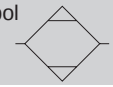
Refrigerated air dryer Xeroaqua Air cooling

GT9000(D) Series

For direct air compressor connection, standard inlet air

Applicable air compressor: 75, 90, 120, 150, 190, 240, 300, 380, 450 kW

JIS symbol



CAD

Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Model No.			GT9075D	GT9090D	GT9120D	GT9150D	GT9190D	GT9240	GT9300	GT9380	GT9450
Applicable air compressor		kW	75	90	120	150	190	240	300	380	450
Working range	Working fluid		Compressed air								
	Inlet air temperature	°C	5 (41°F) to 60 (140°F)								
	Inlet air pressure	MPa	0.29 (≈43 psi, 3 bar) to 0.98 (≈142 psi, 9 bar)					0.1 (≈15 psi, 1 bar) to 0.98 (≈142 psi, 9 bar)	0.29 (≈43 psi, 3 bar) to 0.93 (≈134 psi, 9 bar)		
	Ambient temperature	°C	2 (35°F) to 48 (118°F)					2 (35°F) to 40 (104°F)			
Rating	Processing air rate 50/60 Hz (*2)	m^3/min (ANR)	11.4/12.6	16.3/18.9	20.8/23.8	25.9/30.1	32.1/38.1	36.5/43.0	44.2/52.0	55.2/65.0	70.3/82.8
	Processing air rate (Compressor intake condition) 50/60 Hz (*3)	m^3/min	12.1/13.4	17.3/20.1	22.1/25.3	27.5/32.0	34.1/40.5	38.3/45.2	46.4/54.6	58.0/68.3	73.8/87.0
	Inlet air temperature	°C	40 (104°F)								
	Inlet air pressure	MPa	0.7 (≈101 psi, 7 bar)								
	Ambient temperature	°C	32 (89°F)								
Performance	Outlet air pressure dew point	°C	10 (50°F) (*4)								
Power supply			Three-phase 200/200, 220 VAC 50/60 Hz								
Electrical specifications	Power consumption 50/60 Hz (*5)	kW	2.5/3.0, 3.0	3.0/3.9, 3.9	3.0/3.9, 3.9	4.1/5.2, 5.2	5.7/7.5, 7.4	4.6/5.7, 5.6	5.9/6.8, 6.8	8.6/10.1, 10.0	9.3/11.2, 11.9
	Current consumption 50/60 Hz (*5)	A	9.5/9.5, 9.4	11.5/12.0, 12.0	11.5/12.0, 12.0	14.0/16.5, 15.5	20.5/24.5, 22.5	17.9/19.2, 19.1	19.9/22.3, 21.2	26.4/29.4, 28.9	36.3/38.3, 38.2
	Starting current 50/60 Hz	A	110/100	110/115	110/115	140/155	165/190	135/135	83/77	98/91	135/135
Refrigerant			R-410A					R-407C			
Air inlet and outlet port size (*6)			R2	R2	Flange 2 1/2B	Flange 3B		Flange 4B	Flange 5B		Flange 6B
Weight		kg	146	186	205	279	286	555	790	870	970
Released heat		kW 50/60 Hz	8.4/9.4	11.3/13.2	13.6/15.7	17.2/20.2	21.7/25.9	18.8/22.1	20.8/24.5	26.7/31.3	33.0/39.0

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

How to order (air-cooling)

GT9 075D - G - AC380V

- Ⓐ Capacity category
- Ⓑ Option *1
- Ⓒ Voltage *2

Code	Description
Ⓐ Capacity category	
075D	75 kW
090D	90 kW
120D	120 kW
150D	150 kW
190D	190 kW
240	240 kW
300	300 kW
380	380 kW
450	450 kW
Ⓑ Option	
Blank	Standard products
G	Different voltage compatible
H2	SUS nameplate
H3	Simple export packaging *3
N1	Copper tube rust proof coating
Q1	Drain piping right (GT9075D to GT9190D only)
Ⓒ Voltage	
200 VAC	
220 VAC (60Hz only standard)	
230 VAC	
240 VAC	
380 VAC	
400 VAC	
415 VAC	
440 VAC	
480 VAC	

Precautions for model No. selection

*1: Indicate options in alphabetical order.
*2: Specify the voltage for item Ⓒ even when the model is a standard product.
Example: GT9090D-AC200V
*3: Option H3 is packaged in plywood.
*4: The instruction manual and nameplates are provided in Japanese and English. However, the proof pressure certificate (GT9240 and higher) is available as Japanese text only. Contact CKD when an English version is required.
*5: Contact CKD if a photo of the completed product is required.
*6: Contact CKD to designate the color of the body panel.

Selection guide (GT9075D to 9190D)

(1) Temperature compensation coefficient

GT9075D, GT9090D, GT9120D

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

GT9150D

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

GT9190D

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

(2) Inlet air pressure coefficient

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

(3) Ceiling coefficient

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

When determining the appropriate model from the reference processing air rate of each model No.
Reference processing air rate × (1) Temperature correction coefficient × (2) Inlet air pressure coefficient = Maximum processing air rate
*1: Select with conditions where the value of the product of each coefficient ((1)×(2)) does not exceed the upper limit coefficient of (3).

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

Substitute the above conditions into the equation above to obtain the processing air rate when using GT9150D.
Product of each coefficient
(1) × (2) = 0.95 × 0.92 = 0.87
As the (3) ceiling coefficient of 1.05, when the inlet air pressure of the working conditions is 0.5 MPa, is not exceeded, the max. processing air rate will be 25.9 (reference processing air rate) × 0.87 = 22.5 m^3/min (ANR).
If the used air quantity is less than or equal to this value, select that model.

Selection guide (GT9240 to GT9450)

(1) Temperature compensation coefficient

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

(2) Inlet air pressure coefficient

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

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

(3) Ceiling coefficient

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

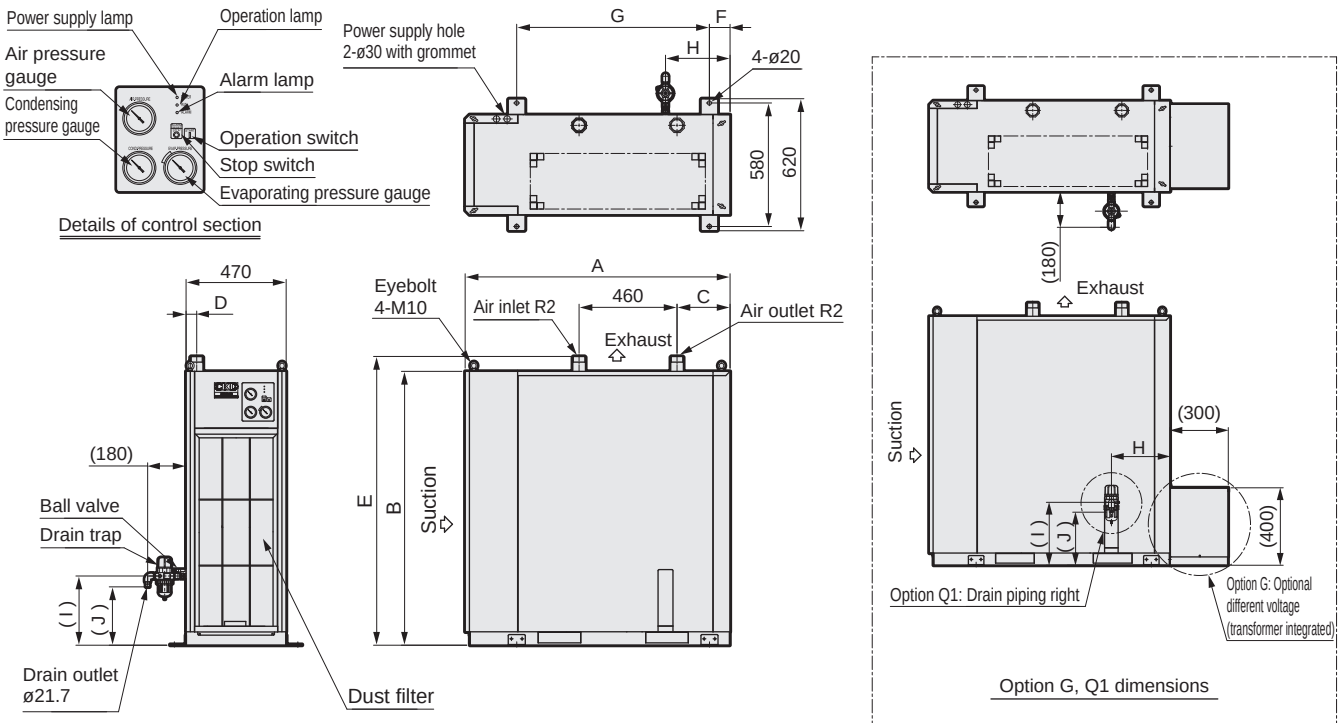
When determining the appropriate model from the reference processing air rate of each model No.
Reference processing air rate × (1) Temperature correction coefficient × (2) Inlet air pressure coefficient = Maximum processing air rate
*2: Select with conditions where the value of the product of each coefficient ((1)×(2)) does not exceed the upper limit coefficient of .

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

Substitute the above conditions into the equation above to obtain the processing air rate when using the GT9240.
Product of each coefficient
(1)×2= 0.94 ×087 = 0.81
As the ceiling coefficient of 1.12 at the inlet air pressure 0.5MPa (use conditions) is not exceeded, the maximum processing air rate will be 23.8 (reference processing air rate) ×0.81=19.2m^3/min (ANR).
If the used air quantity is less than or equal to this value, select that model.
*3: For compatibility with pressure dew points of less than 10°C, contact CKD separately.

Dimensions CAD

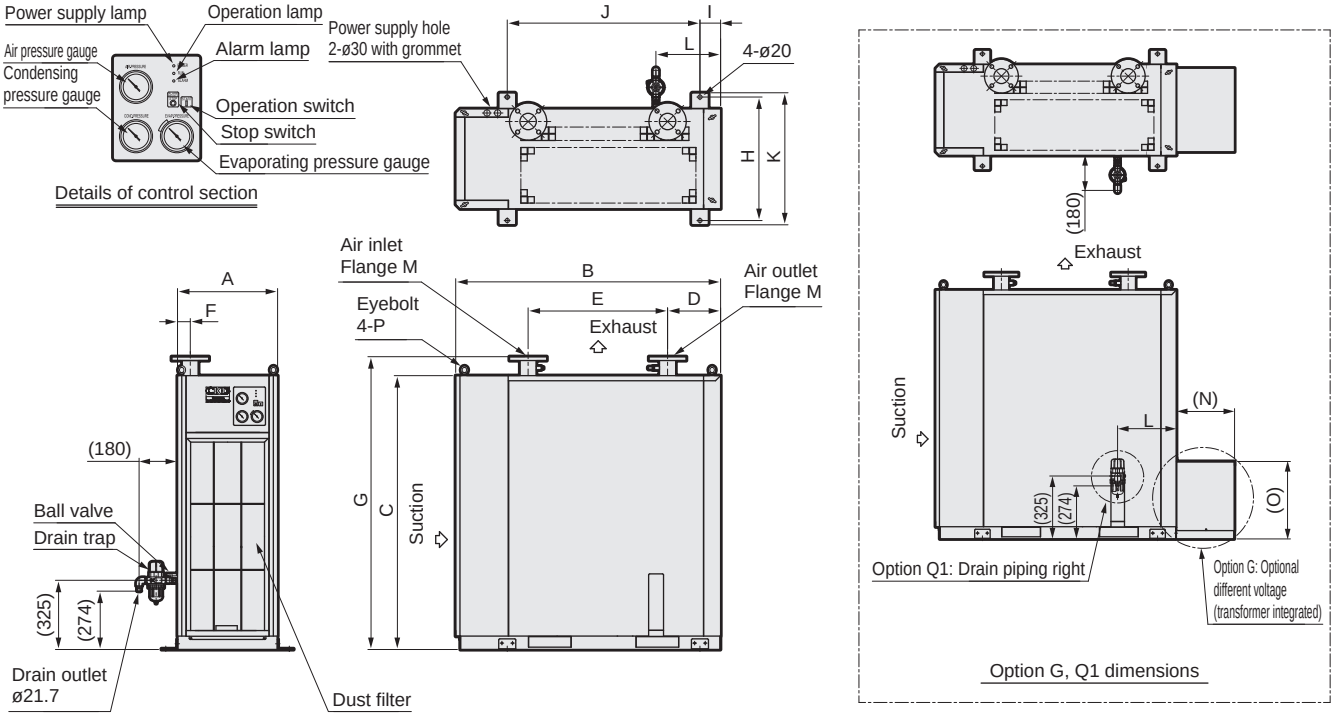
● GT9075D, GT9090D



*1: The drain trap and ball valve are included.

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

● GT9120D, GT9150D, GT9190D

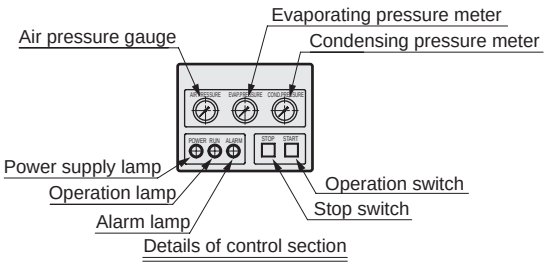


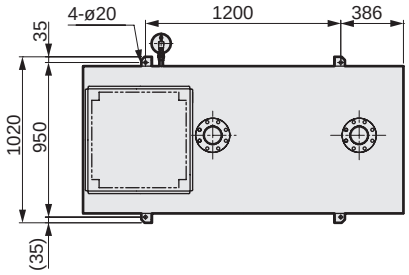
*1: The drain trap and ball valve are included.

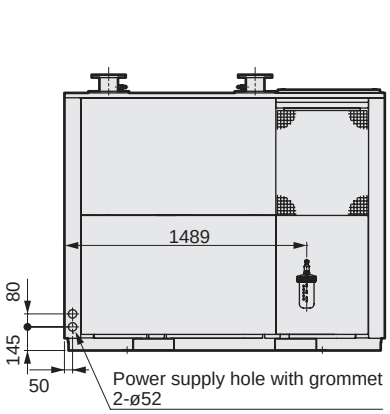
Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
GT9120D	470	1244	1286	249	655	60	1375	580	97	905	620	303	2 1/2B	300	400	M10
GT9150D	700	1290	1332	305	720	225	1432	810	67	1030	850	325	3B	350	420	M16
GT9190D	700	1290	1332	107	860	225	1432	810	67	1030	850	325	3B	350	420	M16

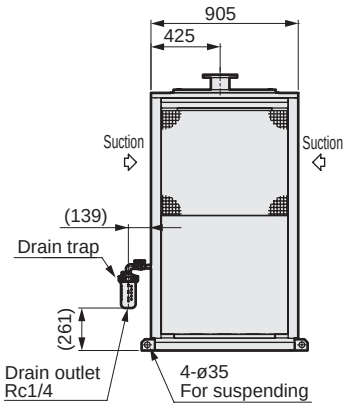
Dimensions

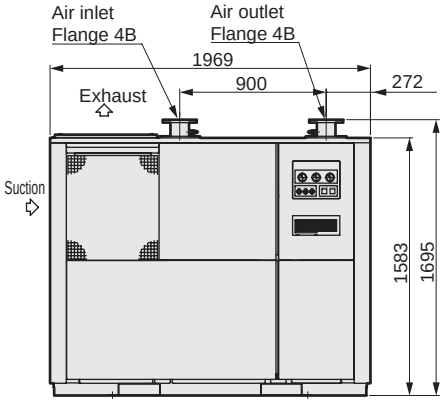
● GT9240



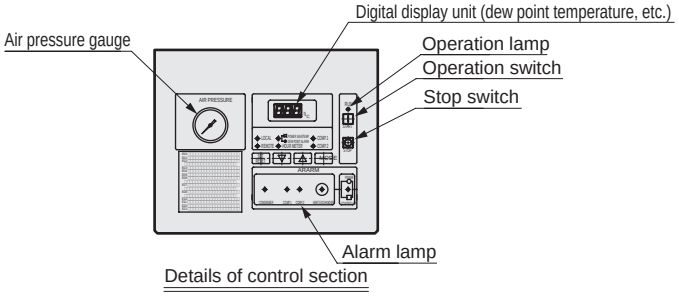


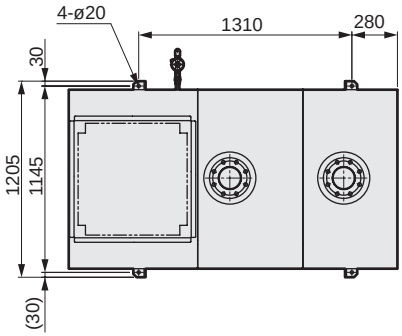


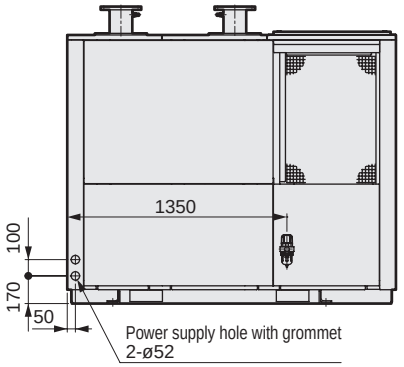


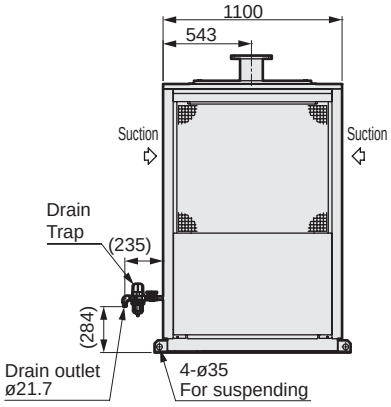


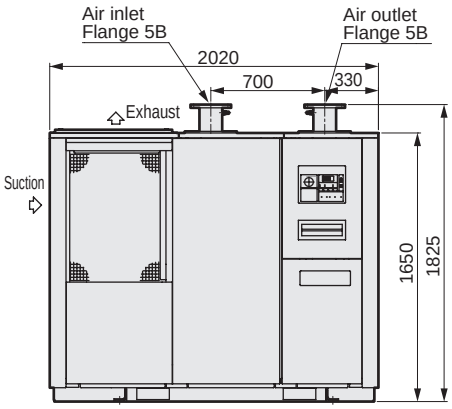
● GT9300,GT9380







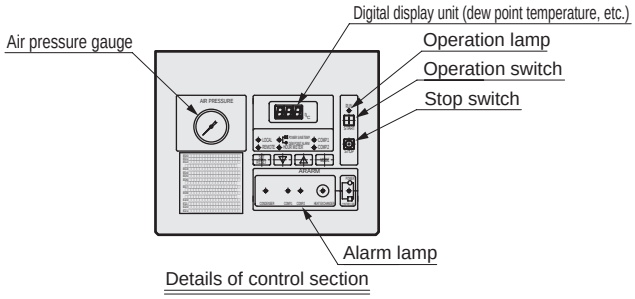




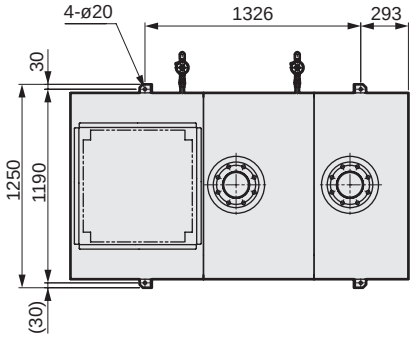
*1: The dew point display value is a guide, and is not the actual dew point.
To measure the actual dew point, measure the secondary side air with a dew point gauge.

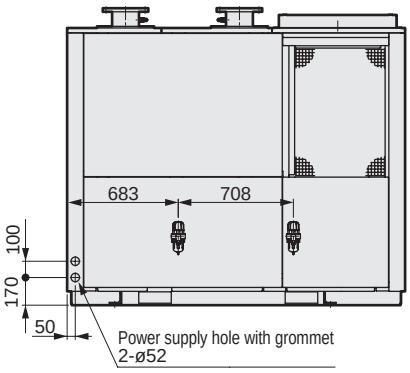
Dimensions

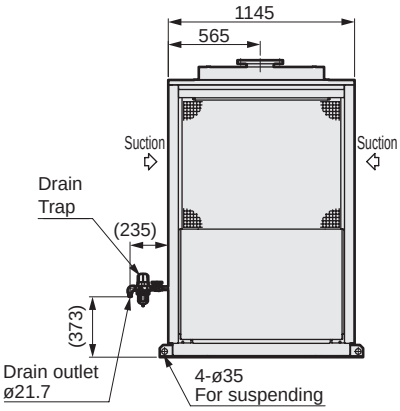
● GT9450

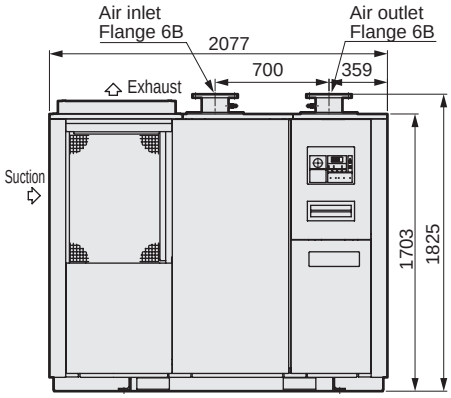


Details of control section









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

MEMO

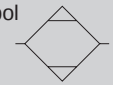
Refrigerated air dryer Xeroaqua Water cooling type

GT9000W(D) Series

For direct air compressor connection, standard inlet air

Applicable air compressor: 75, 90, 120, 150, 190, 240, 300, 380, 450 kW

JIS symbol



CAD

Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Model No.		GT9075WD	GT9090WD	GT9120WD	GT9150WD	GT9190WD	GT9240W	GT9300W	GT9380W	GT9450W
Applicable air compressor	kW	75	90	120	150	190	240	300	380	450
Working range	Working fluid	Compressed air								
	Inlet air temperature °C	5 (41°F) to 60 (140°F)								
	Inlet air pressure MPa	0.29 (≈43 psi, 3 bar) to 0.98 (≈142 psi, 9 bar)					0.1 (≈15 psi, 1 bar) to 0.98 (≈142 psi, 9 bar)	0.29 (≈43 psi, 3 bar) to 0.93 (≈134 psi, 9 bar)		
	Cooling water inlet pressure MPa	0.2 (≈29 psi, 2 bar) to 0.74 (≈107 psi, 7 bar)								
	Ambient temperature °C	2 (35°F) to 48 (118°F)					2 (35°F) to 45 (113°F)			
Rating	Processing air rate m^3/min (ANR) 50/60 Hz (*2)	11.4/13.2	16.3/18.9	20.8/23.8	25.9/30.1	32.9/38.6	39.9/47.0	48.4/57.0	60.3/71.0	79.0/93.0
	Processing air rate m^3/min (Compressor intake condition) 50/60 Hz (*3)	12.1/14.0	17.3/20.1	22.1/25.3	27.5/32.0	35.0/41.0	41.9/49.4	50.8/59.9	63.3/74.6	83.0/97.7
	Inlet air temperature °C	40 (104°F)								
	Inlet air pressure MPa	0.7 (≈101 psi, 7 bar)								
	Cooling water inlet temperature °C	32 (89°F)								
	Cooling water volume m^3/h 50/60 Hz	1.5/1.7	2.4/2.8	2.5/2.9	2.7/3.0	3.0/3.2	3.6/3.8	3.4/4.0	4.3/5.0	6.0/7.1
	Ambient temperature °C	32 (89°F)								
Performance	Outlet air pressure dew point °C	10 (50°F) (*4)								
Power supply		Three-phase 200/200, 220 VAC 50/60 Hz								
Electrical specifications	Power consumption kW 50/60 Hz (*5)	1.7/2.0, 2.0	2.1/2.6, 2.5	2.1/2.6, 2.5	3.5/4.2, 4.2	4.7/6.2, 6.1	3.5/4.4, 4.3	5.1/5.7, 5.7	6.5/7.6, 7.5	8.5/9.0, 8.9
	Current consumption A 50/60 Hz (*5)	8.0/8.0, 8.0	8.6/9.4, 8.9	8.6/9.4, 8.9	11.5/12.0, 11.0	15.5/17.0, 16.0	14.8/15.0, 14.9	17.6/18.9, 18.4	22.5/25.0, 24.5	29.6/32.0, 31.4
	Starting current A 50/60 Hz	110/100	110/115	110/115	140/155	165/190	135/135	83/77	98/91	135/135
Refrigerant		R-410A					R-407C			
Air inlet and outlet port size (*6)		R2	R2	Flange 2 $^1/_2$B	Flange 3B		Flange 4B	Flange 5B		Flange 6B
Weight	kg	140	183	203	270	277	532	790	870	940

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

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

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

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

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

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

How to order (water-cooling)

GT9 075WD - G - AC380V

Ⓐ Capacity category

Ⓑ Option *1

Ⓒ Voltage *2

Code	Description
Ⓐ Capacity category	
075WD	75 kW
090WD	90 kW
120WD	120 kW
150WD	150 kW
190WD	190 kW
240W	240 kW
300W	300 kW
380W	380 kW
450W	450 kW
Ⓑ Option	
Blank	Standard products
G	Different voltage compatible
H2	SUS nameplate
H3	Simple export packaging *3
N1	Copper tube rust proof coating
Q1	Drain piping right (GT9075WD to GT9190WD only)
Ⓒ Voltage	
200 VAC	
220 VAC (60Hz only standard)	
230 VAC	
240 VAC	
380 VAC	
400 VAC	
415 VAC	
440 VAC	
480 VAC	

Precautions for model No. selection

*1: Indicate options in alphabetical order.
*2: Specify the voltage for item Ⓒ even when the model is a standard product.
Example: GT9090WD-AC200V
*3: Option H3 is packaged in plywood.
*4: The instruction manual and nameplates are provided in Japanese and English. However, the proof pressure certificate (GT9240W and higher) is available as Japanese text only. Contact CKD when an English version is required.
*5: Contact CKD if a photo of the completed product is required.
*6: Contact CKD to designate the color of the body panel.

Selection guide (GT9075WD to 9190WD)

(1) Temperature compensation coefficient

GT9075WD, GT9090WD, GT9120WD

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

GT9150WD

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

GT9190WD

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

(2) Inlet air pressure coefficient

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

(3) Ceiling coefficient

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

When determining the appropriate model from the reference processing air rate of each model No.
Reference processing air rate × (1) Temperature correction coefficient × (2) Inlet air pressure coefficient = Maximum processing air rate
*1: Select with conditions where the value of the product of each coefficient ((1)×(2)) does not exceed the upper limit coefficient of (3).

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

Substitute the above conditions into the equation above to obtain the processing air rate when using GT9150WD.
Product of each coefficient
(1) × (2) = 1.15 × 0.92 = 1.05
As the (3) ceiling coefficient of 1.05, when the inlet air pressure of the working conditions is 0.5 MPa, is not exceeded, the max. processing air rate will be 25.9 (reference processing air rate) × 1.05 = 27.1 m^3/min (ANR).
If the used air quantity is less than or equal to this value, select that model.

Selection guide (GT9240W to GT9450W)

(1) Temperature compensation coefficient

Inlet air temperature (°C)	35		40		45	
Pressure dew point (°C)	10	15	10	15	10	15
Coefficient	1.20	1.29	1.00	1.09	0.80	0.87
Inlet air temperature (°C)	**50**		**55**		**60**	
Pressure dew point (°C)	**10**	**15**	**10**	**15**	**10**	**15**
Coefficient	0.60	0.65	0.40	0.44	0.20	0.22

(2) Inlet air pressure coefficient

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

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

(3) Ceiling coefficient

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

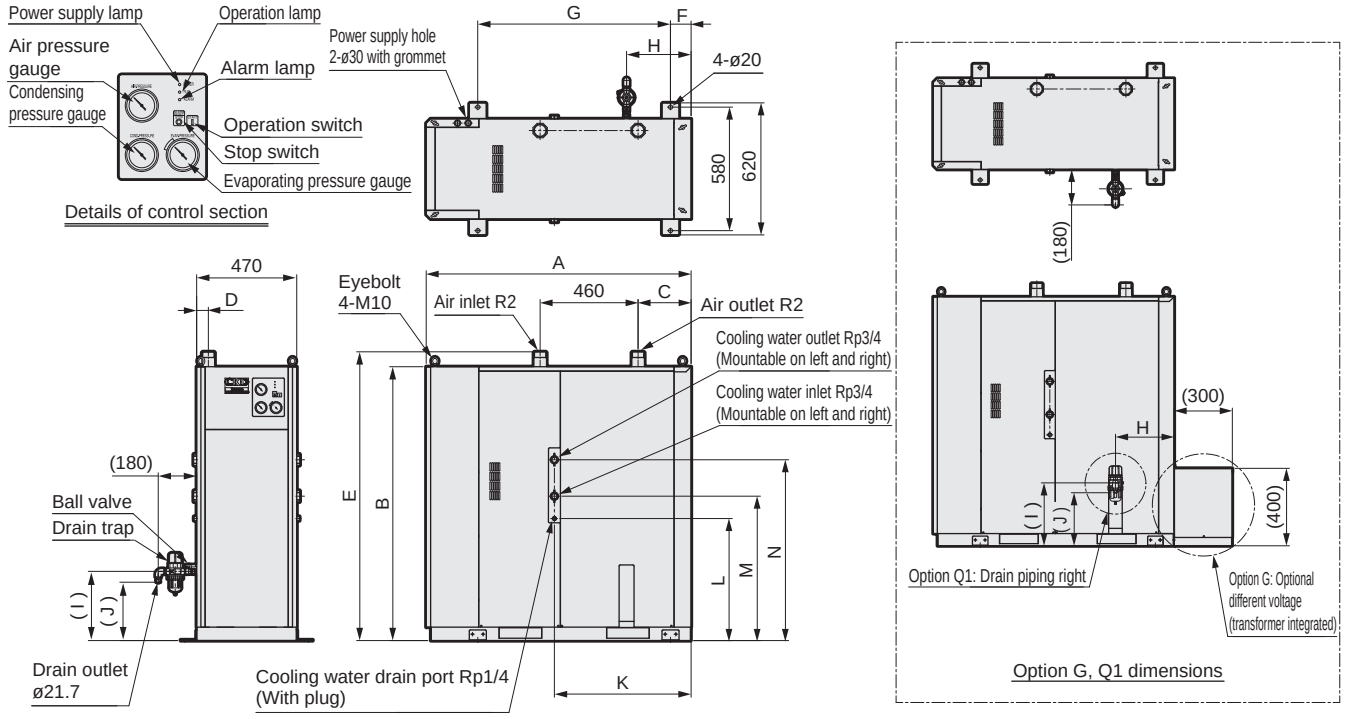
When determining the appropriate model from the reference processing air rate of each model No.
Reference processing air rate × (1) Temperature correction coefficient × (2) Inlet air pressure coefficient = Maximum processing air rate
*2: Select with conditions where the value of the product of each coefficient ((1)×(2)) does not exceed the upper limit coefficient of.

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

Substitute the above conditions into the equation above to obtain the processing air rate when using the GT9240W.
Product of each coefficient
(1) × (2) = 1.20 × 0.87 = 1.04
As the ceiling coefficient of 1.12 at the inlet air pressure 0.5MPa (use conditions) is not exceeded, the maximum processing air rate will be 39.9 (reference processing air rate) ×1.04=41.4m^3/min (ANR).
If the used air quantity is less than or equal to this value, select that model.
*3: For compatibility with pressure dew points of less than 10°C, contact CKD separately.

Dimensions CAD

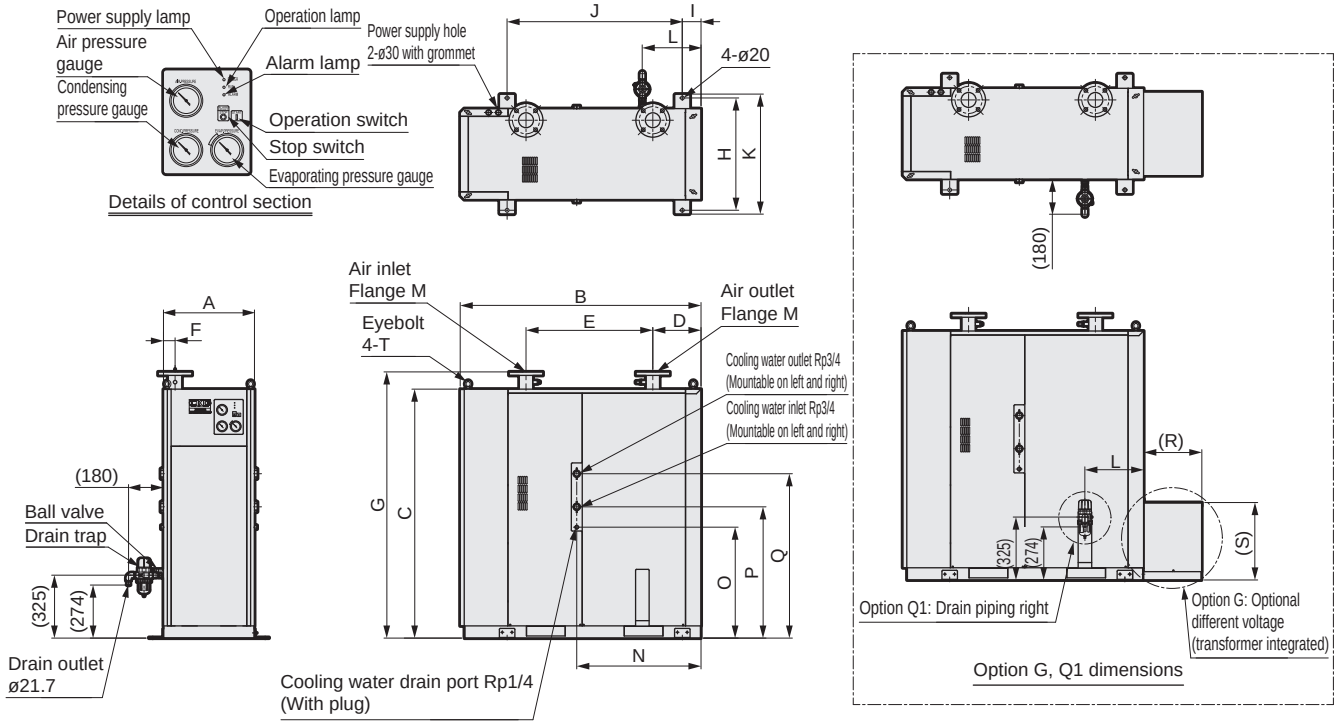
● GT9075WD, GT9090WD



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

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

● GT9120WD, GT9150WD, GT9190WD

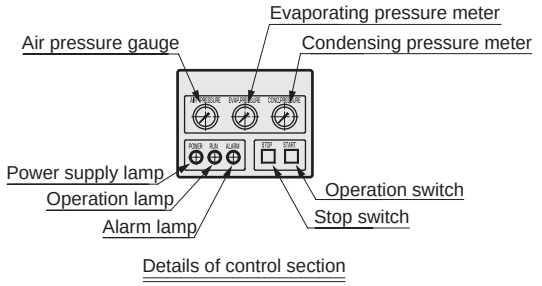


*1: The drain trap and ball valve are included.
*2: Select either the right or left panel for installation of the cooling water piping. The installation position will be symmetrical on both the right and left side panels.

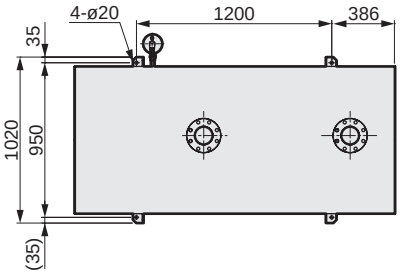
Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
GT9120WD	470	1244	1286	249	655	60	1375	580	97	905	620	303	$2\,{}^{1}/_{2}$B	642	573	678	849	300	400	M10
GT9150WD	700	1290	1332	305	720	225	1432	810	67	1030	850	325	3B	1000	120	190	563	350	420	M16
GT9190WD	700	1290	1332	107	860	225	1432	810	67	1030	850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

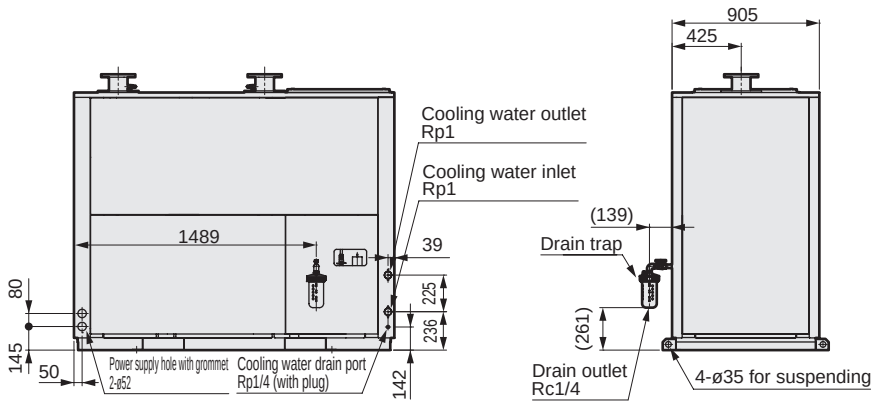
Dimensions

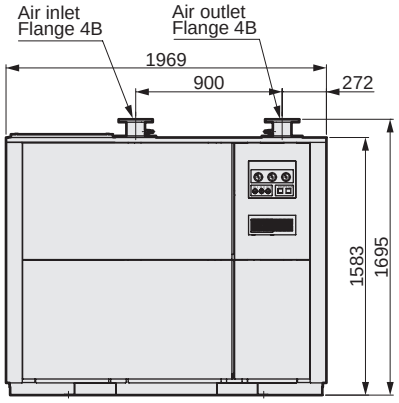
● GT9240W



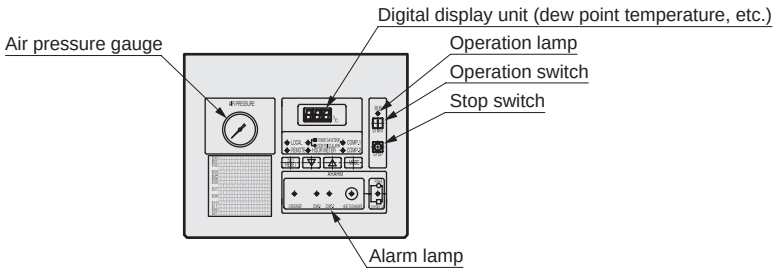
Details of control section



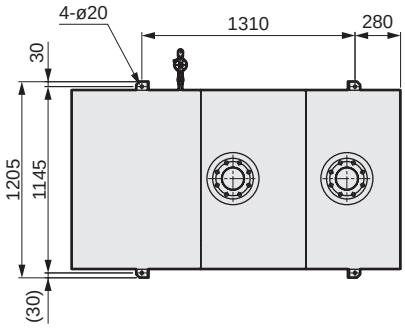


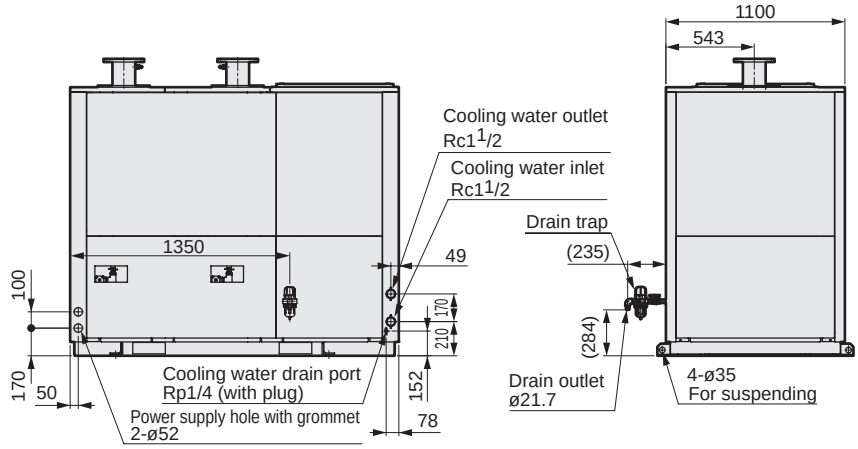


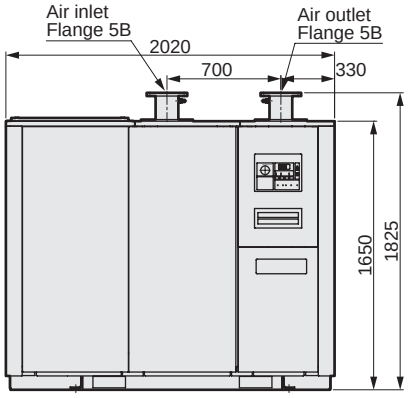
● GT9300W, GT9380W



Details of control section



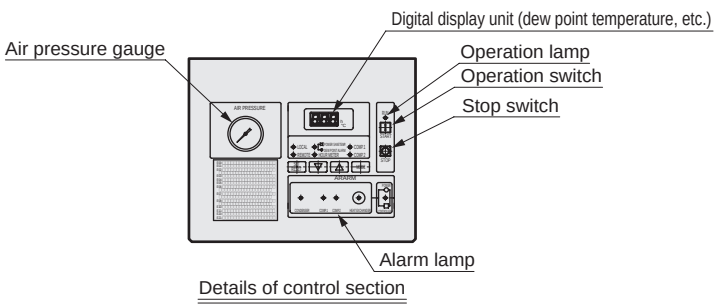


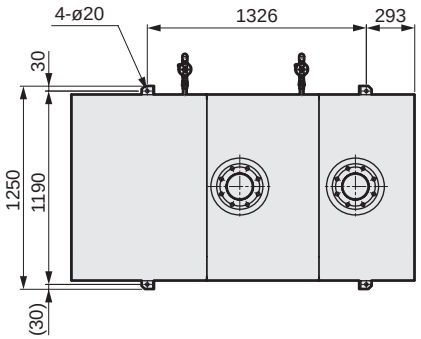


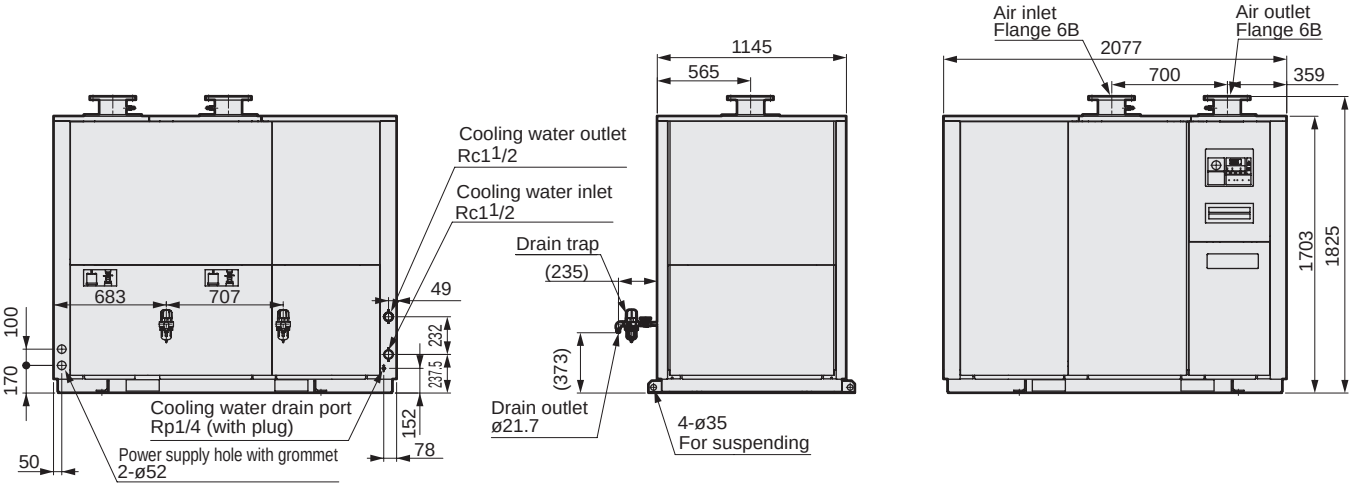
*1: The dew point display value is a guide, and is not the actual dew point.
To measure the actual dew point, measure the secondary side air with a dew point gauge.

Dimensions CAD

● GT9450W







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

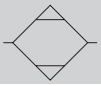
MEMO

Refrigeration air dryer Xeroaqua (Inverter controlled water-cooling)

GT9000WV2 Series

For direct air compressor connection, standard inlet air

● Applicable air compressor: 710, 960 kW

JIS symbol 

CAD

Specifications

Model No.		GT9710WV2	GT9960WV2
Applicable air compressor kW		710	960
Working range	Working fluid	Compressed air	
	Inlet air temperature °C	5 to 60	
	Inlet air pressure MPa	0.1 to 0.93	
	Cooling water inlet pressure MPa	0.2 to 0.74	
	Ambient temperature °C	2 to 50	
Rating	Processing flow rate m^3/min(ANR) 50/60Hz (*2)	139.1	184.2
	Processing flow rate m^3/min (Compressor intake condition) 50/60Hz (*3)	146.1	193.4
	Inlet air temperature °C	40	
	Inlet air pressure MPa	0.7	
	Cooling water inlet temperature °C	32	
	Cooling water volume m^3/h 50/60Hz	10.7	14.2
	Ambient temperature °C	32	
	Outlet air pressure dew point °C	10 (*4)	
Outlet air pressure dew point switching range °C		10 to 18 (Manual setting/outside temperature linkage switching function equipped)	
Power supply		Three-phase 200/200, 220 VAC 50/60 Hz (*5)	
Electrical specifications	Power consumption kW 50/60Hz (*6)	14.8	19.6
	Operating current A 50/60Hz (*6)	49.0	68.6
Refrigerant		R-407C	
Air outlet/inlet piping bore size (*7)		Flange 8B	
Weight kg		1330	2200

*1: Outer panel: Quality Cool White (Munsell No.5GY7.5/0.5)
Base: Munsell No.N3.0
*2: ANR shows conditions of 20°C atmospheric pressure and relative humidity 65%.
*3: This is a value converted to the intake condition of the air compressor in an environment of 32°C with a relative humidity of 75%.
*4. Contact CKD for information on the dew point performance guarantee.
*5: Make sure that the imbalance between phases of the power supply voltage is within ±2%.
*6. The power consumption and operation current are both reference values under the rated conditions, and are not guaranteed
*7: Flange is a 10K flange.
*8: GT9960WV2 is limited to the Japanese market. Contact CKD if export is required.

How to order (inverter controlled water-cooling)

GT9 710 WV2- G - AC380V

Ⓐ Capacity category
Ⓑ Option *1
Ⓒ Voltage *2

Code	Description
Ⓐ Capacity category	
710	710 kW
960	960 kW
Ⓑ Option	
Blank	Standard products
G	Different voltage compatible
H2	SUS nameplate
H3	Simple export packaging
N1	Copper tube rust proof coating
Ⓒ Voltage	
200 VAC	
220 VAC (60Hz only standard)	
230 VAC	
240 VAC	
380 VAC	
400 VAC	
415 VAC	
440 VAC	
480 VAC	

Precautions for model No. selection

*1: Indicate options in alphabetical order.
*2: Specify the voltage for Item Ⓒ even when the model is a standard product.
Example: GT9710WV-AC200V
*3: Option H3 is packaged in plywood.
*4: The instruction manual and nameplates are provided in Japanese and English. However, the proof pressure certificate is available as Japanese text only. Contact CKD when an English version is required.
*5: Contact CKD if a photo of the completed product is required.
*6: Contact CKD to designate the color of the body panel.

Selection guide

(1) Temperature compensation coefficient

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

(2) Inlet air pressure coefficient

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

(3) Upper limit coefficient

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

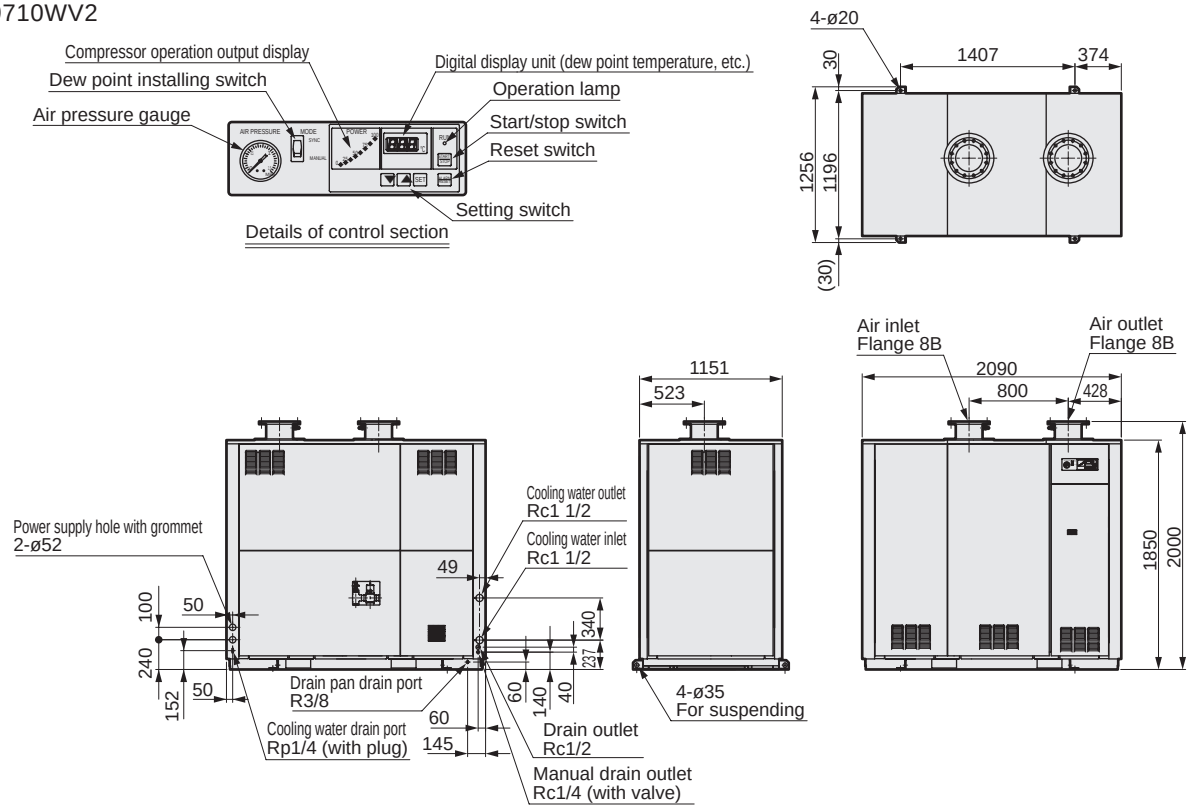
When determining the appropriate model from the standard processing air rate of each model No.
Standard processing air rate x (1) Temperature correction coefficient x (2) Inlet air pressure coefficient = Maximum processing air rate
*1: Select with conditions where the value of the product of each coefficient ((1)x(2)) does not exceed the upper limit coefficient of (3).

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

Substitute the above conditions in the above formula and determine the quantity of handling air in cases when GT9710WV is used.
Product of each coefficient
(1) x (2) = 0.80 x 0.87 = 0.69
As the (3) upper limit coefficient of 1.04, when the inlet air pressure of the working conditions is 0.5 MPa, is not exceeded, the max. processing air rate will be 139.1 (standard processing air rate) x 0.69 = 95.9 m^3/min(ANR).
If the used air quantity is less than or equal to this value, select that model.

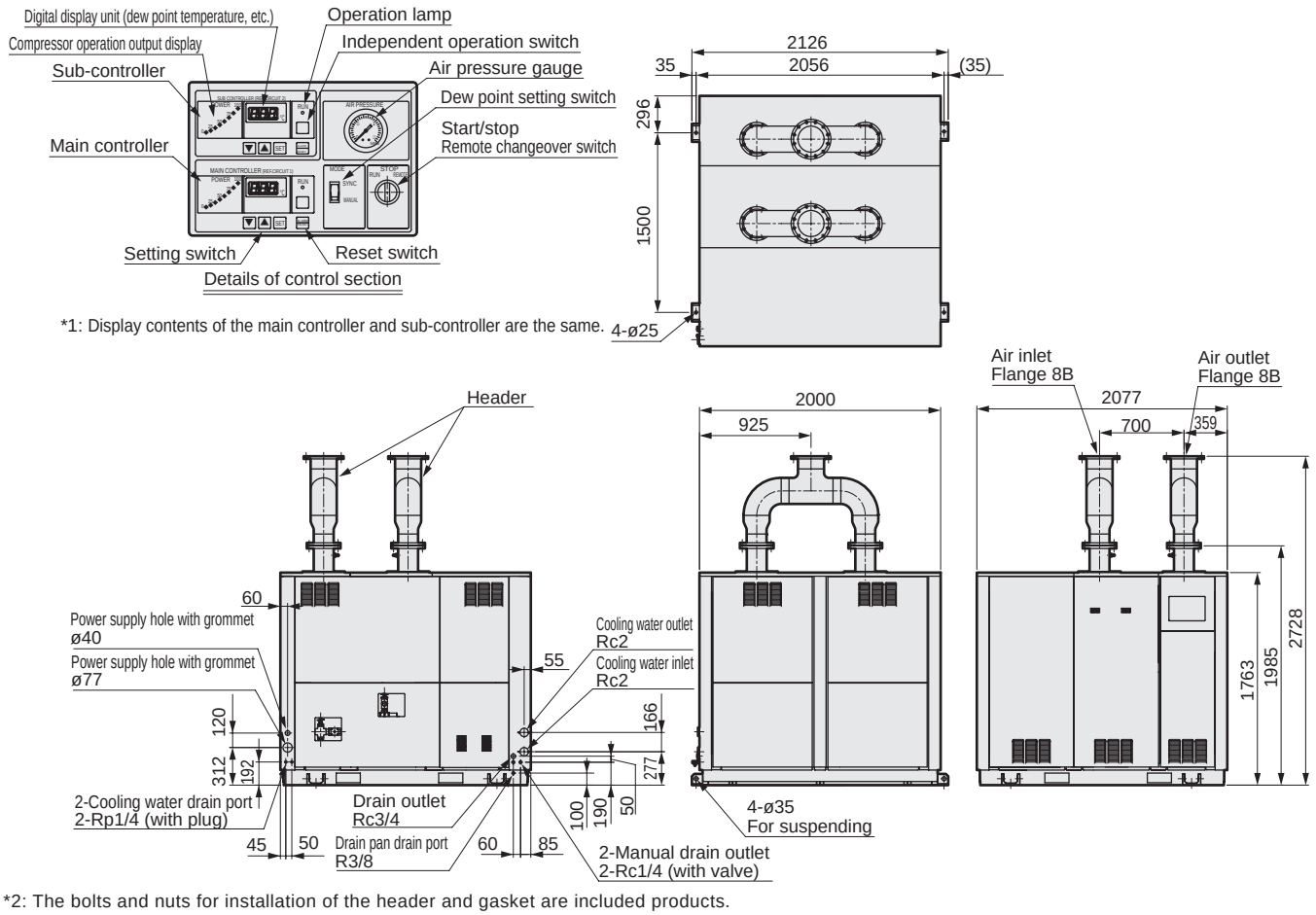
Dimensions CAD

● GT9710WV2



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

● GT9960WV2

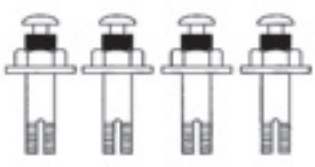


*1: Display contents of the main controller and sub-controller are the same.

*2: The bolts and nuts for installation of the header and gasket are included products.
*3: The dew point display value is a guide, and is not the actual dew point.
To measure the actual dew point, measure the secondary side air with a dew point gauge.

Accessory (sold separately)

Foundation bolt



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

Compatible model		No. / Size	RD-QFL-436465 M16xL100	RD-QFL-436466 M20xL130
GT9075D	GT9075WD		○	
GT9090D	GT9090WD		○	
GT9120D	GT9120WD		○	
GT9150D	GT9150WD		○	
GT9190D	GT9190WD		○	
GT9240	GT9240W		○	
GT9300	GT9300W		○	
GT9380	GT9380W		○	
GT9450	GT9450W		○	
		GT9710WV2	○	
		GT9960WV2		○

Companion flange

Set of insert welded flanges, hexagon head bolts, nuts, and gasket

Compatible model		No. / Size	RD-KFL-436467 Flange 2 1/2B	RD-KFL-436468 Flange 3B	RD-KFL-436469 Flange 4B	RD-KFL-436470 Flange 5B	RD-KFL-436471 Flange 6B	RD-KFL-436472 Flange 8B
GT9120D	GT9120WD		○					
GT9150D	GT9150WD			○				
GT9190D	GT9190WD			○				
GT9240	GT9240W				○			
GT9300	GT9300W					○		
GT9380	GT9380W					○		
GT9450	GT9450W						○	
		GT9710WV2						○
		GT9960WV2						○