

オリオンクリーンエアシステム 冷凍式圧縮空気除湿装置

Clean Air System

(Heavy Duty Models)

Low Pressure Loss & Energy Saving

Eco-Friendly Refrigerant Applied

Powerful performance in Asia with heavy duty specification



Best Match for Inverter Compressor & Oil-Free Compressor



Specifications Refrigerated Air Dryer

ARX Series

Model

《Water Cooled》 ARX2900A-W

ARX4100A-WE ARX5300A-WE ARX7400A-WE

《Air Cooled》 ARX2300A

> ARX3100A-E ARX3500A-E





		Model		Water Cooled	Models					
Item			ARX2900A-W	ARX4100A-WE	ARX5300A-WE	ARX7400A-WE				
	Air processing capacity	m³/min	29	41	53	74				
	Inlet air pressure	MPa		0	69					
Air processing	Inlet air temperature	C		94	5					
conditions	Outlet pressure dew point	r			0					
	Cooling water temperature	C		3	32	tte .				
	Cooling water flow rate	m³/h	4.8	5.2	5.4	9				
	Inlet air temperature	7		10	~60					
	Ambient temperature	C		2-	~45					
Operating ranges	Compressed air pressure	MPa	0.29~0.98							
Operating ranges	Cooling water temperature	C	2~34							
	Cooling water operating pressure (gauge pressure)	MPa	0.3~0.7							
Outside dimensions	H×D×W	mm	1500×1000×802	1500×1000×802	1500×1199×850	1620×1654×877				
Mass		kg	278	350	395	495				
Air connection	Flange(JIS 10K FF)		2 · 1/2B (65A)	3B (80A)	4B (100A)	4B (100A)				
Dual-Drive Eco syst	em (Capacity control fu	nction)	3+3	0	0	0				
(Power saving	s during capacity control op	eration)			46%					
Refrigerant			R407C	R407C	R407C	R410A				
	Power	V		Three phas	se 380V 50Hz					
Electrical specifications	Power consumption	kW	4.2	6.8	9.5	12.5				
	Electric current	Α	8	12.5	17.5	21				
Recommended pre-filter	Installed before the ARX	(Option)	DSF2900A	DSF4100A	DSF5300A-SUS	DSF6100A-SUS DSF8000A-SUS				

※ Special-order models available with an air pressure specification of 1.0 MPa.
 ※ Air processing capacity figures are based on ANR and adjusted to atmospheric pressure, 32°C, 75% RH.
 ※ Refer to the specifications sheet for further details.
 ※ Always install a Super Drain Filter (DSF) along the piping before the ARX unit.
 ※ No comparison flanges.

		Model		Air Cooled Models	
Item		and the same	ARX2300A	ARX3100A-E	ARX3500A-E
	Air processing capacity	m³/min	23	31	35
	Inlet air pressure	MPa		0.69	
Air processing	Inlet air temperature	C		50	
conditions	Outlet pressure dew point	C		10	
	Ambient temperature	C		35	
	Inlet air temperature	C		10~60	
Operating ranges	Ambient temperature	C		2~45	
	Compressed air pressure	MPa			
Outside dimensions	H×D×W	mm	1500×1500×802	1500×1500×802	1500×1500×802
Mass		kg	323	385	380
Air connection	Flange(JIS 10K FF)		2 · 1/2B (65A)	3B (80A)	3B (80A)
Dual-Drive Eco syst	em (Capacity control fu	nction)	N-	0	0
(Power saving	s during capacity control or	peration)	Neg	4	6%
Refrigerant			R407C	R407C	R407C
	Power	V	-	hree phase 380V 50	Hz
Electrical specifications	Power consumption	kW	5.6	10	10
	Electric current	A	10.5	18	18
Recommended pre-filter	Installed before the ARX	(Option)	DSF2900A	DSF3	3500A

* No comparison flanges



Super Filter Series Product Specifications

Model

«4 Unit Types and 12 Models to Suit Your Needs» DSF/LSF/MSF/KSF2900A ∼ 4100A

- · For Heavy Duty ARX Air Flow.
- · Stainless Steel Vessel Standard (For both cleanliness and reduced weight.)
- · Highly Efficient Filter Element (Made in Japan)

Super Drain Filter DSF Series: Removes water droplets and solid particulate (5 µm and larger).

Super Line Filter LSF Series: Removes solid particulate (1 µm and larger).

Super Mist Filter MSF Series: Removes oil and solid particulate (0.01 µm and larger).

Super Activated Carbon Filter KSF Series: Oil and odor removal (oil concentration at outlet: 0.003 wt ppm).

Model [SF/LSF/MSF/KSF	2900A	3500A	4100A
Air processing capa	city (at 0.69 MPa) m ³ /min	29	35	41
Body and housing	g		Stainless stee	el
	Operating ranges Mpa		0.1 - 0.98 (DSF: 0.2	2 - 0.98)
Operating ranges	Inlet air temperature C		5 - 60	
	Ambient temperature C		2 - 60	
Performance specifications	Filtration	DSF: 5µm (Water droplet separat MSF: 0.01µm(Filtration efficiency	ACCOUNT AND	LSF: 1µm (Filtration efficiency: 99.999%) KSF: Adsorption by activated carbon fiber
op com casono	Output oil concentration Wtppm	MSF: 0.01 KSF: 0.003	3 * Subject to inlet	t air conditions of the system piping.
When to replace	filter element	One year or pressure loss 0.02	MPa for DSF, 0.035 I	MPa for LSF/MSF, whichever comes first.
	Air connection (flange)	2 1/2B (65A)		3B (80A)
Main dimensions	Dimensions (front face × depth × height)	DSF: 590×290×1007 LSF/MSF: 590×290×992 KSF: 590×290×825	LSF	DSF : 590×290×1164 F/MSF : 590×290×1149 KSF : 590×290×982
	Mass kg	26	DSF	/MSF:32 LSF:31 KSF:30
	Body color		Ivory	
Element	EDS/ELS/EMS/EKS models	1300		2000
Cicilient	Quantity	2		2
	Auto drain trap	FD-10-A (DSF) FD2 (LSF/MSF	F) None with KSF.
Accessories	Pressure differential gauge	DG-50A (Comes standard o	nly with the MSF. Av	vailable as an option on other models.)
	Other		S.e.	

[#] Special-order models available with an air pressure specification of 1.0 MPa. # Refer to the specifications sheet for further details.

^{*} Airconnection flange: JIS 10K FF, no comparison flanges.

Model D	SF/LSF/MSF/KSF	5300A-SUS	6100A-SUS		8000A-SUS
Air processing capa	acity (at 0.69 MPa) m³/min	53	61		80
Body and housi	ng		Stainless stee		
	Operating ranges MPa		0.1 - 0.98 (DSF: 0.2	- 0.98)	
Operating ranges	Inlet air temperature °C		5 - 60		
	Ambient temperature C		2 - 60		
Performance specifications	Filtration	DSF: 5µm (Water droplet sep MSF: 0.01µm(Filtration efficie	• •		n (Filtration efficiency: 99.999%) orption by activated carbon fiber
Specifications.	Output oil concentration Wtppm	MSF: 0.01 KSF: 0.0	003	ir conditi	ons of the system piping.
When to replace	filter element	One year or pressure loss 0.0	2 MPa for DSF, 0.035 M	Pa for LS	SF/MSF, whichever comes first.
	Air connection (flange)		4B(100A), GB/I	₹F	
Main dimensions	Dimensions (front face × depth × height)	DSF : 640; LSF/MSF : 640; KSF : 640;	442×1210		680×639×1779
	Mass kg	DSF/MSF:48 L	SF: 47 KSF: 46		DSF/LSF: 117 MSF: 116 KSF: 115
	Body color	In the second se	rory		Silver
Element	EDS/ELS/EMS/EKS models	2	000		2000
Elettletif	Quantity		3	141	4
	Auto drain trap	FD-10-A (DSF) FD2 (LSF/MSF) Nor	ne with KSF.
Accessories	Pressure differential gauge	DG-50A (Comes standar	d only with the MSF. Ava	ilable as	an option on other models.)
	Other				Stand



Technical Information and Operating Constraints

Heavy Duty ARX Model Choice

Air dryer processing capacity differs based on operating conditions. Confirm the installation location and operating requirements and choose the model that adequately meets your needs.

Dryer processing air flow (m³/min) = standard air flow ① (m³/min) × the temperature coefficient ② × the pressure correction coefficient ③

(1) Standard Air Flow

Water Cooled Models

VValci Cooled Models				
Model ARX	2900A-W	4100A-WE	5300A-WE	7400A-WE
Air processing capacity(m³/min)	29	41	53	74

Air Cooled Models

Model	ARX	2300A	3100A-E	3500A-E
Air processing	capacity(m³/min)	23	31	35

2 Temperature Correction Coefficient

Water Cooled Models

Inlet air °C		40	en ci	10	45		VOLUM !	50			55			60	63 F
Pressure dew point °C	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
Temperature correction coefficient	0.88	1.14	1.14	0.77	1.00	1.14	0.66	0.91	1.10	0.59	0.83	0.98	0.54	0.75	0.89

Air Cooled Models

Inlet air C				40			45			50		55			60		
Pressure dew point °C			5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
		30	0.85	1.15	1.37	0.83	1.12	1.35	0.78	1.06	1.27	0.67	0.88	1.04	0.62	0.80	0.92
Temperature correction	Ambient	32	0.82	1.12	1.34	0.80	1.09	1.31	0.76	1.03	1.24	0.64	0.85	1.01	0.60	0.75	0.89
coefficient	temperature (°C)	35	0.79	1.09	1.30	0.77	1.06	1.28	0.73	1.00	1.21	0.62	0.81	0.98	0.57	0.70	0.86
	'	40	0.60	0.81	0.98	0.58	0.80	0.96	0.55	0.75	0.91	0.47	0.62	0.75	0.44	0.56	0.66

(3) Pressure Correction Coefficient

Air pressure MPa	0.29	0.39	0.49	0.59	0.69	0.79	0.89	0.98
Pressure correction coefficient	0.73	0.80	0.87	0.93	1.00	1.07	1.13	1.2

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