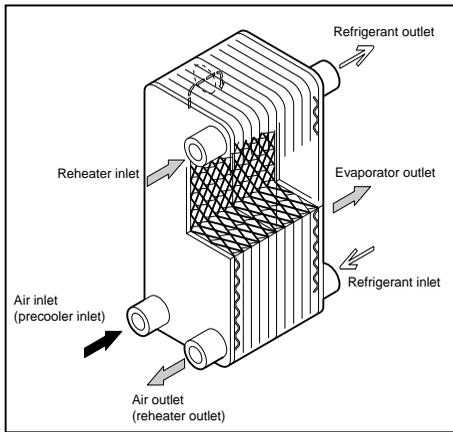


Refrigerating type dryer GX series Discontinue

- Rust-proof, leak-proof heat exchanger
- Precooler 60% heat exchanging efficiency^{*1} realized



• Rust-proof

Conventional heat exchangers were so-called "rust-proof", but even if stainless steel was used for the pressure container, copper pipes were used for the refrigerant section in the pressure container, so corrosion would occur. With the GX Series, a stainless steel plate heat exchanger is used, so corrosion resistance is high and durability of more than 10 years without refrigerant leaks or rust formation is anticipated.

• Outstanding heat exchange efficiency with a 3°C dew point

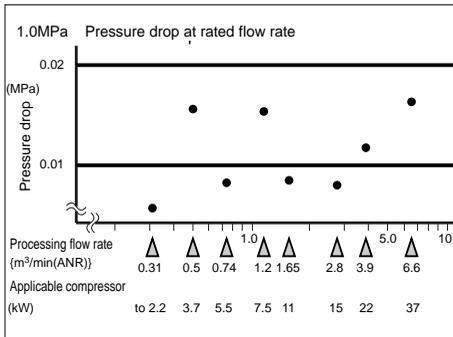
The plate type heat exchanger has a complete countercurrent flow structure, so the precooler's heat efficiency is outstanding. This saves energy and prevents dew from condensing at the outlet piping. A pressure dew point of 3°C, complying with ISO7183 (intake air temperature 38°C, ambient temperature 38°C) has been realized. (GX4100 (E) Series)

• All models high-pressure compatible

The plate heat exchanger is a rigid and solid structure without gaskets that has an outstanding pressure resistance^{*2}, and all models have a maximum working pressure of 1.6 MPa as standard.

• Low pressure loss design

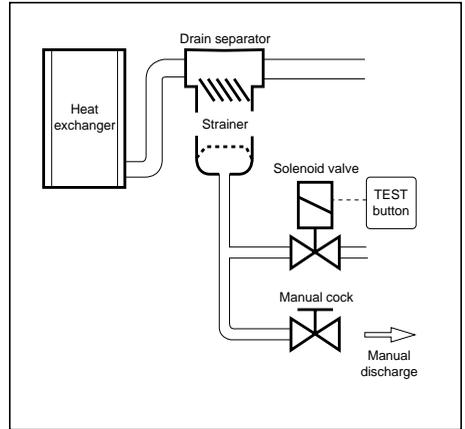
The plate heat exchanger has a cross-flow structure with large path, so pressure loss is low. (Refer to page 48 for details on the flow rate characteristics for each model.)



*1. Realized with GX4106 (E) rated conditions

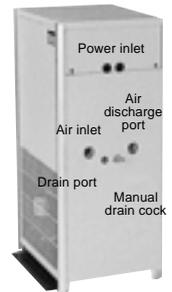
*2. Plate heat exchanger's maximum working pressure 3 MPa

- Problems with drainage discharge are eliminated.



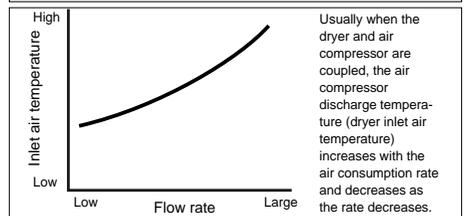
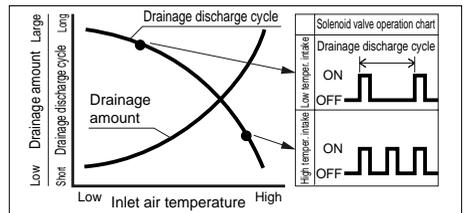
• Completely separated and accurately discharged drainage

- By incorporating a centrifugal separation drain separator, a drain separation efficiency of 99% and over is maintained semipermanently.
- Drainage is forcibly exhausted from the drain separator using air pressure in the dryer so the drain does not plug up.
- Drainage exhausted from the drain separator is discharged with the solenoid valve.
- The strainer in the drain separator prevents the solenoid valve orifice from plugging up.
- The discharge of drainage is checked by pressing the TEST button on the operation panel.
- A manual cock is provided, so drainage is discharged in an emergency.



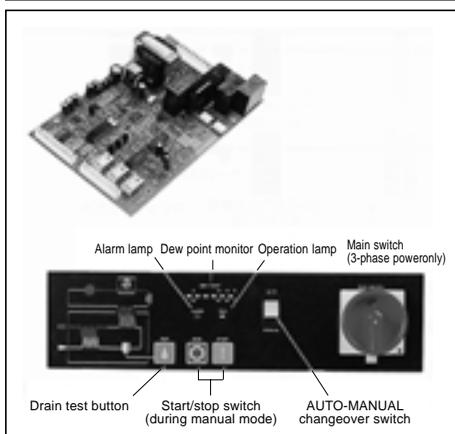
• Air loss is prevented

- Drain discharge time is controlled based on the inlet air temperature, thereby preventing air loss.
- Solenoid valve operation frequency drops with inlet air temperature drops, extending the life of the solenoid valve.



Discontinue

• Easy daily inspections



• Electronic control system

Reliability has been increased dramatically by using electronic control for drain valve control and refrigerant circuit errors.

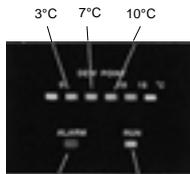
• Electronic fan control switch

A proximity type fan control switch is used, so the life is semipermanent.

• Dew point is visible with the electronic dew point meter

The dew point temperature is shown with a bar graph, so the dew point temperature can be checked easily. The reading may differ slightly from the actual pressure dew point. Use this value as a reference.

The alarm lamp turns ON when a dryer error occurs.



• Dew point class display following International Standards ISO7183-2

Dew point class	Pressure dew point	Lamp lighting state
4	3°C	Green 1
5	7°C	Green 2
6	10°C	Green 3

Turns ON when error occurs

Turns ON in normal state

• Central control in factory possible (option)

Central control in the factory is possible by retrieving remote signals and run/error signal outputs.

• Daily ON-OFF operations are eliminated by using automatic operation.

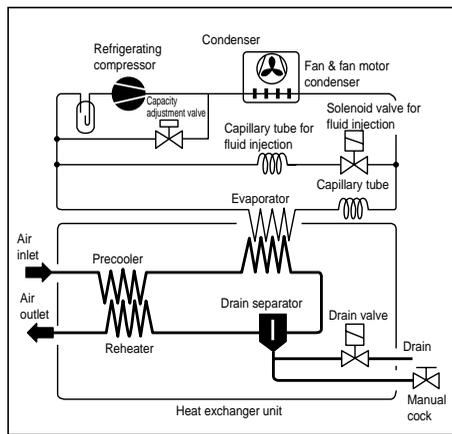
Automatic operation (ON at 0.17 MPa and OFF at 0.07 MPa) is done by detecting air pressure.

During automatic operation, the dryer is turned ON and OFF automatically in sequence with the air compressor, so daily operations are not required. Manual operation is possible using the AUTO-MANUAL changeover switch.

• Down transformer available compatible with diverse power voltages. (Option)

Power voltages are handled with a built-in transformer, so space is not wasted with a standalone or external transformer.

• Complete high temperature countermeasures



• Fluid injection circuit mounted as standard

The G Series (GX4100 (E), GX5000 Series) has a fluid injection circuit as standard, so the dryer does not stop with an error even during extremely hot weather.

• Forced cooled refrigeration compressor

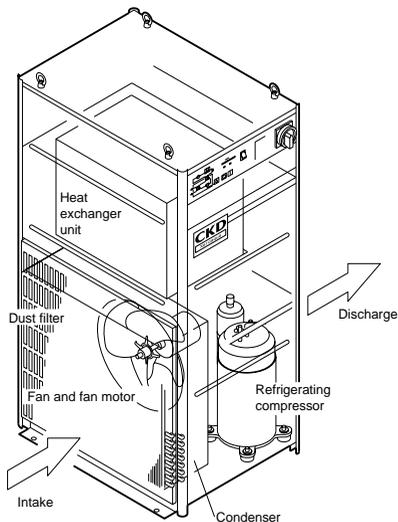
The refrigeration compressor is forcibly cooled by directly blowing the condenser fan wind onto it. Durability and overload resistance performance are increased dramatically.

• Tropical series lineup

The GX6000 Series enables an intake temperature of 80°C, ambient temperature of 35°C, and pressure dew point of 10°C. This can be used coupled with a reciprocating compressor even in locations hot throughout the year.

• Dew condensation eliminated from heat exchanger

The heat exchanger and drain circuit, on which dew easily forms, have been compactly set within a one-piece mold thermal insulation material, so dew will not condense and leak.



Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Automatic drain other
F.R.L (Module)
F.R.L (Separate)
Small F.R.
Precise R.
Electro pneumatic R.
Auxiliary
Flow control valve
Silencer
Check valve / others
Joint / tube
Vacuum F.
Vacuum R.
Vacuum generator
Vacuum auxiliary / pad
Mechanical pressure SW
Electronic pressure SW
Electronic dif. pres. SW
Sealing / close contact conf. SW

Pressure SW for coolant
Flow sensor for air
Total air system

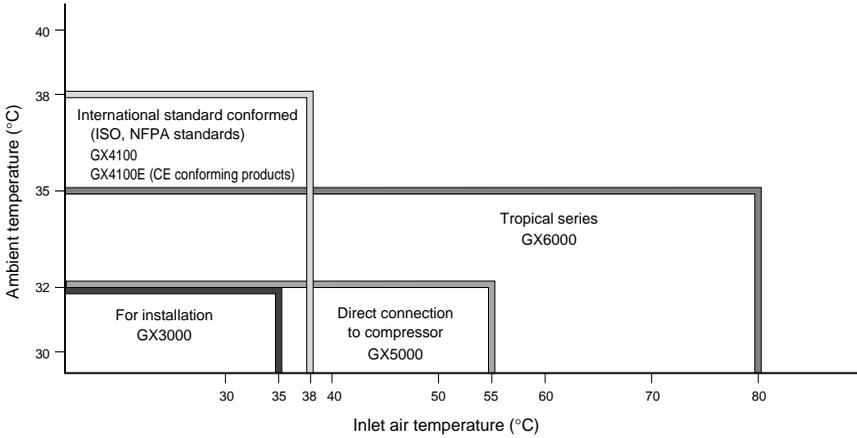
Water cooling refrigerator
Flow sensor for water

Main line unit
Refrigerating type dryer GX

5 series 45 models

Wide variation.

- Series configuration



Series variation

Series	Rated conditions				Model number	Applicable air compressor (kW)								
	Pressure dew point (°C)	Inlet air temperature (°C)	Ambient temperature (°C)	Inlet air pressure (MPa)		to 2.2	3.7	5.5	7.5	11	15	22	37	
GX3000	10	35	32	0.7	2	(RD1000 series)							○	○
GX4100 GX4100E	3	38	38	0.7	24	●	●	●	●	●	●	●	●	
GX5000	10	55	32	0.7	12	○	○	○	○	○	○	○	○	
GX6000	10	80	35	0.7	7	○	○	○	○	○	○	—	—	

New refrigerant R407C is used for ●, while refrigerant R22 is used for other models.

Zero ozone destruction. New high efficiency refrigerant used GX4100 (E) series

GX4100 (E) series uses new refrigerant R407C.

Comparing to refrigerant

Items	Type of refrigerant	
	R407C	R22
Ozone destruction coefficient (ODP)	0	0.055
Global warming coefficient (GWP)	1500	1700

HCFC regulation (total abolition schedule)

	Sweden	1997 end of year	Italy	2008 end of year
Germany, Norway, Holland	1999 end of year	USA (completely abolished for new machines)		2010 end of year
Denmark	2001 end of year	EU wide		2015 end of year
Belgium	2004 end of year	World wide		2020 end of year

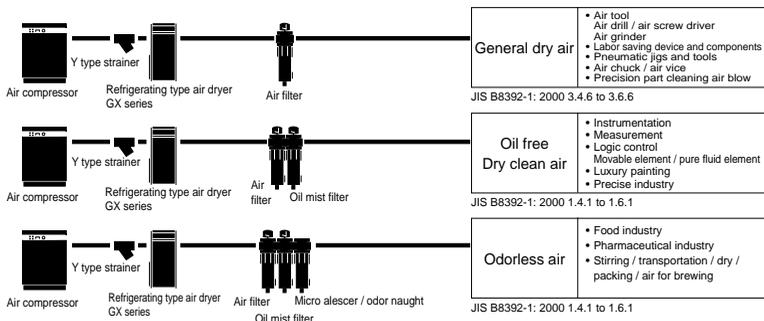
As of 1999. Sep.

INDEX						
Flow characteristics	Precautions	GX3000	GX4100 GX4100E	GX5000	GX6000	Technical data
Page 48	Page 50 to 51	Page 52	Page 56	Page 60	Page 64	Page 68



Always read precautions on Page 50 to 51 to use this product properly and safely.

System selection example list



General dry air

- Air tool
- Air drill / air screw driver
- Air grinder
- Labor saving device and components
- Pneumatic jigs and tools
- Air chuck / air vice
- Precision part cleaning air blow

JIS B8392-1: 2000 3.4.6 to 3.6.6

Oil free Dry clean air

- Instrumentation
- Measurement
- Logic control
- Movable element / pure fluid element
- Luxury painting
- Precise industry

JIS B8392-1: 2000 1.4.1 to 1.6.1

Odorless air

- Food industry
- Pharmaceutical industry
- Stirring / transportation / dry / packing / air for brewing

JIS B8392-1: 2000 1.4.1 to 1.6.1

For installation (GX3000Series) Rated (Ambient: 32 °C, Inlet air: 35 °C, Pressure dew point: 10 °C)

Air compressor		Refrigerating type air dryer	Air filter (3 μm or 5 μm)	Oil mist filter (oil removing)	Micro alescer / odor naught type (for odor remover)
Output	Standard treated flow rate				
kW	m ³ /min(ANR)				
to 2.2	0.31/0.35	RD1003(A)-AC100/200V	F3000-10-F	M3000-10-F1	1237-3C-X
3.7	0.5/0.55	RD1004(A)-AC100/200V	F3000-10-F	M8000-20-F1	1238-6C-X
5.5	0.74/0.81	RD1006(A)-AC100/200V	F4000-15-F	M8000-20-F1	1238-6C-X
7.5	1.2/1.3	RD1008(A)-AC100/200V	F8000-20-F	M8000-20-F1	1238-6C-X
11	1.65/1.8	RD1011(A)-AC100/200V	AF1003P-20	AF1003M-20	AF1003X-20
15	2.5/2.7	RD1015(A)-AC100/200V	AF1004P-25	AF1004M-25	AF1004X-25
22	3.9/4.3	GX3022-AC200V	AF1004P-25	AF1004M-25	AF1004X-25
37	6.6/7.3	GX3037-AC200V	AF1008P-40	AF1008M-40	AF1008X-40

JIS B8392-1: 2000 Compressed air quality assurance grade

Grade	Max. particle diameter (μm)	Arrival pressure dew point (°C)	Max. oil content density (mg/m ³)
1	0.1	-70	0.01
2	1	-40	0.1
3	5	-20	1
4	15	3	5
5	40	7	25
6	—	10	—

For example,
 Grade 1,2,1 shows
 Solid particle 0.1 μm
 Pressure dew point-40°C
 Oil content density 0.01mg/m³

International Standard conformed (GX4100/GX4100E series) Rated (Ambient: 38 °C, inlet air: 38 °C and pressure dew point: 3 °C)

Air compressor		Refrigerating type air dryer	Air filter (3 μm or 5 μm)	Oil mist filter (oil removing)	Micro alescer / odor naught type (for odor remover)
Output	Standard treated flow rate				
kW	m ³ /min(ANR)				
to 2.2	0.31/0.35	GX4103(E)-AC100/200V	F3000-10-F	M3000-10-F1	1237-3C-X
3.7	0.5/0.55	GX4104(E)-AC100/200V	F3000-10-F	M8000-20-F1	1238-6C-X
5.5	0.74/0.81	GX4106(E)-AC100/200V	F4000-15-F	M8000-20-F1	1238-6C-X
7.5	1.2/1.3	GX4108(E)-AC100/200V	F8000-20-F	M8000-20-F1	1238-6C-X
11	1.65/1.8	GX4111(E)-AC200V	AF1003P-20	AF1003M-20	AF1003X-20
15	2.8/3.1	GX4115(E)-AC200V	AF1004P-25	AF1004M-25	AF1004X-25
22	3.9/4.3	GX4122(E)-AC200V	AF1004P-25	AF1004M-25	AF1004X-25
37	6.6/7.3	GX4137(E)-AC200V	AF1008P-40	AF1008M-40	AF1008X-40

Note 1. Y type strainer is attached to the main body.

Note 2. An air filter is to be used where inlet air temperature is 60°C or less, while an oil mist filter is used where inlet air temperature is 54°C or less. If air temperature from the secondary side of dryer is high, keep enough distance from the dryer to install. The inlet air temperature to a filter is to be the specified value or less.

Direct connection to compressor (GX5000 series) Rated (Ambient: 32 °C, inlet air: 55 °C and pressure dew point: 10 °C)

Air compressor		Refrigerating type air dryer	Air filter (3 μm or 5 μm)	Oil mist filter (oil removing)	Micro alescer / odor naught type (for odor remover)
Output	Standard treated flow rate				
kW	m ³ /min(ANR)				
to 2.2	0.31/0.35	GX5003-AC100/200V	F3000-10-F	M4000-10-F1	1237-3C-X
3.7	0.5/0.55	GX5004-AC100/200V	F3000-10-F	M8000-20-F1	1238-6C-X
5.5	0.74/0.81	GX5006-AC100/200V	F4000-15-F	M8000-20-F1	1238-6C-X
7.5	1.2/1.3	GX5008-AC100/200V	F8000-20-F	M8000-20-F1	1238-6C-X
11	1.65/1.8	GX5011-AC200V	AF1003P-20	AF1003M-20	AF1003X-20
15	2.8/3.1	GX5015-AC200V	AF1004P-25	AF1004M-25	AF1004X-25
22	3.9/4.3	GX5022-AC200V	AF1004P-25	AF1004M-25	AF1004X-25
37	6.6/7.3	GX5037-AC200V	AF1008P-40	AF1008M-40	AF1008X-40

Note 3. This system can not be used for high pressure specifications (1 to 1.6MPa) . Please consult with CKD.

Note 4. A pre-filter other than above filter is required for refrigerating type air dryer RD1000 series. Please consult with CKD.

Note 5. Refer to Page 33 for RD1000 series.

Note 6. Refer to Page 168 for AF1000 series.

Note 7. Refer to Page 1 or "Clean air unit" catalog (No.CB-005-2A) for other filters.

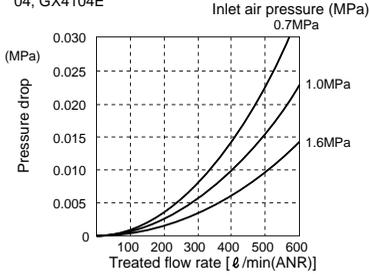
Tropical series (GX6000 series) Rated (Ambient: 35 °C, inlet air: 80 °C and pressure dew point: 10 °C)

Air compressor		Refrigerating type air dryer	Air filter (3 μm or 5 μm)	Oil mist filter (oil removing)	Micro alescer / odor naught type (for odor remover)
Output	Standard treated flow rate				
kW	m ³ /min(ANR)				
to 2.2	0.31/0.35	GX6003-AC100/200V	F3000-10-F	M3000-10-F1	1237-3C-X
3.7	0.5/0.55	GX6004-AC200V	F3000-10-F	M8000-20-F1	1238-6C-X
5.5	0.74/0.81	GX6006-AC200V	F4000-15-F	M8000-20-F1	1238-6C-X
7.5	1.2/1.3	GX6008-AC200V	F8000-20-F	M8000-20-F1	1238-6C-X
11	1.65/1.8	GX6011-AC200V	AF1003P-20	AF1003M-20	AF1003X-20
15	2.8/3.1	GX6015-AC200V	AF1004P-25	AF1004M-25	AF1004X-25

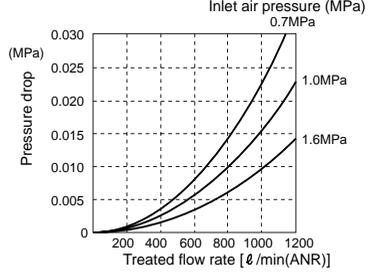
Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Sealing / close contact conf. SW
 Pressure SW for coolant
 Flow sensor for air
 Total air system
 Water cooling refrigerator
 Flow sensor for water
 Main line unit
 Refrigerating type dryer GX

Flow characteristics

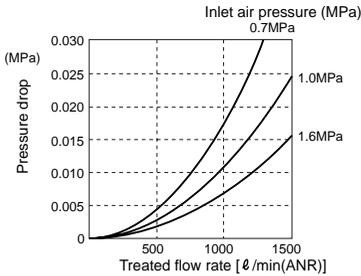
- GX ** 03, GX4103E
GX ** 04, GX4104E



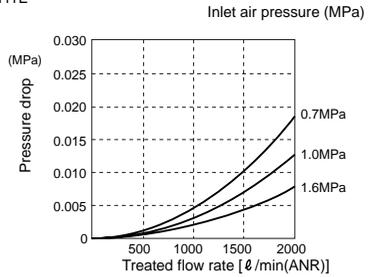
- GX ** 06, GX4106E



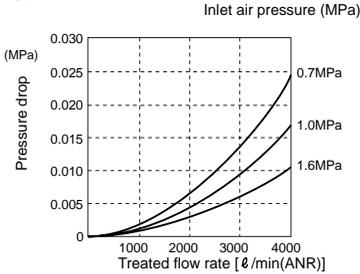
- GX ** 08
GX4108E



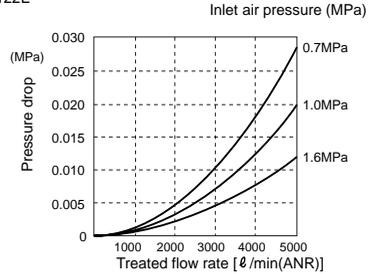
- GX ** 11
GX4111E



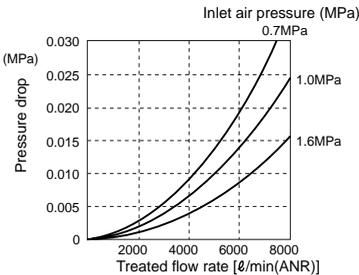
- GX ** 15
GX4115E



- GX ** 22
GX4122E



- GX ** 37
GX4137E





Main line component

Discontinue

Safety Precautions

Read this before starting use.

Please refer to Intro 43 for general precautions.

GX Series(Refrigeration dryer)



WARNING

Manufacturer's Liability

The manufacturer shall not be responsible for the following matters:

• Illegal modifications or repairs using nonstandard parts by user.

• Major errors caused during use by user.



WARNING

General Matters

This product shall not be used for applications other than dehumidification of compressed air.



WARNING

Transport

- 1 During transport, this product shall not be laid on its side, and vibration and impact shall not be applied.
- 2 Suspend the product as shown in Fig. 1 when moving it.

3 Use the 4 suspension hooks (M8 eye bolts), and suspend the product with a rope, etc.

4 The suspension angle must be 60° and over.



Fig. 1



CAUTION

Installation

Ambient temperature

- 1 Do not use this product in a place exceeding the maximum working temperature.
- 2 Do not install this product where it will be subject to radiated heat.
- 3 If the maximum working temperature may be exceeded, install ventilation fans or provide an air inlet, etc.
- 4 Do not use this product where the temperature is lower than the minimum working temperature.

Location

- 5 Install this product indoors. When using it outdoors, designate the option symbol "O". (Protection class IPX3 or equivalent)
- 6 Install this product in a well-ventilated place with low levels of dust and dirt.
- 7 Install this product where it will not be subject to rain.
- 8 Do not use this product in highly-humid places where dew could condense.
- 9 Avoid using this product where it may be subject to direct sunlight, or where heat could be generated.
- 10 Do not use this product where corrosive gases are present.

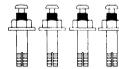
Floor

- 11 Install this product on a stable, nonvibrating floor.
- 12 Install this product on a flat surface.

- 13 If the foundation is soft, provide foundation work.
- 14 Anchor bolt positions and hole dimensions are shown in the outline dimension drawing.
- 15 Recommended anchor bolts are shown below.

Pile anchor bolt

Size	Material	Qty.	Model
M8 X 70	SUS	4	GX3022, GX4103(E), GX4104(E), GX4106(E), GX4108(E), GX4111(E), GX4115(E), GX5003, GX5004, GX5006, GX5008, GX5011, GX5015, GX6003, GX6004, GX6006, GX6008
			GX3037, GX4122(E), GX4137(E), GX5022, GX5037, GX6011, GX6015
M10 X 100			



Anchor bolts and nuts are available as accessories (options).

Vibration

- 16 When using the reciprocating compressor, use a flexible tube or high pressure rubber hose for piping with the air dryer so that vibration will be adsorbed.

Maintenance space

- 17 Ensure the following space to provide good ventilation and make maintenance and inspection easier.
 - 4 surrounding directions: 600 mm and over in each direction
 - Top: More than the total height of the product

Discontinue

CAUTION

Design & Selection

Air quality

- 1 Do not use intake air that contains corrosive gases, chemicals, organic solvents, or flammable gases.

Filter

- 2 Refer to system selection examples on page 47 for details on the model no. of filter used on the secondary side of the product.

Air temperature

- 3 Do not use air that exceeds the maximum intake temperature.
- 4 If the intake temperature is high, install an after cooler, etc., and lower air to the maximum intake temperature (or less). Drainage generated in the after cooler must be removed before the dryer.

WARNING

Installation & Adjustment

- 1 Use this product within the power voltage range in specifications.
- 2 Do not turn the power switch ON and OFF frequently. Failure to observe this could result in failure.
- 3 When operating the dryer from a remote location using the remote operation circuit (option M), observe the following:

"Start and stop the dryer 10 or fewer times/hour, and after restarting, wait at least 5 minutes before stopping again. The stop time must be 3 minutes or longer."

- 4 Install an independent ground leakage breaker on the main power source to protect against overloads and prevent electric shocks from current leaks.
- 5 Ground the ground cable.

CAUTION

Installation & Adjustment

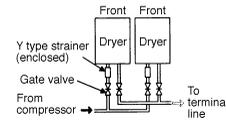
Air piping

- 1 Pipe the dryer as shown below.

For 24-hour operation:

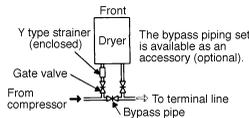
A parallel installation for emergencies is recommended.

Use 1 unit for normal operation, and the other unit as a spare.



For intermittent operation:

Install a bypass pipe for maintenance.



- 2 Install the enclosed Y strainer to prevent dirt in the pipe from entering the dryer.
- 3 Design piping so weight of pipes is not applied to the dryer.
- 4 Use piping that withstands working pressure. Check that no air leaks from connections.

- 5 Galvanized steel pipes (white pipes) are recommended for pipe materials. Use stainless steel pipes based on specifications and applications.

Drain piping

- 6 Connect the drain pipe to the drain.
- 7 Use a drain pipe with a bore size of $\phi 7$ and over. Keep the length to within 2 m, and release the discharge end to the atmosphere.
- 8 The drain piping port is Rc1/4. 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.
- 9 If oil enters drainage, it must be drained and treated. Contact an industrial waste specialist for treatment.
- 10 Drainage is periodically discharged using air pressure. Securely fix the drain discharge tube, etc., so that it does not sway during drain discharge.
- 11 Keep the drain discharge manual cock completely closed during normal operation. Use this manual cock to remove drainage during maintenance.

CAUTION

During use & Maintenance

- 1 This product uses Freon gas. To protect the environment, collect Freon gas when disposing of the product. Contact

CKD or a specialist for such collection.

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Automatic drain other
F.R.L (Module)
F.R.L (Separate)
Small F.R.
Precise R.
Electro pneumatic R.
Auxiliary
Flow control valve
Silencer
Check valve / others
Joint / tube
Vacuum F.
Vacuum R.
Vacuum generator
Vacuum auxiliary / pad
Mechanical pressure SW
Electronic pressure SW
Electronic dif. pres. SW
Sealing / close contact conf. SW
Pressure SW for coolant
Flow sensor for air
Total air system
Water cooling refrigerator
Flow sensor for water
Main line unit Refrigerating type dryer GX

Saturated viper rate table

Saturated viper table (relative humidity 100%)

(Unit: g/m³)

	Per 1 °C									
	0	1	2	3	4	5	6	7	8	9
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	4.84	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

How to read saturated viper rate table

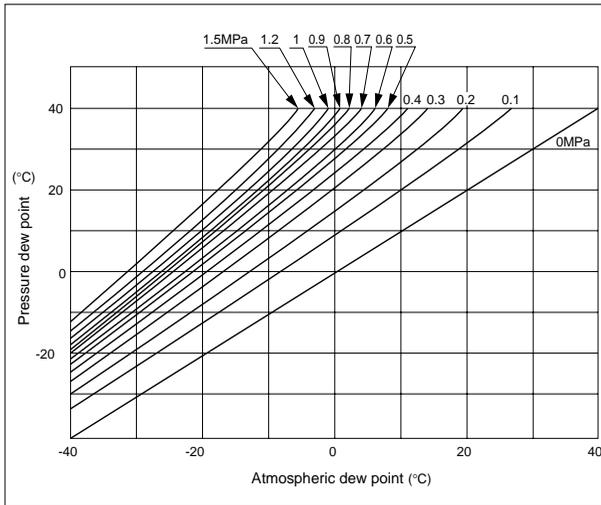
In the table, temperature per 1°C is indicated on columns, while temperature per 10°C is on rows.

(E.g.) Find saturated viper rate for 32°C.

E.g.	Per 1 °C				
	0	1	2	3	
32 °C					
Per 10 °C	40				
	30		33.7		
	20				

33.7g/m³ are obtained according to the table above.

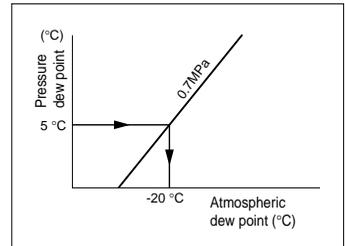
Pressure dew point - atmospheric dew point conversion table



How to read pressure dew point - atmospheric dew point conversion table

Use this table to convert pressure dew point per pressure to atmospheric dew point or atmospheric dew point to pressure dew point.

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



Where pressure 0.7MPa, converting pressure dew point 5°C to atmospheric dew point, -20°C is obtained.



Discontinue

Refrigerating type dryer

GX3000 Series

For installation / standard inlet air (35°C) type
 Applicable air compressor: 22kW and 37kW
 JIS symbol



CAD DATA AVAILABLE.

Specifications

Descriptions		GX3022	GX3037
Applicable air compressor kW		22	37
Use range	Working fluid	Compressed air	
	Inlet air temperature °C	5 to 50	
	Inlet air pressure MPa	0.2 to 1.6	
	Ambient temperature °C	2 to 43	
Rated	Treated flow rate m ³ /min (ANR)	3.9/4.3	6.6/7.3
	Inlet air temperature °C	35	
	Inlet air pressure MPa	0.7	
	Ambient temperature °C	32	
Functionality	Outlet air pressure dew point °C	10	
	Pressure drop MPa	According to flow characteristics (refer to page 48.)	
Electrical specifications	Power supply	Single phase 200/200-220V 50/60Hz	Three phase 200/200-220V 50/60Hz
	Power consumption kW	0.55/0.65	1.03/1.25
	Operating current A	3.0/3.3	4.1/4.4
	Starting current A	14.2/11.9	19.9/19.0
Device details	Operational procedures	Automatic and manual operations	
	Refrigerant control method	Capillary tube	
	Temperature control method	Capacity adjustment mechanism	
	Refrigerant	R22	
Air inlet/outlet port size	Rc1	Rc1 ¹ / ₂	
Drain port size	Rc1/4	Rc1/4	
Dimensions (height X bottom X width)	960 X 520 X 420	1040 X 670 X 420	
Product mass kg	63	90	
Exhaust heat kW	1.91	3.44	

Note 1. Standard paint color

Outer panel : Quality cool white (Munsell No.5GY7.5/0.5)
 Base : Black (Munsell No.N1.0)

Note 2. ANR shows conditions where 20°C atmospheric pressure and relative humidity 65%.

Selection guide

To find applicable models according to max. treating air flow rate.
 Standard treating flow rate X pressure dew point coefficient X inlet air temperature coefficient X ambient temperature coefficient X pressure coefficient = max. treating air flow rate

Conditions	Working conditions	Selecting conditions	Coefficient
Pressure dew point	7 °C or less	5 °C	0.72
Inlet air temperature	35 to 43 °C	45 °C	0.70
Ambient temperature	25 to 33 °C	35 °C	0.98
Pressure	0.55 to 0.75MPa	0.5MPa	0.87
Frequency	60Hz	60Hz	—

Substitute above conditions to the expression above to find treating air flow rate for GX3022.

$$4.3 \times 0.72 \times 0.70 \times 0.98 \times 0.87 = 1.8\text{m}^3/\text{min}$$

If air consumption is this number or less, select the model.

Note. Select a model where the product per coefficient does not exceed 1.5.

(1) Pressure dew point coefficient		(3) Ambient temperature coefficient	
Pressure dew point	Coefficient	Ambient temperature	Coefficient
15 °C	1.3	32 °C	1.00
10 °C	1.0	35 °C	0.98
5 °C	0.72	40 °C	0.90
		43 °C	0.84

(2) Inlet air temperature coefficient		(4) Pressure coefficient	
Inlet air temperature	Coefficient	Inlet pressure	Coefficient
35 °C	1.00	0.2MPa	0.67
40 °C	0.83	0.3MPa	0.73
45 °C	0.70	0.4MPa	0.80
50 °C	0.51	0.5MPa	0.87
		0.6MPa	0.94
		0.7MPa	1.00
		0.8MPa	1.07
		0.9MPa	1.13
		1.0MPa	1.17
		1.6MPa	1.38

How to order

GX30 37 - G - AC380V

A Capacity code

B Option
Note 1

C Voltage
Note 2

Symbol	Descriptions
A Capacity code	
22	22kW
37	37kW
B Option	
A	Analog dew point hygrometer
F	Optional color
G	Optional voltage
H	English documentation
H2	SUS name plate
M	Remote control & operation / fault signal output
N1	Copper tube rust proof coating
O	Outdoors specifications (protection grade IP X 3) Note 3
Y2	Product photo
C Voltage	
AC200V	
AC220V	
AC230V	
AC240V	
AC380V	
AC400V	
AC415V	
AC440V	
AC460V	
AC480V	

Note on model No. selection

- Note 1: Indicate options in alphabetic order.
 Note 2: (1) Indicate the voltage in section "C" even for standard voltage.
 E.g.) GX3022-AC200V
 (2) Order model no. is following at voltage AC220V.
 E.g.) If 50Hz and AC220 V, option G product: GX3022-G-AC220V.
 If 60Hz and AC220 V, standard product: GX3022-AC200V.
 Note 3: If option O and other options are combined, please be noted following matters.
 (1) Ones except option A are available.
 (2) Option M is already integrated, so selecting option M is not necessary.
 (3) No accessory of by-pass pipe set (separate sales) can be installed.

Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Sealing / dose contact conf. SW

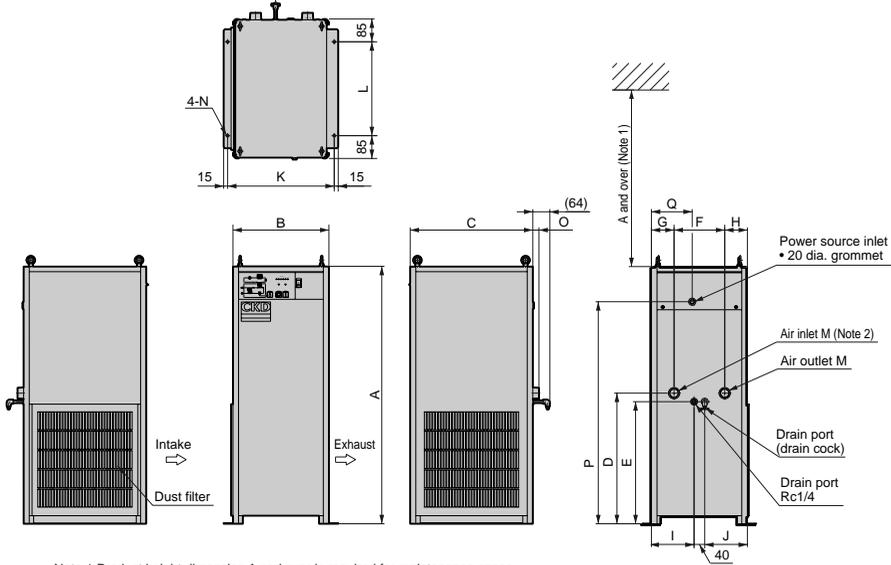
Pressure SW for coolant
 Flow sensor for air
 Total air system

Water cooling refrigerator
 Flow sensor for water

Main line unit
 Refrigerating type dryer GX

Dimensions

(File name: Page 69 or Ending 12)



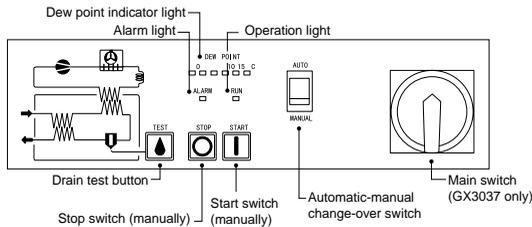
Note 1. Product height dimension A and over is required for maintenance space.

Note 2. Y type strainer and nipple to install to air inlet are attached.

Model no.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
GX3022	960	420	520	487	455	190	120	(110)	195	(185)	460	350	Rc1	10 dia.	(23)	(828)	(188)
GX3037	1040	420	670	514	482	190	120	(110)	195	(185)	465	500	Rc1½	13 dia.	(27)	(855)	(118)

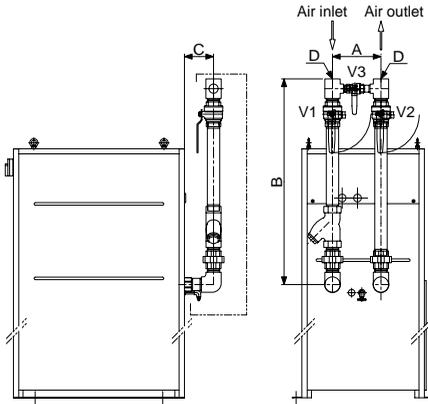
The dimension in () is for reference.

Details of control section



Dimensions: Accessories (separate sales)

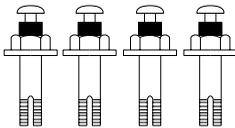
- By-pass pipe set



No.	Applicable model no.	A	B	C	D
GXP-FL-233919	GX3022	190	759	106	Rc1
GXP-FL-233920	GX3037	190	801	114	Rc1 1/2

V1, V2 and V3: Ball valve
 V1: Normally open
 V2: Normally open
 V3: Normally closed

- Foundation bolt & nut



No.	Applicable model no.	Size	Material	Quantity
GXP-FL-233907	GX3022	M8 X 70	SUS	4
GXP-FL-233908	GX3037	M10 X 100	SUS	4

Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Sealing / close contact conf. SW

Pressure SW for coolant
 Flow sensor for air
 Total air system

Water cooling refrigerator
 Flow sensor for water

Main line unit
 Refrigerating type dryer GX



Discontinue

Refrigerating type dryer

GX4100 / GX4100E Series

International Standard conformed / ISO / NEPA standards

Applicable air compressor: 2.2kW to 37kW

JIS symbol



CAD DATA AVAILABLE.

Specifications

Descriptions		GX4103 GX4103E	GX4104 GX4104E	GX4106 GX4106E	GX4108 GX4108E	GX4111 GX4111E	GX4115 GX4115E	GX4122 GX4122E	GX4137 GX4137E
Applicable air compressor kW		to 2.2	3.7	5.5	7.5	11	15	22	37
Use range	Working fluid	Compressed air							
	Inlet air temperature °C	5 to 60							
	Inlet air pressure MPa	0.2 to 1.6							
	Ambient temperature °C	2 to 43							
Rated	Treated flow rate m ³ /min (ANR)	0.31/0.35	0.5/0.55	0.74/0.81	1.2/1.3	1.65/1.82	2.8/3.1	3.9/4.3	6.6/7.3
	Inlet air temperature °C	38							
	Inlet air pressure MPa	0.7							
	Ambient temperature °C	38							
Functionality	Outlet air pressure dew point °C	3							
	Pressure drop MPa	According to flow characteristics (refer to page 48)							
Electrical specifications	Power supply	Single phase 100/100-110V, 200/200-220V 50/60Hz				Single phase 200/200-220V 50/60Hz	Three phase 200/200-220V50/60Hz		
	Power consumption kW	0.17/0.18	0.22/0.23	0.25/0.30	0.35/0.41	0.48/0.56	0.95/1.16	1.30/1.55	2.2/2.7
	Operating current 100V A	2.0/1.9	2.6/2.4	3.0/3.6	4.2/4.4	—	—	—	—
	Operating current 200V A	1.0/1.0	1.3/1.2	1.5/1.8	2.1/2.2	2.7/3.0	3.8/4.2	5.1/5.2	7.9/8.8
	Starting current 100V A	5.1/4.8	8.6/8.1	13.9/13.1	17.6/16.3	—	—	—	—
	Starting current 200V A	2.7/2.6	4.04/3.84	6.2/5.8	9.6/8.9	14.2/11.9	19.9/19.0	29/26	45/42
Device details	Operational procedures	Automatic operation and manual operation							
	Refrigerant control method	Capillary tube							
	Temperature control method	Capacity adjustment mechanism							
	Refrigerant	R407C							
Air inlet/outlet port size		Rc3/8	Rc3/8	Rc1/2	Rc3/4	Rc3/4	Rc1	Rc1	Rc1 1/2
Drain port size		Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4
Dimensions (height X depth X width)		790 X 380 X 300	790 X 380 X 300	820 X 430 X 350	820 X 430 X 350	960 X 450 X 420	1040 X 520 X 420	1120 X 610 X 420	1170 X 670 X 480
Product mass kg		30	32	38	42	56	75	89	120
Exhaust heat kW		0.33	0.5	0.7	1.0	1.5	2.7	3.7	6.3

Note 1. Standard paint color Outer panel : Quality cool white (Munsell No.5GY7.5/0.5)

Base : Black (Munsell No.N1.0)

Note 2. ANR shows conditions where 20 °C atmospheric pressure and relative humidity 65%.

Selection guide

Find the adequate model according to max. treatment air capacity.

Standard treated flow rate X Pressure dew point coefficient X Inlet air temperature coefficient X Ambient temperature coefficient X Pressure coefficient = Max. treated air flow rate

Conditions descriptions	Working conditions	Selecting conditions	Coefficient
Pressure dew point	3 °C or less	3 °C	1.0
Inlet air temperature	35 to 43 °C	45 °C	0.78
Ambient temperature	35 to 40 °C	40 °C	0.95
Pressure	0.55 to 0.75MPa	0.5MPa	0.86
Frequency	60Hz	60Hz	—

Substitute above conditions to the expression above, and find the treatment air capacity for GX4111.

$$1.82 \times 1.0 \times 0.78 \times 0.95 \times 0.86 = 1.16\text{m}^3/\text{min}$$

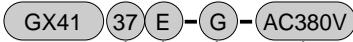
If air consumption is this number or less, select the model.

Note. Select a product where the value of product per coefficient is less than 1.5.

(1) Pressure dew point correction coefficient		(3) Ambient temperature coefficient	
Pressure dew point	Coefficient	Ambient temperature	Coefficient
15°C	1.19	38°C	1.00
10°C	1.10	40°C	0.95
7°C	1.05	43°C	0.87
3°C	1.00		

(2) Inlet air temperature correction coefficient		(4) Pressure coefficient	
Inlet air temperature	Coefficient	Inlet pressure	Coefficient
38°C	1.00	0.2MPa	0.65
40°C	0.93	0.3MPa	0.72
45°C	0.78	0.4MPa	0.79
50°C	0.66	0.5MPa	0.86
55°C	0.56	0.6MPa	0.94
60°C	0.48	0.7MPa	1.00
		0.8MPa	1.02
		0.9MPa	1.05
		1.0MPa	1.07
		1.6MPa	1.12

How to order



A Capacity code

B Standards

C Option
Note 1
Note 2

D Voltage
Note 3

Symbol	Descriptions
A Capacity code	
03	2.2kW
04	3.7kW
06	5.5kW
08	7.5kW
11	11kW
15	15kW
22	22kW
37	37kW
B Standards	
Blank	Standard products in Japan
E	CE marking products for European market
C Option	
A	Analog dew point hygrometer
F	Optional color
G	Optional voltage
H	English documentations
H2	SUS name plate
M	Remote control & operation / fault signal output
N1	Copper tube rust proof coating
O	Outdoors specifications (protection grade IP X 3) Note 4
Y2	Product photo
D Voltage	
AC100V	
AC115V	
AC127V	
AC200V	
AC220V	
AC230V	
AC240V	
AC380V	
AC400V	
AC415V	
AC440V	
AC460V	
AC480V	



Note on model No. selection

- Note 1: CE conforming products are provided for options; A, F, H2, M and N1. Option H is already compiled as standard.
- Note 2: Indicate options in alphabetic order.
- Note 3: (1) Always indicate voltage of section **D** even for standard products.
E.g.) GX4122-AC200V
- (2) Order model of voltage AC220V is the following.
E.g.) For 50Hz and AC220V, option G product: GX4122-G-AC220V
For 60Hz and AC220V, standard product: GX4122-AC200V
- (3) AC115V, AC127V are available for 4 models; GX4103, GX4104, GX4106 and GX4108.
- (4) Single phase AC100V specification of GX4111 is a custom order.
- Note 4: If option O and other options are combined, please be noted following matters.
- (1) One excluding option A and M can be selected.
 - (2) Option M is integrated, so selecting "M" is not necessary.
 - (3) By-pass pipe set as accessories (separate sales) can not be installed.

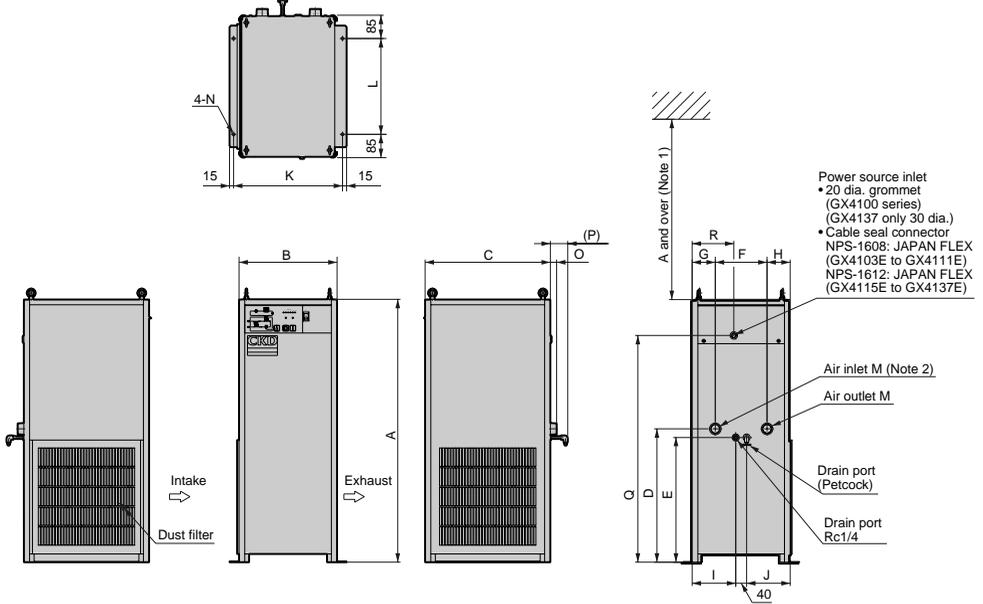
Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Sealing / dose contact conf. SW
 Pressure SW for coolant
 Flow sensor for air
 Total air system
 Water cooling refrigerator
 Flow sensor for water

Main line unit
 Refrigerating type dryer GX

GX4100/GX4100E Series Discontinue

Dimensions

 (File name: Page 69 or Ending 12)



Note 1. Product height dimension A and over is required for maintenance space.

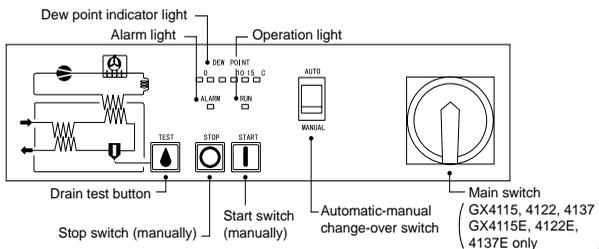
Note 2. A Y type strainer and a nipple installed to the air inlet are attached.

Note 3. Power cord and ground cable 1.5m are installed for AC100V type (E type excluded).

Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
GX4103(E)	790	300	380	405	379	120	90	(90)	130	(130)	340	210	Rc3/8	10 dia.	(-7)	(54)	(675)	(78)
GX4104(E)	790	300	380	405	379	120	90	(90)	130	(130)	340	210	Rc3/8	10 dia.	(-7)	(54)	(675)	(78)
GX4106(E)	820	350	430	430	404	140	95	(115)	145	(165)	390	260	Rc1/2	10 dia.	(-7)	(54)	(697)	(128)
GX4108(E)	820	350	430	430	404	140	95	(115)	145	(165)	390	260	Rc3/4	10 dia.	(-7)	(54)	(697)	(128)
GX4111(E)	960	420	450	487	455	190	120	(110)	195	(185)	460	280	Rc3/4	10 dia.	(-7)	(54)	(828)	(188)
GX4115(E)	1040	420	520	514	482	190	120	(110)	195	(185)	460	350	Rc1	10 dia.	(23)	(64)	(855)	(118)
GX4122(E)	1120	420	610	593	561	190	120	(110)	195	(185)	465	440	Rc1	13 dia.	(23)	(64)	(935)	(118)
GX4137(E)	1170	480	670	641	609	190	120	(170)	195	(245)	525	500	Rc1 1/2	13 dia.	(27)	(64)	(986)	(158)

The dimension in () is for reference.

Details of manual override section



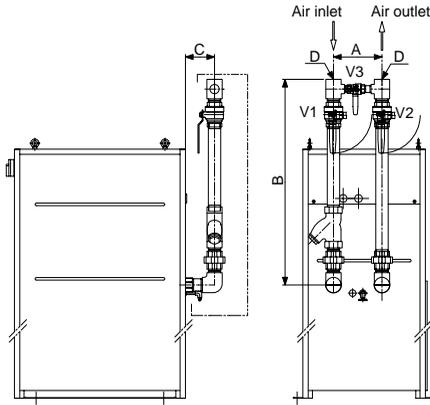
Discontinue

GX4100/GX4100E Series

Dimensions

Dimensions: Accessories (separate sales)

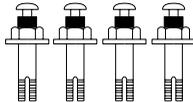
- By-pass pipe set



No.	Applicable model no.	A	B	C	D
GXP-FL-233915	GX4103(E) GX4104(E)	120	536	79	Rc3/8
GXP-FL-233916	GX4106(E)	140	575	79	Rc1/2
GXP-FL-233917	GX4108(E)	140	600	80	Rc3/4
GXP-FL-233918	GX4111(E)	190	715	80	Rc3/4
GXP-FL-233919	GX4115(E) GX4122(E)	190	759	106	Rc1
GXP-FL-233920	GX4137(E)	190	801	114	Rc1 1/2

V1, V2 and V3: Ball valve
 V1: Normally open
 V2: Normally open
 V3: Normally closed

- Foundation bolt & nut



No.	Applicable model no.	Size	Material	Quantity
GXP-FL-233907	GX4103(E) GX4104(E)	M8 X 70	SUS	4
	GX4106(E) GX4108(E)			
	GX4111(E) GX4115(E)			
GXP-FL-233908	GX4122(E) GX4137(E)	M10 X 100		

Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Stepping / close contact conf. SW
 Pressure SW for coolant
 Flow sensor for air
 Total air system
 Water cooling refrigerator
 Flow sensor for water
 Main line unit
 Refrigerating type dryer GX



Discontinue

Refrigerating type dryer

GX5000 Series

Direct connection to compressor / high temperature inlet air (55°C) type

Applicable air compressor: 2.2kW to 37kW

JIS symbol



CAD DATA AVAILABLE.

Specifications

Descriptions	GX5003	GX5004	GX5006	GX5008	GX5011	GX5015	GX5022	GX5037	
Applicable air compressor kW	to 2.2	3.7	5.5	7.5	11	15	22	37	
Use range	Working fluid								
	Compressed air								
	Inlet air temperature °C								
	5 to 80								
Inlet air pressure MPa									
0.2 to 1.6									
Ambient temperature °C									
2 to 43									
Rated	Treated flow rate m ³ /min(ANR)	0.31/0.35	0.5/0.55	0.74/0.81	1.2/1.3	1.65/1.82	2.8/3.1	3.9/4.3	6.6/7.3
	Inlet air temperature °C								
	55								
	Inlet air pressure MPa								
0.7									
Ambient temperature °C									
32									
Functionality	Outlet air pressure dew point °C								
	10								
Pressure drop MPa									
According to flow characteristics (refer to page 48.)									
Electrical specifications	Power supply	Single phase 100/100-110V, 200/200-220V 50/60Hz				Single phase 200/200-220V 50/60Hz	Three phase 200/200-220V 50/60Hz		
	Power consumption kW	0.17/0.18	0.22/0.23	0.25/0.30	0.35/0.41	0.48/0.56	0.95/1.16	1.30/1.55	2.2/2.7
	Operating current 100V A	2.0/1.9	2.6/2.4	3.0/3.6	4.2/4.4	—	—	—	—
	Operating current 200V A	1.0/1.0	1.3/1.2	1.5/1.8	2.1/2.2	2.7/3.0	3.8/4.2	5.1/5.2	7.9/8.8
	Starting current 100V A	5.1/4.8	8.6/8.1	13.9/13.1	17.6/16.3	—	—	—	—
	Starting current 200V A	2.7/2.6	4.04/3.84	6.2/5.8	9.6/8.9	14.2/11.9	19.9/19.0	29/26	45/42
	Operational procedures								
Automatic and manual operations									
Refrigerant control method									
Capillary tube									
Temperature control method									
Capacity adjustment mechanism									
Refrigerant									
R22									
Air inlet/outlet port size	Rc3/8	Rc3/8	Rc1/2	Rc3/4	Rc3/4	Rc1	Rc1	Rc1 1/2	
Drain port size	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	
Dimensions (height X depth X width)	790 X 380 X 300	790 X 380 X 300	820 X 430 X 350	820 X 430 X 350	960 X 450 X 420	1040 X 520 X 420	1120 X 610 X 420	1170 X 670 X 480	
Product mass kg	30	32	38	42	56	75	89	120	
Exhaust heat kW	0.4	0.6	0.9	1.4	1.9	3.3	4.7	8.0	

Note 1. Standard paint color outer panel : Quality cool white (Munsell No.5GY7.5/0.5)
Base : Black (Munsell No.N1.0)

Note 2. ANR shows conditions where 20°C atmospheric pressure and relative humidity 65%.

Selection guide

To find applicable models according to max. treating air flow rate.

Standard treating flow rate X pressure dew point coefficient X inlet air temperature coefficient X ambient temperature coefficient X pressure coefficient = max. treating air flow rate

Conditions	Working conditions	Selecting conditions	Coefficient
Pressure dew point	5 °C or less	5 °C	0.7
Inlet air temperature	55 to 65 °C	65 °C	0.90
Ambient temperature	35 to 40 °C	40 °C	0.84
Pressure	0.55 to 0.75MPa	0.5MPa	0.86
Frequency	50Hz	50Hz	—

Substitute above conditions to the expression above to find treating air flow rate for GX5011.

$$1.65 \times 0.7 \times 0.90 \times 0.84 \times 0.86 = 0.75 \text{m}^3/\text{min}$$

If air consumption is this number or less, select the model.

Note. Select a model where the product per coefficient does not exceed 1.5.

(1) Pressure dew point coefficient		(3) Ambient temperature coefficient	
Pressure dew point	Coefficient	Ambient temperature	Coefficient
15 °C	1.1	32 °C	1.00
10 °C	1.0	35 °C	0.94
5 °C	0.7	40 °C	0.84
		43 °C	0.78
(2) Inlet air temperature coefficient		(4) Pressure coefficient	
Inlet air temperature	Coefficient	Inlet pressure	Coefficient
55 °C	1.00	0.2MPa	0.65
60 °C	0.95	0.3MPa	0.72
65 °C	0.90	0.4MPa	0.79
70 °C	0.86	0.5MPa	0.86
75 °C	0.82	0.6MPa	0.94
80 °C	0.79	0.7MPa	1.00
		0.8MPa	1.02
		0.9MPa	1.05
		1.0MPa	1.07
		1.6MPa	1.12

How to order

GX50 37 - G - AC380V

A Capacity code

B Option
Note 1

C Voltage
Note 2

Symbol	Descriptions
A Capacity code	
03	2.2kW
04	3.7kW
06	5.5kW
08	7.5kW
11	11kW
15	15kW
22	22kW
37	37kW
B Option	
A	Analog dew point hygrometer
F	Optional color
G	Optional voltage
H	English documentation
H2	SUS name plate
M	Remote control & operation / fault signal output
N1	Copper tube rust proof coating
O	Outdoors specifications (protection grade IP X 3) Note 3
Y2	Product photo
C Voltage	
AC100V	
AC115V	
AC127V	
AC200V	
AC220V	
AC230V	
AC240V	
AC380V	
AC400V	
AC415V	
AC440V	
AC460V	
AC480V	

⚠ Note on model No. selection

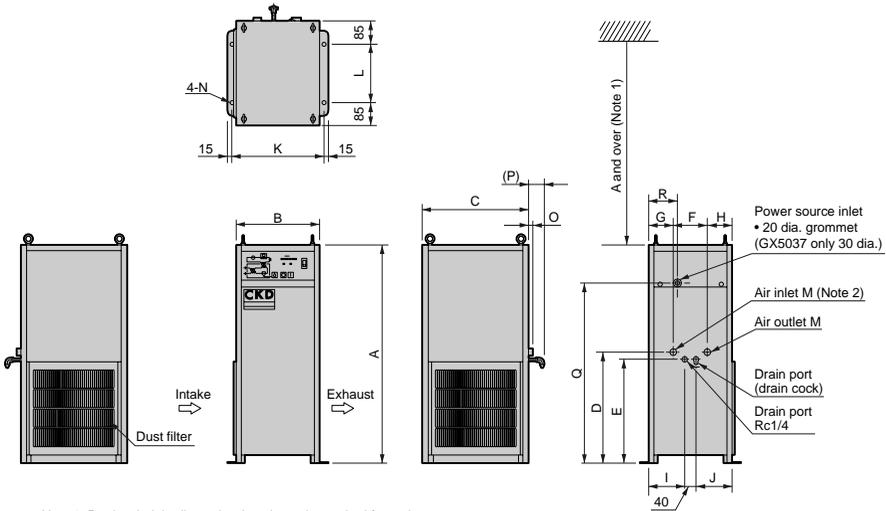
- Note 1: Indicate options in alphabetic order.
- Note 2: (1) Indicate the voltage in section **C** even for standard voltage.
E.g.) GX5022-AC200V
(2) Ordering model is following for voltage AC220V.
E.g.) If 50Hz and AC220 V, option G product : GX5022-G-AC220V
If 60Hz and AC220 V, standard product : GX5022-AC200V
- Note 3: (1) AC115V and AC127V are available for 4 models; GX5003, GX5004, GX5006 and GX5008.
(2) Single phase AC100V specification of GX5011 is a custom order.
(3) If option O and other option are combined, please be noted following matters.
(1) Ones except option A and M can be selected.
(2) Option M is already integrated, so selecting option M is not required.
(3) No accessory of by-pass pipe set (separate sales) can be installed.

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Automatic drain other
F.R.L (Module)
F.R.L (Separate)
Small F.R.
Precise R.
Electro pneumatic R.
Auxiliary
Flow control valve
Silencer
Check valve / others
Joint / tube
Vacuum F.
Vacuum R.
Vacuum generator
Vacuum auxiliary / pad
Mechanical pressure SW
Electronic pressure SW
Electronic dif. pres. SW
Sealing / close contact conf. SW
Pressure SW for coolant
Flow sensor for air
Total air system
Water cooling refrigerator
Flow sensor for water

Main line unit
Refrigerating type dryer GX

Dimensions

 (File name: Page 69 or Ending 12)



Note 1. Product height dimension A and over is required for maintenance space.

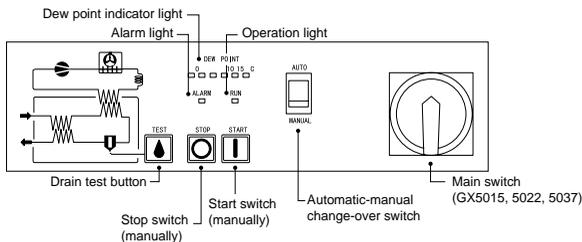
Note 2. Y type strainer and nipple to install to air inlet are attached.

Note 3. Power cord and ground cable 1.5m are installed for AC100V type.

Model no.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
GX5003	790	300	380	405	379	120	90	(90)	130	(130)	340	210	Rc3/8	10 dia.	(-7)	(54)	(675)	(78)
GX5004	790	300	380	405	379	120	90	(90)	130	(130)	340	210	Rc3/8	10 dia.	(-7)	(54)	(675)	(78)
GX5006	820	350	430	430	404	140	95	(115)	145	(165)	390	260	Rc1/2	10 dia.	(-7)	(54)	(697)	(128)
GX5008	820	350	430	430	404	140	95	(115)	145	(165)	390	260	Rc3/4	10 dia.	(-7)	(54)	(697)	(128)
GX5011	960	420	450	487	455	190	120	(110)	195	(185)	460	280	Rc3/4	10 dia.	(-7)	(54)	(828)	(188)
GX5015	1040	420	520	514	482	190	120	(110)	195	(185)	460	350	Rc1	10 dia.	(23)	(64)	(855)	(118)
GX5022	1120	420	610	593	561	190	120	(110)	195	(185)	465	440	Rc1	13 dia.	(23)	(64)	(935)	(118)
GX5037	1170	480	670	641	609	190	120	(170)	195	(245)	525	500	Rc1/2	13 dia.	(27)	(64)	(986)	(158)

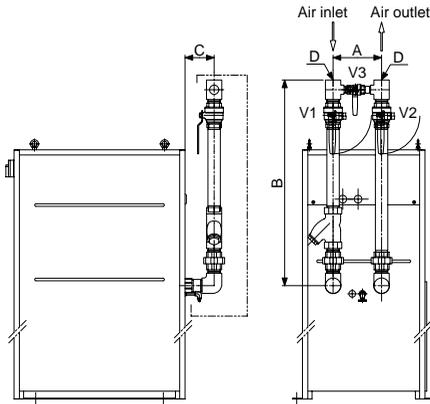
The dimension in () is for reference.

Details of control section



Dimensions: Accessories (separate sales)

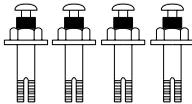
- By-pass pipe set



No.	Applicable model no.	A	B	C	D	E
GXP-FL-233915	GX5003, GX5004	120	513	79	23	Rc3/8
GXP-FL-233916	GX5006	140	548	79	27	Rc1/2
GXP-FL-233917	GX5008	140	571	80	29	Rc3/4
GXP-FL-233918	GX5011	190	686	80	29	Rc3/4
GXP-FL-233919	GX5015, GX5022	190	725	106	34	Rc1
GXP-FL-233920	GX5037	190	760	114	41	Rc1/2

V1, V2 and V3: Ball valve
 V1: Normally open
 V2: Normally open
 V3: Normally closed

- Foundation bolt & nut



No.	Applicable model no.	Size	Material	Quantity
GXP-FL-233907	GX5003, GX5004	M8 X 70	SUS	4
	GX5006, GX5008 GX5011, GX5015			
GXP-FL-233908	GX5022, GX5037	M10 X 100		

Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Seating / close contact conf. SW
 Pressure SW for coolant
 Flow sensor for air
 Total air system
 Water cooling refrigerator
 Flow sensor for water
Main line unit
 Refrigerating type dryer GX



Discontinue

Refrigerating type dryer

GX6000 Series

High temperature inlet air (80°C) type for high temperature and humidity district
 Applicable air compressor: 2.2kW to 15kW
 JIS symbol



CAD DATA AVAILABLE.

Specifications

Descriptions		GX6003	GX6004	GX6006	GX6008	GX6011	GX6015
Applicable air compressor kW		to 2.2	3.7	5.5	7.5	11	15
Use range	Working fluid	Compressed air					
	Inlet air temperature °C	5 to 80					
	Inlet air pressure MPa	0.2 to 1.6					
Rated	Ambient temperature °C	2 to 43					
	Treated flow rate m ³ /min (ANR)	0.31/0.35	0.5/0.55	0.74/0.81	1.2/1.3	1.65/1.82	2.8/3.1
	Inlet air temperature °C	80 (inlet air dew point 71 °C)					
Functionality	Inlet air pressure MPa	0.7					
	Ambient temperature °C	35					
	Outlet air pressure °C	10					
Electrical specifications	dew point MPa	According to flow characteristics (refer to page 48.)					
	Power supply	Single phase 100/100 - 110V, 200/200 - 220V 50/60Hz	Single phase 200/200 - 220V 50/60Hz	Three phase 200/200 - 220V 50/60Hz			
	Power consumption kW	0.39/0.45	0.55/0.65	0.64/0.75	1.03/1.25	1.38/1.66	2.33/2.93
	Operating current 100V A	4.6/4.8	—	—	—	—	—
	Operating current 200V A	2.3/2.4	3.1/3.3	2.8/2.9	4.2/4.4	5.4/5.5	8.2/9.5
	Starting current 100V A	17.6/16.3	—	—	—	—	—
	Starting current 200V A	9.6/8.9	14.2/11.9	14.0/12.2	19.9/19.0	29/26	45/42
Device details	Operational procedures	Automatic and manual operations					
	Refrigerant control method	Capillary tube					
	Temperature control method	Capacity adjustment mechanism					
	Refrigerant	R22					
Air inlet/outlet port size	Rc3/8	Rc3/8	Rc1/2	Rc3/4	Rc3/4	Rc1	
Drain port size	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	
Dimensions (height X depth X width)	820 X 430 X 350	880 X 450 X 420	960 X 520 X 420	960 X 520 X 420	1120 X 610 X 420	1170 X 670 X 480	
Product mass kg	39	48	53	55	87	110	
Exhaust heat kW	1.0	1.6	2.2	3.6	4.9	8.3	

Note 1. Standard paint color outer panel : Quality cool white (Munsell No.5GY7.5/0.5)
 Base : Black (Munsell No.N1.0)

Note 2. ANR shows conditions where 20 °C atmospheric pressure and relative humidity 65%.

Selection guide

To find applicable models according to max. treating air flow rate.

Standard treating flow rate X pressure dew point coefficient X inlet air temperature coefficient X ambient temperature coefficient X pressure coefficient = max. treating air flow rate

Conditions	Working conditions	Selecting	Coefficient
Pressure dew point	8 °C or less	5 °C	0.7
Inlet air temperature	70 to 75 °C	75 °C	0.97
Ambient temperature	35 to 42 °C	43 °C	0.8
Pressure	0.55 to 0.75MPa	0.5MPa	0.86
Frequency	60Hz	60Hz	—

Substitute above conditions to the expression above to find treating air flow rate for GX6008.

$$1.3 \times 0.7 \times 0.97 \times 0.8 \times 0.86 = 0.61 \text{m}^3/\text{min}$$

If air consumption is this number or less, select the model.

Note. Select a model where the product per coefficient does not exceed 1.5.

(1) Pressure dew point correction coefficient		(3) Ambient temperature coefficient	
Pressure dew point	Coefficient	Ambient temperature	Coefficient
15 °C	1.1	35 °C	1.0
10 °C	1.0	40 °C	0.89
5 °C	0.7	43 °C	0.80

(2) Inlet air temperature correction coefficient		(4) Pressure coefficient	
Inlet air temperature	Coefficient	Inlet pressure	Coefficient
55 °C (saturated)	1.30	0.2MPa	0.65
60 °C (saturated)	1.21	0.3MPa	0.72
65 °C (saturated)	1.12	0.4MPa	0.79
70 °C (saturated)	1.04	0.5MPa	0.86
75 °C (saturated)	0.97	0.6MPa	0.94
80 °C (dew point 71 °C)	1.00	0.7MPa	1.00
80 °C (saturated)	0.90	0.8MPa	1.02
		0.9MPa	1.05
		1.0MPa	1.07
		1.6MPa	1.12

How to order

GX60 15 - G - AC380V

A Capacity code

B Option
Note 1

C Voltage
Note 2

Symbol	Descriptions
A Capacity code	
03	2.2kW
04	3.7kW
06	5.5kW
08	7.5kW
11	11kW
15	15kW
B Option	
A	Analog dew point hygrometer
F	Optional color
G	Optional voltage
H	English documentation
H2	SUS name plate
M	Remote control & operation / fault signal output
N1	Copper tube rust proof coating
O	Outdoors specifications (protection grade IP X 3) Note 3
Y2	Product photo
C Voltage	
AC100V	
AC115V	
AC127V	
AC200V	
AC220V	
AC230V	
AC240V	
AC380V	
AC400V	
AC415V	
AC440V	
AC460V	
AC480V	

⚠ Note on model No. selection

Note 1: Indicate options in alphabetic order.

Note 2: (1) Indicate the voltage in section **C** even for standard voltage.
E.g.) GX6022-AC200V

(2) Ordering model is following for voltage AC220V.
E.g.) If 50Hz and AC220 V, option G product: GX6006-G-AC220V
If 60Hz and AC220 V, standard product: GX6006-AC200V

(3) AC115V and AC127V are available for GX6003 only.

(4) Single phase AC100V specification of GX6004 is a custom order.

Note 3: If option O and other options are combined, please be noted following matters.

- (1) One except option A and M can be selected.
- (2) Option M is already integrated, so selecting option M is not required.
- (3) Accessory of by-pass pipe set (separate sales) can not be installed.

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Automatic drain other
F.R.L (Module)
F.R.L (Separate)
Small F.R.
Precise R.
Electro pneumatic R.
Auxiliary
Flow control valve
Silencer
Check valve / others
Joint / tube
Vacuum F.
Vacuum R.
Vacuum generator
Vacuum auxiliary / pad
Mechanical pressure SW
Electronic pressure SW
Electronic dif. pres. SW
Sealing / close contact conf. SW

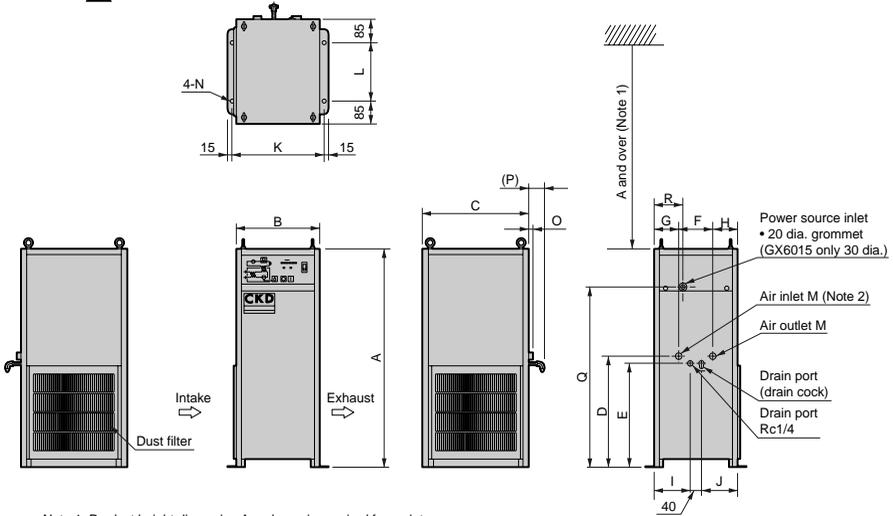
Pressure SW for coolant
Flow sensor for air
Total air system

Water cooling refrigerator
Flow sensor for water

Main line unit
Refrigerating type dryer GX

Dimensions

 (File name: Page 69 or Ending 12)



Note 1. Product height dimension A and over is required for maintenance space.

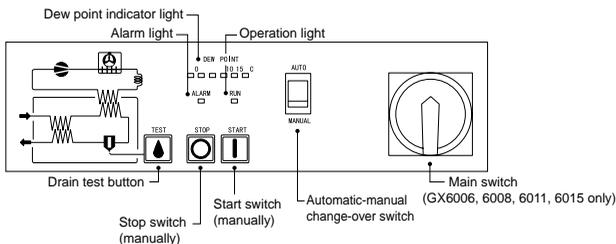
Note 2. Y type strainer and nipple to install to air inlet are attached.

Note 3. Power cord and ground cable 1.5m are installed for AC100V type.

Model no.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
GX6003	820	350	430	430	404	120	115	(115)	155	(155)	390	260	Rc3/8	10 dia.	(-7)	(54)	(697)	(128)
GX6004	880	420	450	481	455	120	150	(150)	190	(190)	460	280	Rc3/8	10 dia.	(-7)	(54)	(748)	(188)
GX6006	960	420	520	507	481	140	140	(140)	190	(190)	460	350	Rc1/2	10 dia.	(-7)	(54)	(828)	(188)
GX6008	960	420	520	507	481	140	140	(140)	190	(190)	460	350	Rc3/4	10 dia.	(-7)	(54)	(828)	(188)
GX6011	1120	420	610	593	561	190	120	(110)	195	(185)	465	440	Rc3/4	13 dia.	(-7)	(54)	(935)	(118)
GX6015	1170	480	670	641	609	190	120	(170)	195	(245)	525	500	Rc1	13 dia.	(23)	(64)	(986)	(158)

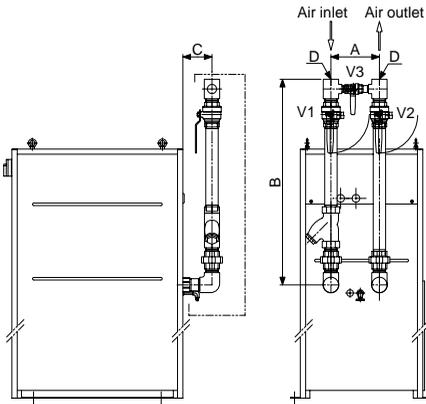
The dimension in () is for reference.

Details of control section



Dimensions: Accessories (separate sales)

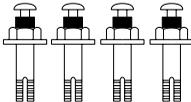
• By-pass pipe set



No.	Applicable model no.	A	B	C	D	E
GXP-FL-233915	GX6003, GX6004	120	513	79	23	Rc3/8
GXP-FL-233916	GX6006	140	548	79	27	Rc1/2
GXP-FL-233917	GX6008	140	571	80	29	Rc3/4
GXP-FL-233918	GX6011	190	686	80	29	Rc3/4
GXP-FL-233919	GX6015	190	725	106	34	Rc1

V1, V2 and V3: Ball valve
 V1: Normally open
 V2: Normally open
 V3: Normally closed

• Foundation bolt & nut



No.	Applicable model no.	Size	Material	Quantity
GXP-FL-233907	GX6003, GX6004	M8 X 70	SUS	4
	GX6006, GX6008			
GXP-FL-233908	GX6011, GX6015	M10 X 100		

Refrigerating type dryer
 Desiccant type dryer
 High polymer membrane dryer
 Air filter
 Automatic drain other
 F.R.L (Module)
 F.R.L (Separate)
 Small F.R.
 Precise R.
 Electro pneumatic R.
 Auxiliary
 Flow control valve
 Silencer
 Check valve / others
 Joint / tube
 Vacuum F.
 Vacuum R.
 Vacuum generator
 Vacuum auxiliary / pad
 Mechanical pressure SW
 Electronic pressure SW
 Electronic dif. pres. SW
 Seating / close contact conf. SW
 Pressure SW for coolant
 Flow sensor for air
 Total air system

Water cooling refrigerator
 Flow sensor for water

Main line unit
 Refrigerating type dryer GX