Discontinue

Refrigerating type dryer

RD1000 / RDM1000 Series

Standard inlet air (35°C) type
Applicable air compressor: 2.2kW to 15kW

JIS symbol

CAD DATA AVAILABLE.

Specifications

Descriptions			RD/RDM 1003	RD/RDM 1004	RD/RDM 1006	RD/RDM 1008	RD/RDM 1011	RD/RDM 1015
Applicable air compressor kW			to 2.2	3.7	5.5	7.5	11	15
Rated	Treatment air capacity m^3/min ANR		to 0.31/0.35	0.50/0.55	0.74/0.81	1.1/1.2	1.65/1.8	2.5/2.7
	Inlet air pressure MPa		0.7					
	Inlet air temperature °C		35					
	Ambient temperature °C		32					
	Outlet air pressure dew point °C		10					
Use range	Working fluid		Compressed air					
	Inlet air temperature °C		5 to 50					
	Ambient temperature °C		2 to 40					
	Ambient humidity		40 to 80% RH					
	Working pressure MPa		0.2 to 1.0, while 0.2 to 1.5 for RDM series.					
Electrical specifications	Power supply		100/200V single phase, 50/60Hz					
	Power consumption kW		0.16/0.17	0.16/0.17	0.22/0.24	0.29/0.32	0.39/0.44	0.53/0.62
	Operating current	AC100V, A	2.0/2.1	2.0/2.1	2.6/2.8	3.4/3.6	4.6/4.8	5.8/6.4
		AC200V, A	1.0/1.0	1.0/1.0	1.3/1.4	1.7/1.8	2.3/2.4	2.9/3.2
Device details	Operational procedures		Automatic and manual operations by air pressure detecting (0.17MPa: ON and 0.07MPa: OFF)					
	Condenser		Air cooling type					
	Refrigerant control method		Capillary tube					
	Temperature control method		Refrigerant pressure control method					
	Refrigerant		R22					
Air inlet/outlet port size Rc			3/8		1/2	3/4		1
Drain port size Rc			1/4					
Drainage method			Normally closed	Normally open				
Product mass kg			16	18	18	45	45	49
Exhaust heat kW			0.3	0.4	0.58	0.83	1.2	1.8

Note 1: Standard paint color: Front panel (double sides) is quality cool white (Munsell No.5GY 7.5/0.5) .
A main body panel is quality gray (Munsell No.3G 6.0/0.5) and base is black (Munsell No.N1.0) .
Note 2: ANR value applies where 20°C atmospheric pressure and relative humidity 65%.
Note 3: If 2.2k W or less, drain separator is a normally closed type DT3010. If over, normally open type DT3000 is provided.

RD1000/RDM1000 Series

Discontinue

How to find air flow rate

Expression: Air flow rate (m³/min ANR) / (ⓐ Pressure dew point coefficient X ⓑ Inlet air temperature coefficient X ⓒ Ambient temperature coefficient X ⓓ Pressure coefficient) ≦ Standard treating flow rate

E.g.

Air flow rate: 0.5m³/min ANR
Pressure dew point 10°C: 1.0
IInlet air temperature 40°C: 0.75
ambient temperature 35°C: 0.90
pressure 0.9MPa: 1.05

$$\frac{0.5\text{m}^3/\text{min}}{(1.0 \times 0.75 \times 0.90 \times 1.05)} = 0.71\text{m}^3/\text{min ANR}$$

Therefore, RD1006 is applied according to * standard treating flow rate in the table above.

Standard treating flow rate

Model no.	Standard treating flow rate m³/min (ANR)
RD1003 RDM1003	0.31/0.35
RD1004 RDM1004	0.50/0.55
RD1006 RDM1006	0.74/0.81
RD1008 RDM1008	1.1/1.2
RD1011 RDM1011	1.65/1.8
RD1015 RDM1015	2.5/2.7

ⓐ Pressure dew point coefficient

Pressure dew point	Coefficient
15 °C	1.1
10 °C	1.0

ⓑ Inlet air temperature coefficient

RD1000 / RDM1000	
Inlet air temperature	Coefficient
35 °C	1.00
40 °C	0.75
45 °C	0.65
50 °C	0.50

Inlet air temperature coefficient is to be 1.00 even if the coefficient is for lower temperature whose coefficient is 1.00 or less.

ⓒ Ambient temperature coefficient

Ambient temperature	Coefficient
32 °C	1.00
35 °C	0.90
40 °C	0.73

ⓓ Pressure coefficient

Inlet pressure	Coefficient
0.2 MPa	0.59
0.3 MPa	0.70
0.4 MPa	0.76
0.5 MPa	0.87
0.6 MPa	0.94
0.7 MPa	1.00
0.8 MPa	1.02
0.9 MPa	1.05
1.0 MPa	1.07
1.5 MPa	1.10

How to order

RD ○ 1 0 0 6 ○ - ○ - ○

Ⓐ Pressure classification
Standard inlet air
Ⓑ Capacity code
Ⓒ Monitor
Ⓓ Option
Ⓔ Voltage

Symbol	Descriptions
Ⓐ Pressure classification	
Blank	Standard pressure (0.2 to 1.0MPa)
M	Medium pressure (0.2 to 1.5MPa)
Ⓑ Capacity code	
003	2.2kW or less
004	3.7kW
006	5.5kW
008	7.5kW
011	11kW
015	15kW
Ⓒ Monitor	
Blank	Digital display monitor
A	Analogue display monitor
Ⓓ Option	
B	By-pass pipe set
L	Anchor bolt
M	Remote control / alarm output
G	Voltage assignment
F	Optional color
N1	Copper tube rust proof coating
C	Switch with cover
C1	Monitor cover
Y2	Product photo
H2	SUS name plate
Ⓔ Voltage	
AC100V	
AC200V	

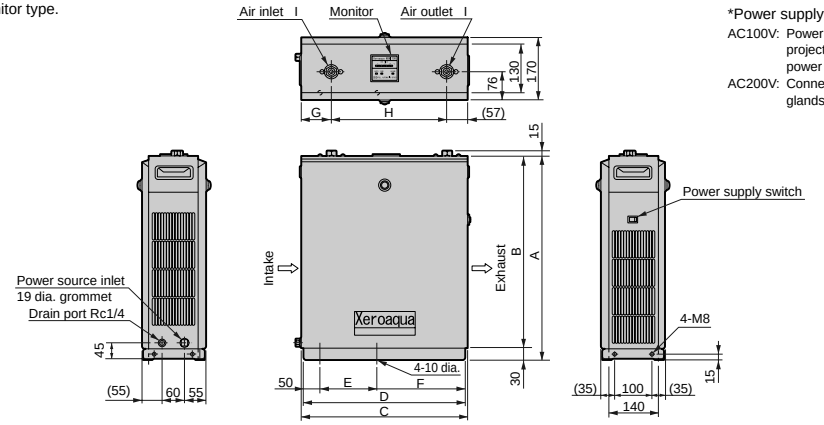
Note on model No. selection

Note 1: Refer to Page 36 to 39 for descriptions of options.
Note 2: Option M is not available for analogue display monitor type.
Note 3: Indicate the voltage for custom voltage.

Dimensions

• RD1003 to 1006
Analogue display monitor type is as same dimensions as digital display monitor type.

CAD (File name: Page 42 or Ending 12)

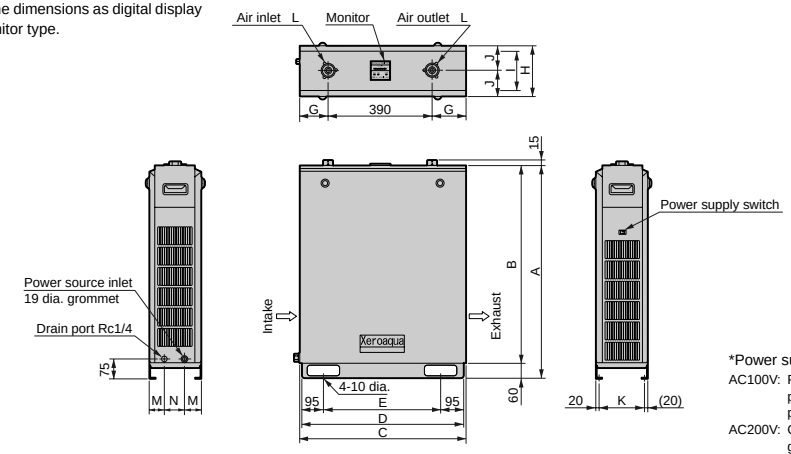


*Power supply
AC100V: Power cord (with plug) projects 1.5m from power source inlet.
AC200V: Connected between glands in the dryer.

Model no.	A	B	C	D	E	F	G	H	I
RD/RDM1003(A)	460	430	440	430	150	240	80	303	Rc3/8
RD/RDM1004(A)	550	520	440	430	150	240	80	303	Rc3/8
RD/RDM1006(A)	550	520	440	430	150	240	80	303	Rc1/2

• RD1008 to 1015
Analogue display monitor type is as same dimensions as digital display monitor type.

CAD (File name: Page 42 or Ending 12)



*Power supply
AC100V: Power cord (with plug) projects 1.5m from power source inlet.
AC200V: Connected between glands in the dryer.

Model no.	A	B	C	D	E	G	H	I	J	K	L	M	N
RD/RDM1008(A)	750	690	570	560	380	90	195	155	97.5	155	Rc3/4	60	75
RD/RDM1011(A)	750	690	570	560	380	90	195	155	97.5	155	Rc3/4	60	75
RD/RDM1015(A)	810	750	630	620	440	120	195	155	97.5	155	Rc1	60	75

Discontinue

Refrigerating-type dryer

RD2000 / RDM2000 Series

High temperature inlet air (55°C) type

• Applicable air compressor: 0.75kW to 15kW

JIS symbol

CAD DATA AVAILABLE.

Specifications

Descriptions			RD/RDM 2001	RD/RDM 2002	RD/RDM 2003	RD/RDM 2004	RD/RDM 2006	RD/RDM 2008	RD/RDM 2011	RD/RDM 2015
Applicable air compressor kW			to 0.75	1.5	2.2	3.7	5.5	7.5	11	15
Rated	Treatment air capacity m^3/min ANR		to 0.10/0.11	0.20/0.22	0.31/0.35	0.50/0.55	0.74/0.81	1.1/1.2	1.65/1.8	2.5/2.7
	Inlet air pressure MPa		0.7							
	Inlet air temperature °C		55							
	Ambient temperature °C		32							
	Outlet air pressure dew point °C		10							
Use range	Working fluid		Compressed air							
	Inlet air temperature °C		5 to 80							
	Ambient temperature °C		2 to 40							
	Ambient humidity		40 to 80% RH							
	Working pressure MPa		0.2 to 1.0, while 0.2 to 1.5 for RDM series.							
Electrical specifications	Power supply		100/200V single phase, 50/60Hz						200V, 3 phase, 50/60Hz	
	Power consumption kW		0.16/0.17	0.16/0.17	0.22/0.24	0.29/0.32	0.39/0.44	0.53/0.62	0.66/0.80	0.97/1.19
	Operating current	AC100V, A	2.0/2.1	2.0/2.1	2.6/2.8	3.4/3.6	4.6/4.8	5.8/6.4	—	—
		AC200V, A	1.0/1.0	1.0/1.0	1.3/1.4	1.7/1.8	2.3/2.4	2.9/3.2	2.6/2.8	3.8/4.2
Device details	Operational procedures		Automatic and manual operations by air pressure detection (0.17MPa: ON and 0.07MPa: OFF)							
	Condenser		Air cooling type							
	Refrigerant control method		Capillary tube							
	Temperature control method		Refrigerant pressure control method							
	Refrigerant		R22							
Air inlet/outlet port size Rc			3/8				1/2	3/4		1
Drain port size Rc			1/4							
Drainage method			Normally closed	Normally open						
Product mass kg			16	18	18	23	45	49	58	60
Exhaust heat kW			0.27	0.37	0.55	0.82	1.19	1.73	2.47	3.82

Note 1: Standard paint color: Front panel (double sides) is quality cool white (Munsell No.5GY 7.5/0.5) .
A main body panel is quality gray (Munsell No.3G 6.0/0.5) and base is black (Munsell No.N1.0) .
Note 2: ANR shows the value where 20°C atmospheric pressure and relative humidity 65%.
Note 3: When 0.75kW or less, automatic drain is normally closed type DT3010.
If over, normally open type DT3000 is provided.

How to find air flow rate

Expression: Air flow rate (m^3/min ANR) / (ⓐPressure dew point coefficient X ⓑInlet air temperature coefficient X ⓒ Ambient temperature coefficient X ⓓ Pressure coefficient) ≦ Standard treating flow rate

E.g.

Air flow rate: 0.4m^3/min ANR
Pressure dew point 10°C: 1.0
Inlet air temperature 60°C:0.87
Ambient temperature 35°C:0.90
Pressure 0.9MPa: 1.05

$$\frac{0.4m^3/min}{(1.0 \times 0.87 \times 0.90 \times 1.05)} = 0.49m^3/min\ ANR$$

Therefore, RD2004 are applied according to the above table * standard treating flow rate.

Standard treating flow rate

Model no.	Standard treating flow rate m^3/min (ANR)
RD2001 RDM2001	0.10/0.11
RD2002 RDM2002	0.20/0.22
RD2003 RDM2003	0.31/0.35
RD2004 RDM2004	0.50/0.55
RD2006 RDM2006	0.74/0.81
RD2008 RDM2008	1.1/1.2
RD2011 RDM2011	1.65/1.8
RD2015 RDM2015	2.5/2.7

ⓐ Pressure dew point coefficient

Pressure dew point	Coefficient
15 °C	1.1
10 °C	1.0

ⓑ Inlet air temperature coefficient

RD2000 / RDM2000	
Inlet air temperature	Coefficient
55 °C	1.00
60 °C	0.87
65 °C	0.69
70 °C	0.55
75 °C	0.48
80 °C	0.38

Inlet air temperature coefficient is to be 1.00 even for the low temperature case that coefficient is 1.00 or less.

ⓒ Ambient temperature coefficient

Ambient temperature	Coefficient
32 °C	1.00
35 °C	0.90
40 °C	0.73

ⓓ Pressure coefficient

Inlet pressure	Coefficient
0.2 MPa	0.59
0.3 MPa	0.70
0.4 MPa	0.76
0.5 MPa	0.87
0.6 MPa	0.94
0.7 MPa	1.00
0.8 MPa	1.02
0.9 MPa	1.05
1.0 MPa	1.07
1.5 MPa	1.10

How to order

RD ○ 2 0 0 6 ○ - ○ - ○

Ⓐ Pressure classification
Ⓑ Capacity code
Ⓒ Monitor
Ⓓ Option
Ⓔ Voltage

Symbol	Descriptions
Ⓐ Pressure classification	
Blank	Standard pressure (0.2 to 1.0MPa)
M	Medium pressure (0.2 to 1.5MPa)
Ⓑ Capacity code	
001	0.75kW or less
002	1.5kW
003	2.2kW
004	3.7kW
006	5.5kW
008	7.5kW
011	11kW
015	15kW
Ⓒ Monitor	
Blank	Digital display monitor
A	Analogue display monitor
Ⓓ Option	
B	By-pass pipe set
L	Anchor bolt
M	Remote control / alarm output
G	Voltage assignment
F	Optional color
N1	Copper tube rust proof coating
C	Switch with cover
C1	Monitor cover
Y2	Product photo
H2	SUS name plate
Ⓔ Voltage	
AC100V	
AC200V	

⚠ Note on model No. selection

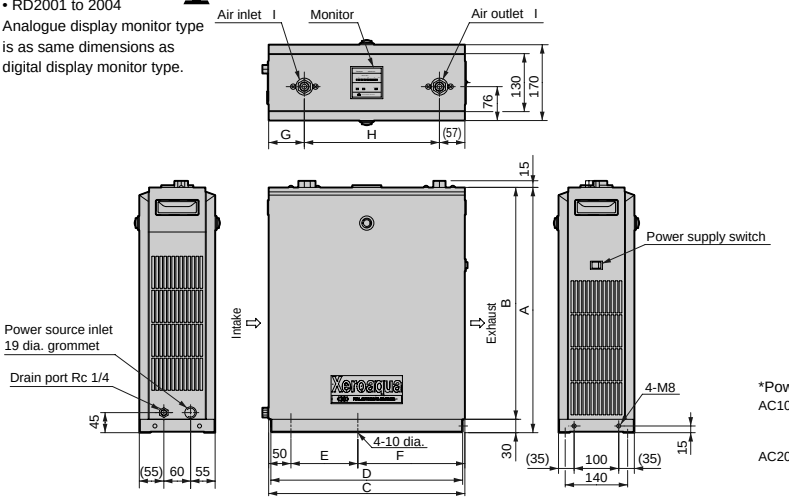
Note 1: Refer to Page 36 to 39 for descriptions of options.
Note 2: Option M is not available for analogue display monitor type.
Note 3: Only AC200V is available for RD2011 and RD2015. When custom voltage, indicate the voltage.

Discontinue

Dimensions

(File name: Page 42 or Ending 12)

• RD2001 to 2004
Analogue display monitor type is as same dimensions as digital display monitor type.

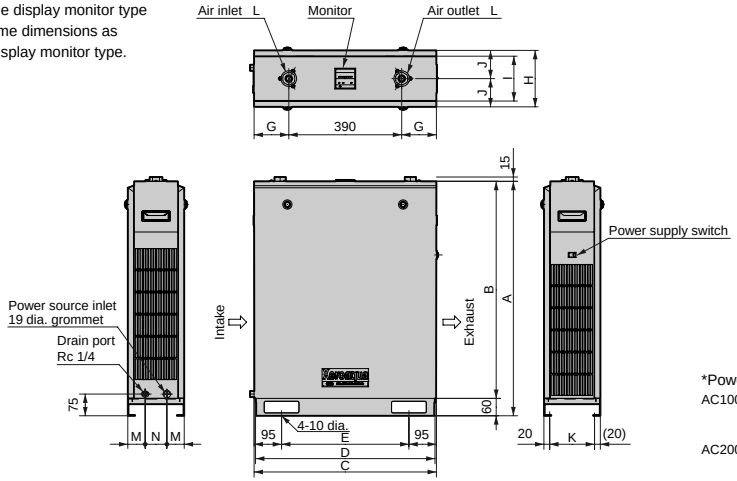


*Power supply
AC100V: Power cord (with plug) projects 1.5m from power source inlet.
AC200V: Connected between glands in the dryer.

Model no.	A	B	C	D	E	F	G	H	I
RD/RDM2001(A)	460	430	440	430	150	240	80	303	Rc3/8
RD/RDM2002(A)	550	520	440	430	150	240	80	303	Rc3/8
RD/RDM2003(A)	550	520	440	430	150	240	80	303	Rc3/8
RD/RDM2004(A)	550	520	560	550	310	200	100	403	Rc3/8

(File name: Page 42 or Ending 12)

• RD2006 to 2015
Analogue display monitor type is as same dimensions as digital display monitor type.



*Power supply
AC100V: Power cord (with plug) projects 1.5m from power source inlet.
AC200V: Connected between glands in the dryer.

Model no.	A	B	C	D	E	G	H	I	J	K	L	M	N
RD/RDM2006(A)	750	690	570	560	380	90	195	155	97.5	155	Rc1/2	60	75
RD/RDM2008(A)	810	750	630	620	440	120	195	155	97.5	155	Rc3/4	60	75
RD/RDM2011(A)	860	800	630	620	440	120	280	240	140	240	Rc3/4	80	120
RD/RDM2015(A)	980	920	630	620	440	120	280	240	140	240	Rc1	80	120