

Refrigerating type air dryer GX8100 series

New product

Introducing the eco-friendly GX Series compact dryer

This totally new GX Series uses zero-ozone-depleting R-407C refrigerant for the compact model in popular GX8000 Series.



Stainless steel heat exchanger compatible with oil-free air

Outstanding corrosion resistance GX8104 to 8108

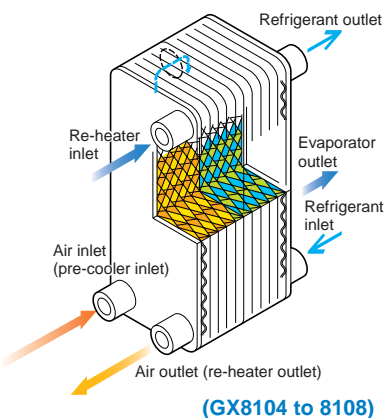
The stainless steel plate heat exchanger prevents refrigerant from leaking and rust from forming, ensures outstanding corrosion resistance.

GX8111 to 8137

The vessel is stainless steel and refrigerating tubes are configured of spine fins with no brazing points.

All models compatible with high pressure

All models have a maximum working pressure of 1.6 MPa.



New eco-friendly refrigerant

The new R-407C refrigerant does not deplete the ozone layer. It surpasses conventional refrigerants in fighting global warming.

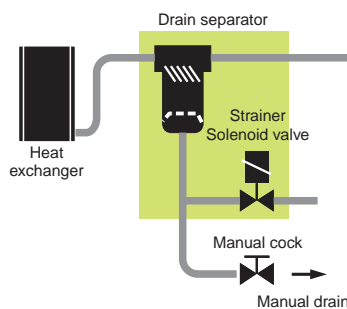


Increased reliability with forced discharge drain

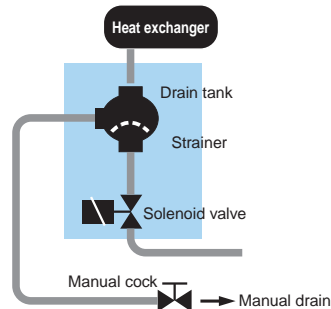
Solve all drain discharge problems

Drainage is forced out by air pressure in the dryer, so the drain does not plug easily. The direct-acting solenoid valve greatly improves reliability over the float valve.

GX8104 to 8108



GX8111 to 8137

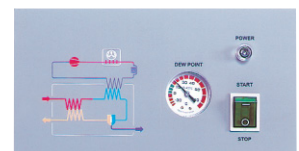


Non-contact fan controller improves reliability

Semi-permanent life

No mechanical motion as with conventional reed switches.

Efficient daily inspection



Dryer operation is visible at a glance at the dew point temperature gauge on the operator panel.

*Use this as a reference because the display may differ from the actual pressure dew point.

Central control at plant (GX8115 to 8137)

Central control at the plant is possible by leading out remote operation and operation signal output.

Standard dust filter

An easy-to-remove dust filter for the capacitor is standard.

Easy-to-remove front panel (No tools required)



Read Precautions for Use in the Pneumatic, Vacuum, and Auxiliary Components Catalog (No. CB-24SA).



Refrigerating type air dryer

GX8100 Series

Applicable air compressor: 3.7 kW, 5.5 kW, 7.5 kW, 11 kW, 15 kW, 22 kW, 37 kW

JIS symbol



Specifications

Model No.		GX8104	GX8106	GX8108	GX8111	GX8115	GX8122	GX8137		
Applicable air compressor		kW		to 3.7	5.5	7.5	11	15	22	37
Usage range	Working fluid		Compressed air							
	Inlet air temperature °C (Note 3)		5 to 80							
	Inlet air pressure MPa		0.2 to 1.6							
	Ambient temperature °C (Note 3)		2 to 43							
Rated	Treated flow rate m ³ /min(ANR) 50/60Hz		0.50/0.55	0.74/0.81	1.20/1.30	1.65/1.82	2.80/3.10	3.90/4.30	6.60/7.30	
	Inlet air temperature °C		55							
	Inlet air pressure MPa		0.7							
	Ambient temperature °C		32							
Performance	Outlet air pressure dew point °C		10							
	Pressure drop MPa (Note 4) 50/60Hz		0.023/0.027	0.009/0.011	0.023/0.027	0.005/0.006	0.015/0.018	0.0026/0.0032	0.008/0.009	
Power supply		Single phase 220V, 230V, 240V 50/60Hz				Three phase 380V, 400V, 415V 50/60 Hz				
Electrical specifications	Power consumption kW 50/60Hz		0.25/0.26	0.42/0.49	0.43/0.50	1.20/1.35	1.69/2.06	1.61/1.98	2.51/3.11	
	Operating current A	Single phase 220V 50/60Hz		1.4/1.3	2.3/2.3	2.3/2.4	6.4/6.7	-	-	-
		Single phase 230V 50/60Hz		1.3/1.2	2.2/2.2	2.2/2.3	6.1/6.4	-	-	-
		Single phase 240V 50/60Hz		1.3/1.2	2.1/2.1	2.1/2.2	5.9/6.1	-	-	-
		Three phase 380V 50/60Hz		-	-	-	-	3.3/3.6	3.1/3.4	5.0/5.6
		Three phase 400V 50/60Hz		-	-	-	-	3.1/3.4	2.9/3.3	4.7/5.4
	Starting current A	Three phase 415V 50/60Hz		-	-	-	-	3.0/3.3	2.8/3.1	4.6/5.2
		Single phase 220V 50/60Hz		3.9/3.6	9.2/8.5	9.2/8.5	25.5/23.4	-	-	-
		Single phase 230V 50/60Hz		3.7/3.5	8.8/8.1	8.8/8.1	24.4/22.4	-	-	-
		Single phase 240V 50/60Hz		3.6/3.3	8.4/7.8	8.4/7.8	23.4/21.4	-	-	-
Three phase 380V 50/60Hz		-	-	-	-	15.4/13.7	15.4/13.7	37.6/33.2		
Three phase 400V 50/60Hz		-	-	-	-	14.6/13.0	14.6/13.0	35.7/31.5		
Three phase 415V 50/60Hz		-	-	-	-	14.1/12.5	14.1/12.5	34.4/30.4		
Refrigerant		R-407C								
Air inlet/outlet port size		Rc3/8	Rc3/4	Rc3/4	Rc1	Rc1	R1 ¹ / ₂	R1 ¹ / ₂		
Drain port size		Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4		
Product mass kg		30	44	44	73	98	124	174		
Exhaust heat kW 50/60Hz		0.59/0.64	0.94/1.04	1.3/1.4	2.6/2.9	4.0/4.7	4.4/5.1	7.2/8.3		

Note 1: Standard paint color Outer panel: Quality cool white (Munsell No. 5GY7.5/0.5)
Quality cool gray (Munsell No. 3G6.0/0.5)
Base: Black

Note 2: ANR indicates the state at 20°C barometric pressure and 65% relative humidity.

Note 3: If the dryer is used with both the inlet air temperature and ambient temperature at maximum (80°C, 43°C) use at the rated flow is not guaranteed. Dryer is shortened in continuous operation. Refer to specifications for details on working ranges.

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

Selection guide

Obtaining the optimum model from each maximum processing air flow:

Reference processing air flow × pressure dew point coefficient × inlet air temperature coefficient × ambient temperature coefficient × pressure coefficient = Maximum processing air flow

Conditions	Working conditions	Selecting conditions	Coefficient
Pressure dew point	Less than 5°C	3°C	0.55
Inlet air temperature	55 to 65°C	65°C	0.70
Ambient temperature	35 to 40°C	40°C	0.75
Pressure	0.55 to 0.75 MPa	0.5MPa	0.88
Frequency	50Hz	50Hz	50Hz

Obtain the processing air flow for the GX8111 by substituting the above conditions into the above equation.

$$1.65 \times 0.55 \times 0.70 \times 0.75 \times 0.88 = 0.42 \text{ m}^3/\text{min}$$

If the working air flow is less than this, select that model.

Note: Select with conditions under which the sum of each coefficient does not exceed 1.5.

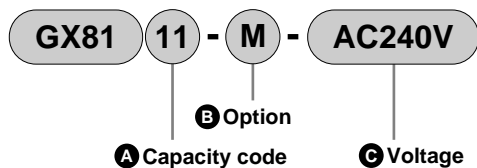
① Pressure dew point coefficient			
Pressure dew point	Coefficient		
	GX8104, GX8106, GX8108	GX8111, GX8115	GX8122, GX8137
15°C	1.06	1.23	1.10
10°C	1.00	1.00	1.00
7°C	0.95	0.82	0.91
5°C	0.91	0.68	0.83
3°C	0.84	0.55	0.70

③ Ambient temperature coefficient	
Ambient temperature	Coefficient
25°C	1.20
32°C	1.00
35°C	0.90
40°C	0.75
43°C	0.67

② Inlet air temperature coefficient		
Inlet air temperature	Coefficient	
	GX8104, GX8106, GX8108, GX8122, GX8137	GX8111, GX8115
40°C	1.15	1.50
45°C	1.12	1.40
50°C	1.08	1.18
55°C	1.00	1.00
60°C	0.88	0.85
65°C	0.74	0.70
70°C	0.60	0.57
75°C	0.44	0.46
80°C	0.30	0.35

④ Pressure coefficient	
Inlet pressure	Coefficient
0.2MPa	0.59
0.3MPa	0.71
0.4MPa	0.80
0.5MPa	0.88
0.6MPa	0.94
0.7MPa	1.00
0.8MPa	1.05
0.9MPa	1.09
1.0MPa	1.12
1.6MPa	1.27

How to order



A Capacity code	
Symbol	Descriptions
04	3.7kW
06	5.5kW
08	7.5kW
11	11kW
15	15kW
22	22kW
37	37kW

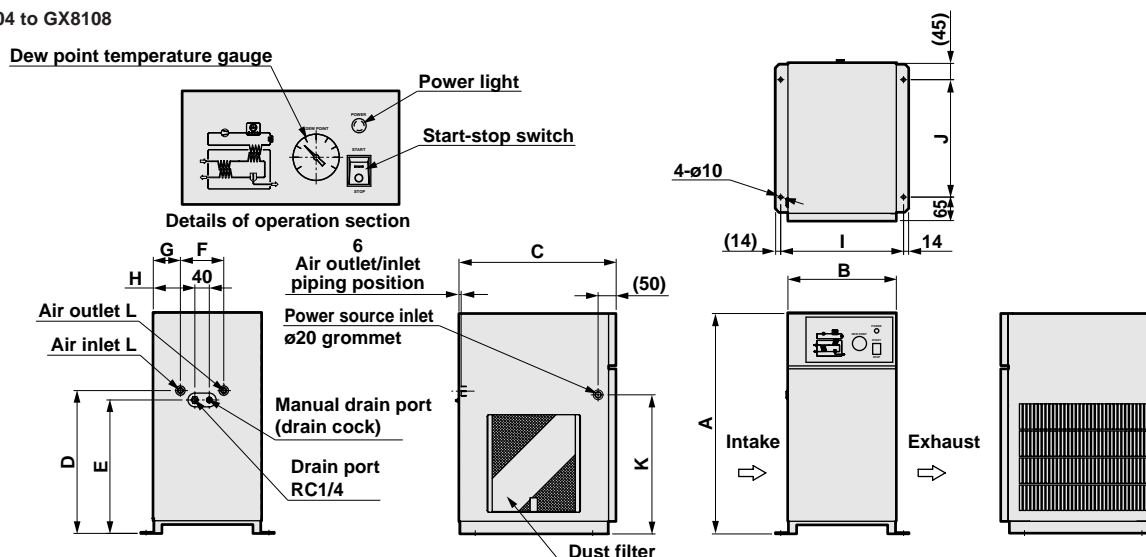
B Option	
Symbol	Descriptions
Blank	Standard products
M	Run signal leadout (Note 1)

C Voltage	
Symbol	Descriptions
AC220V	GX8104, GX8106
AC230V	GX8108, GX8111
AC240V	
AC380V	GX8115, GX8122
AC400V	GX8137
AC415V	

Note 1: This is an option only for GX8104 to 8111. As a standard, the GX8115 to 8137 use remote operation and run signal leadout terminals. Also when remote control is done, do at a state that made a switch of a dryer ON at a power supply side.

Dimensions

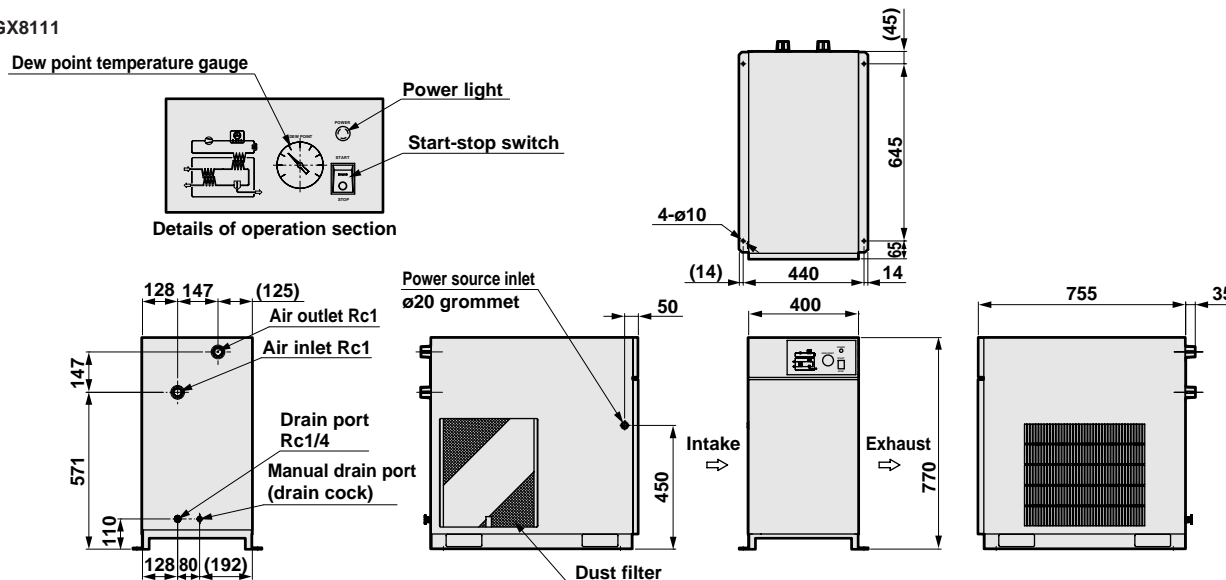
● GX8104 to GX8108



Note 1: The Y strainer and nipple on the air inlet are enclosed.

Model No.	A	B	C	D	E	F	G	H	I	J	K	L
GX8104	610	300	435	395	369	120	75	115	340	325	385	Rc3/8
GX8106	635	370	510	420	394	140	105	155	410	400	410	Rc3/4
GX8108	635	370	510	420	394	140	105	155	410	400	410	Rc3/4

● GX8111

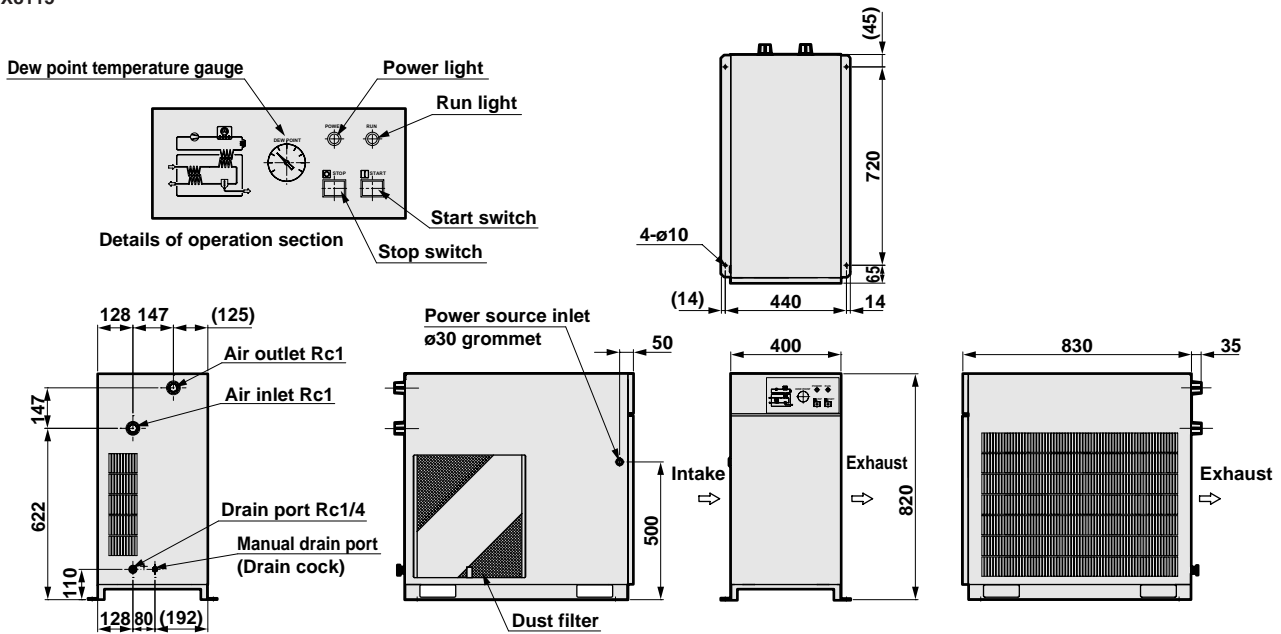


Note 1: The Y strainer is not enclosed.

GX8100 Series

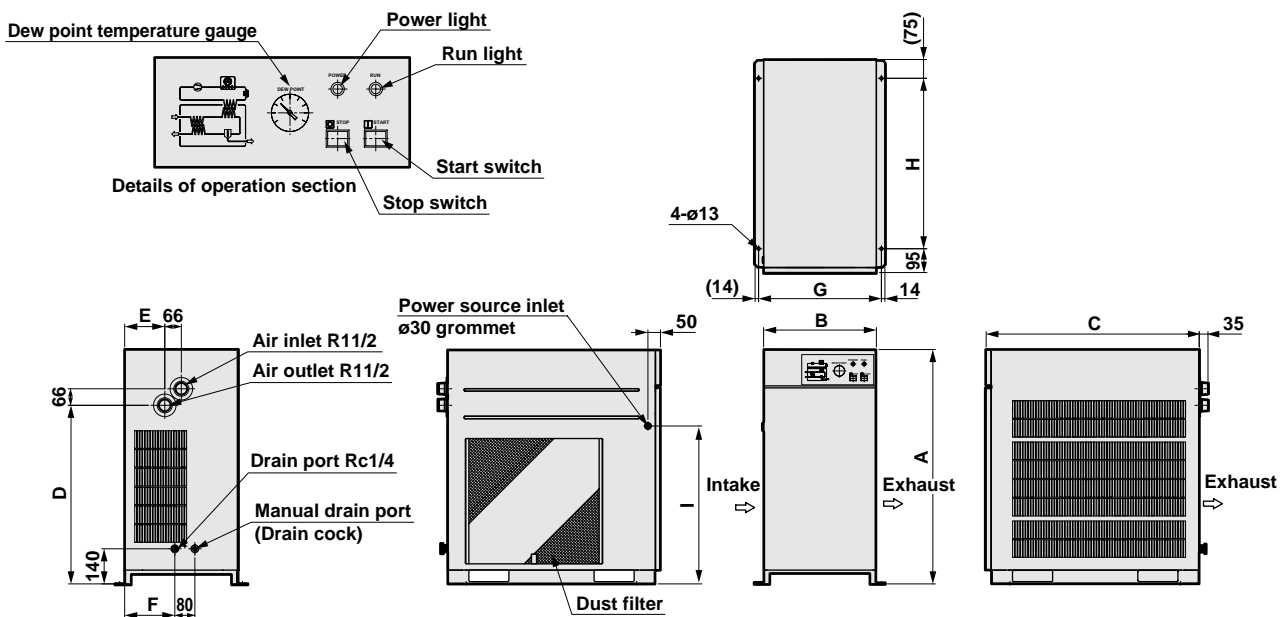
Dimensions

● GX8115



Note 1: The Y strainer is not enclosed.

● GX8122, GX8137



Note 1: The Y strainer is not enclosed.

Model No.	A	B	C	D	E	F	G	H	I
GX8122	935	450	850	712.5	160	200	490	680	630
GX8137	1010	500	930	788.5	180	240	540	760	705

Recommended anchor bolts

Applicable model	Size	Material	Quantity
GX8104, GX8106, GX8108 GX8111, GX8115	M8×70	SUS	4
GX8122, GX8137	M10×100	SUS	4

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