the nylon tube of I.D. 5.7 to 6.0 mm directly to the drain cock.

Dimensions

• GX8275E

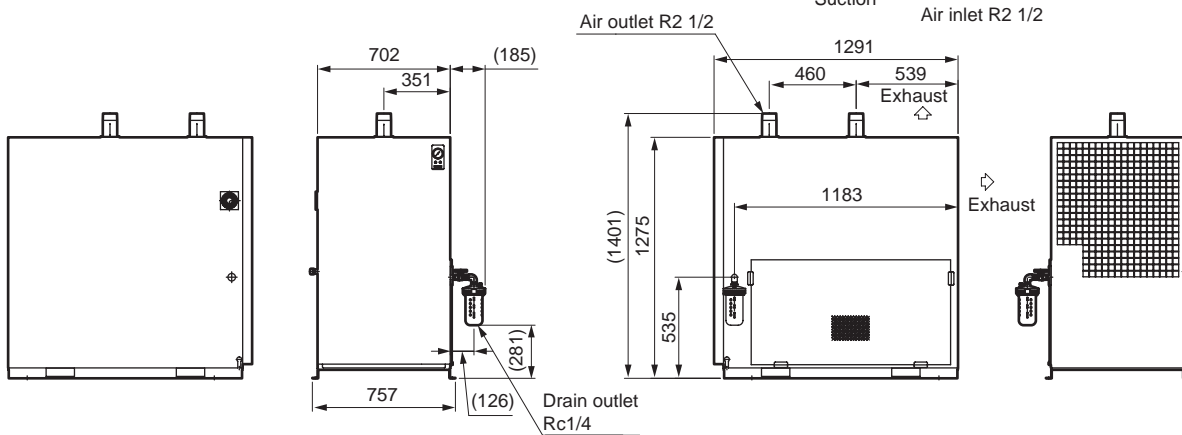
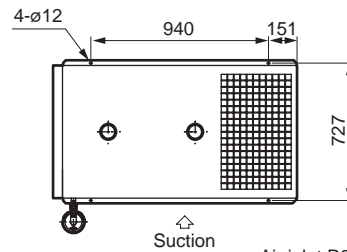
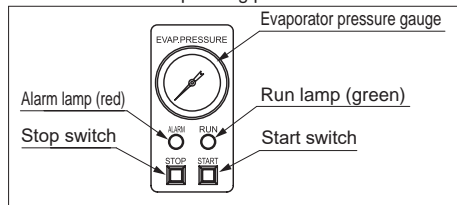
Detail of Operating panel



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

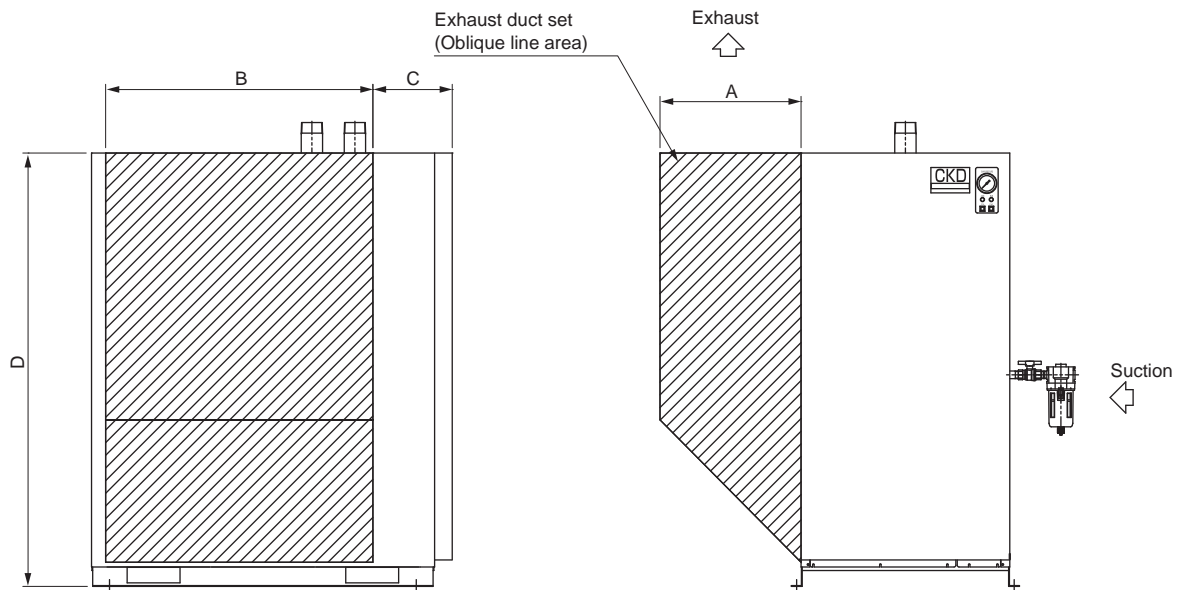
• GX8295E

Detail of Operating panel



Accessories (Optional)

Exhaust duct set (Optional)

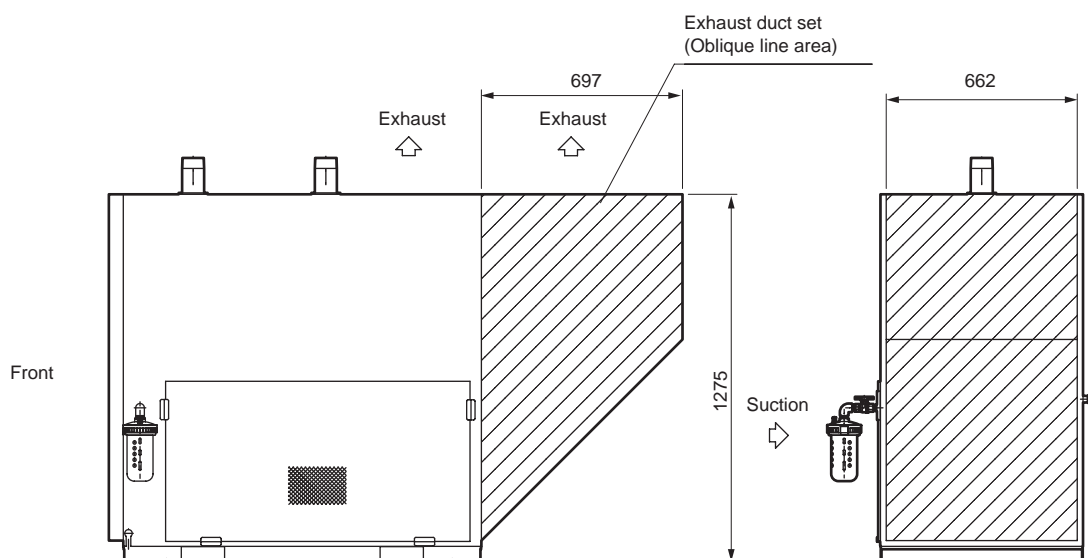


Note

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.

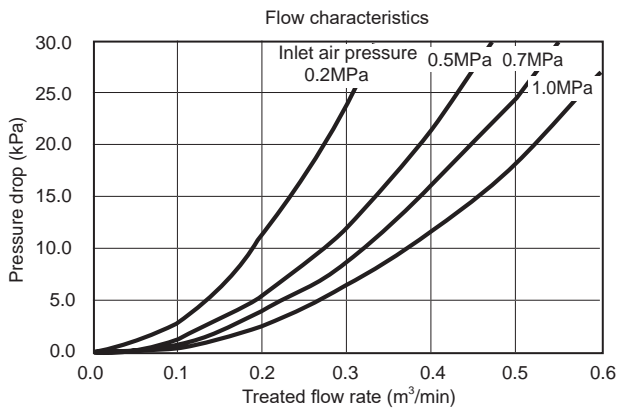
Model No.	Applicable model	Dimension (mm)			
		A	B	C	D
GX-KFL-614457	GX8265E	350	872	98	1054
GX-KFL-614458	GX8275E	400	758	225	1229

- GX-KFL-614725 (Applicable model GX8295E)

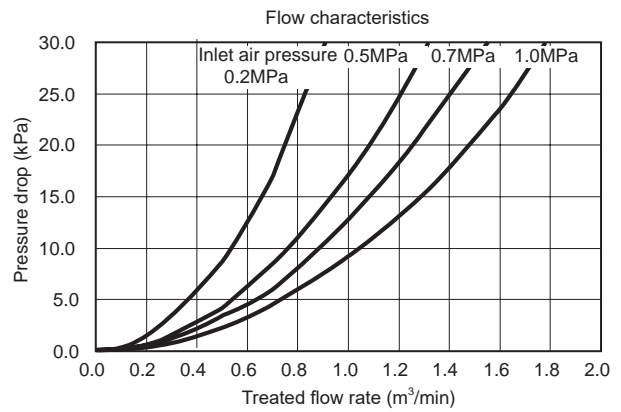


Flow characteristics

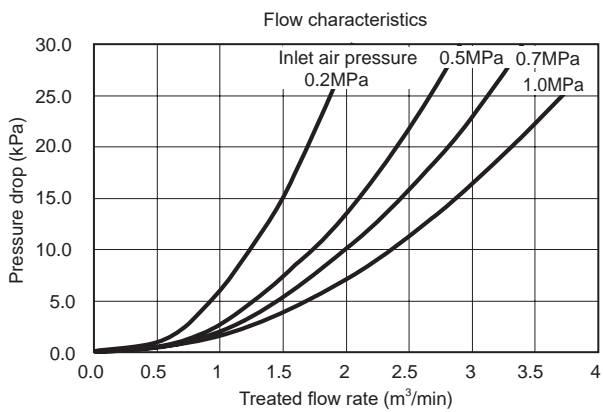
• GX8203D



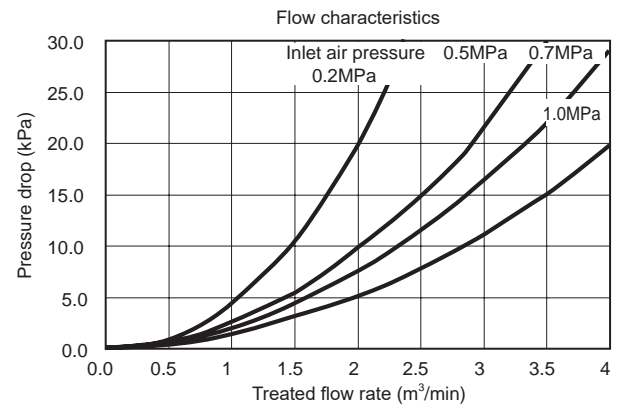
• GX8204D



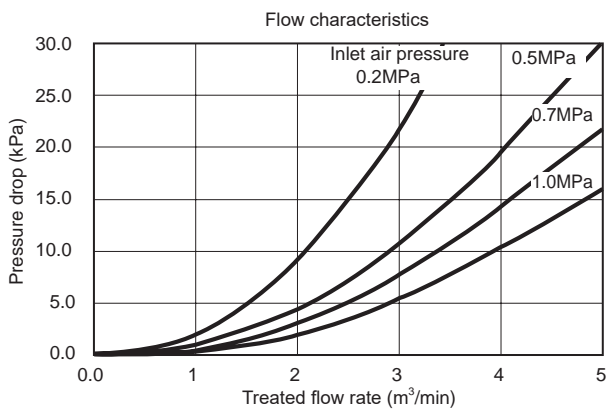
• GX8208D



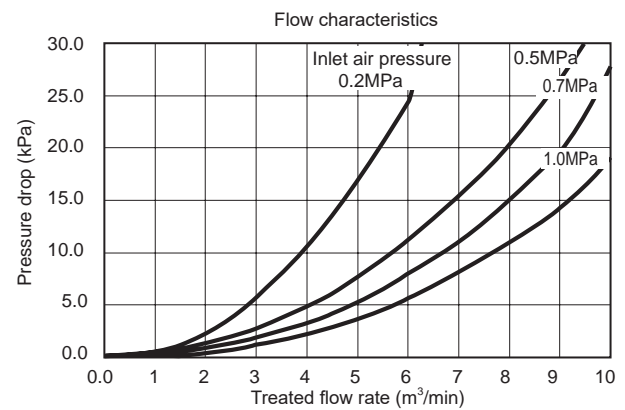
• GX8215D



• GX8222D

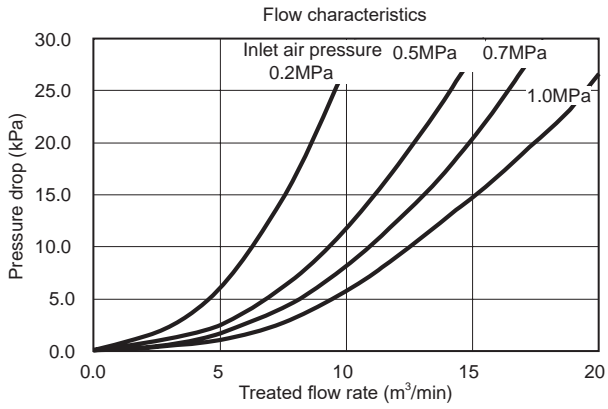


• GX8237D

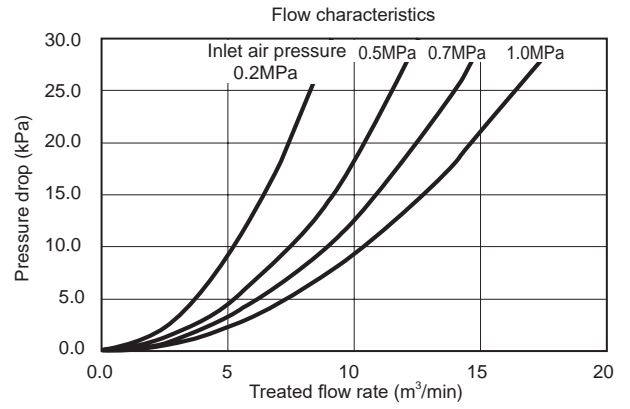


Flow characteristics

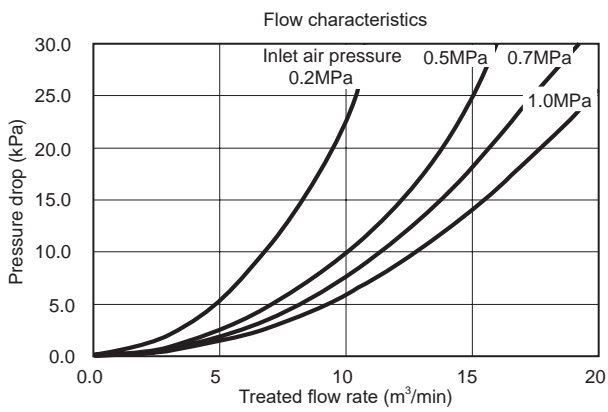
• GX8255D



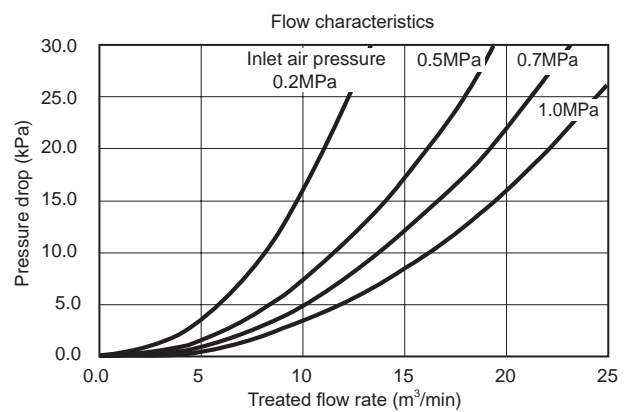
• GX8265E



• GX8275E



• GX8295E



Main line unit

Saturated vapor rate table (relative humidity 100%)

(Unit: g/m³)

		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.

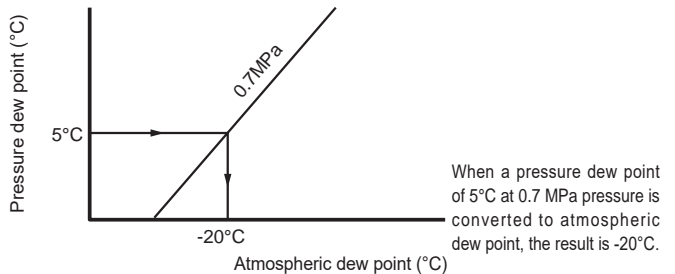
		Temperature at 1°C unit				
		0	1	2	3	
Temperature at 10°C unit	40					
	30			33.7		
	20					

33.7 g/m³ can be selected from the above table.

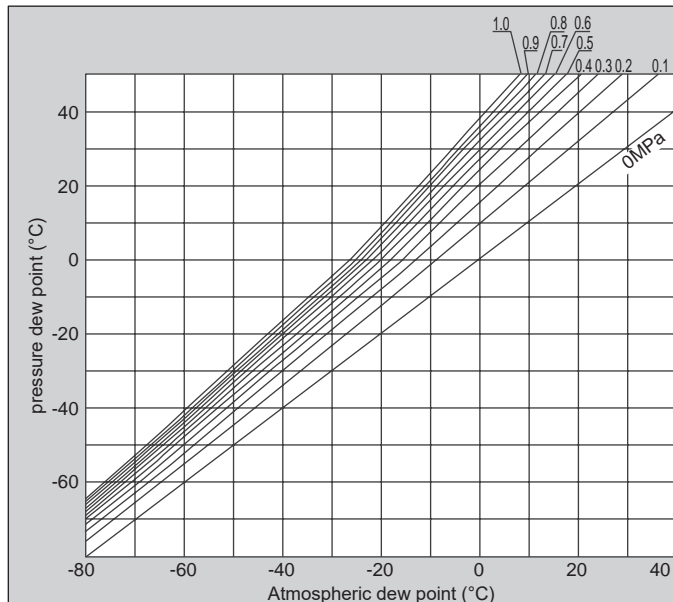
Reading pressure dew point - atmospheric dew point conversion table

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 GX8200 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).

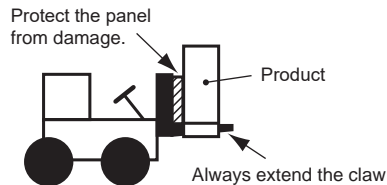
Transportation

⚠ WARNING

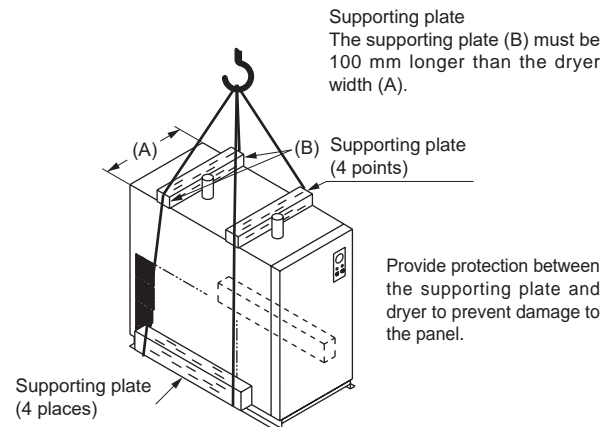
■ During transport, this product shall not be laid on its side, and vibration and impact shall not be applied.

■ Transportation by forklift

(Series GX8255D, GX8265E, GX8275E, GX8295E)



■ 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

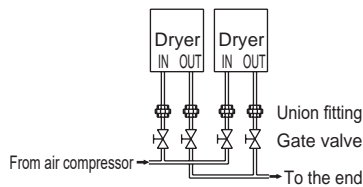
- Ensure the following space to provide good ventilation and make maintenance and inspection easier.
GX8203D to GX8255D
4 surrounding directions: 600mm and over in each direction
Top: 600mm and over
- GX8265E to GX8295E
4 surrounding directions: 1000mm and over in each direction
Top: 1000mm and over

Air pipe method

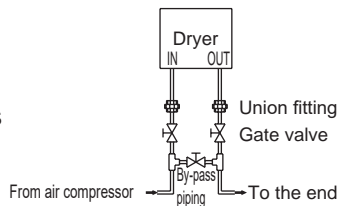
⚠ CAUTION

- 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.

MEMO

MEMO

MEMO

GX8200 Series

Related products

Related products

Flow sensor for compressed air : PFD Series

- 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.

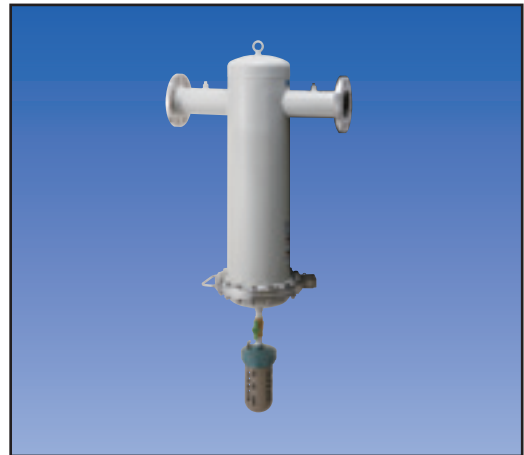
Catalog no. CB-024SA



Main line filter : AF6000 Series

- 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

- High quality and reliability
- Energy saving
- Secure control

Catalog no. CC-1199A



If the goods and/or their replicas, the technology and/or software found in this catalog are to be exported from Japan, Japanese laws require that the exporter makes sure that they will never be used for the development and/or manufacture of weapons for mass destruction.

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