

High Pressure Compressed Air Dryers

SCFX Series 680 PSIG Maximum Working Pressure

SS Series

6,000 PSIG Maximum Working Pressure



- Energy-Saving, HeatSink™
 True-Cycling™ Operation
- Protection For Specialized High Pressure Equipment, Tools and Processes

Specialized Dryers For High Pressure Compressed Air Systems

Energy-Saving HeatSink Compressed Air Dryers



In applications with varying air usage and shift demands, and where there are daily and seasonal changes in ambient temperature, HeatSink™ True-Cycling™ operation provides a way for compressed air users to minimize energy cost associated with air treatment.

Compressed air systems that operate at pressures greater than 200 psig require compressors and air dryers specifically designed to meet the demands of these applications. Such systems provide air for specialized equipment, tools and manufacturing processes which require clean dry air to operate at peak efficiency.

The compression process itself causes concentrations of water, compressor lubricant and particulate that are present in air to increase to levels that can damage tools, increase maintenance requirements or spoil finished product.

ZEKS SCFX Series and SS Series Refrigerated Dryers remove these impurities, ensuring safe and efficient operation of downstream equipment and processes.

ZEKS HeatSink™ True-Cycling™ Dryer Operation

SCFX and SS Dryers include a refrigeration system that cools a thermal mass, which in turn cools the compressed air that flows through the dryer. Cooling causes moisture and contaminants present in the compressed air to condense so they can be removed in a high efficiency separator and discharged from the dryer through an automatic drain. Having the capacity to store cool energy in a thermal mass fluid enables these dryers to cycle off during periods of low air usage while continuing to remove moisture and contaminants

from the air stream. This True-Cycling™ operation typically consumes far less energy than the equivalent non-cycling dryer that operates the refrigeration system continuously.

Both design series feature fully hermetic refrigeration systems and exclusive ZEKS moisture separators, and are designed to deliver 38°F pressure dew point:

SCFX Series includes ZEKS patented CFX® heat exchangers that have a high heat transfer coefficient and low fouling potential, ensuring trouble-free operation at peak efficiency. Made entirely of stainless steel, durable CFX® exchangers provide protection against corrosion and come with ZEKS' 10-year CFX® exchanger warranty. Maximum operating pressure - 680 psig.

SS Series has the capacity to handle pressures as high as 6,000 psig. Constructed with a complete stainless steel air circuit, these dryers are an ideal solution in applications where contaminants within the airstream may be detrimental to copper or aluminum. SS dryers are designed as gas coolers, reducing the temperature of the air before use in downstream operations.



HeatSink^{*} High Pressure Dryer Features

SCFX Series 340-3,550 SCFM

STANDARD FEATURES

- 38°F pressure dew point
- · High quality, fully hermetic refrigerant compressor
- Air-cooled condenser
- High pressure moisture separator
- 680 psig maximum operating pressure
- Stainless steel CFX® heat exchangers
- Digital Performance Control (DPC™)
- Refrigerant suction pressure gauge
- High pressure solenoid condensate drain
- NEMA 1 electrical
- · Fully enclosed, powder coated cabinet

OPTIONAL FEATURES

- Water-cooled condenser
- NEMA 4 electrical
- Complete stainless steel air circuit



SS Series 30-500 SCFM

STANDARD FEATURES

- 38°F pressure dew point
- High quality, fully hermetic refrigerant compressor
- Air-cooled condenser
- High pressure moisture separator
- Up to 6,000 psig maximum operating pressure
- · All stainless steel air circuit
- Digital Dryer Control (optional 1-7SS): dew point display; exchanger temperature display; Fahrenheit/Celsius display; energy savings display
- Refrigerant suction pressure gauge
- Outlet air pressure and inlet air temperature gauges (9-11SS only)
- High temperature indicator (3-11SS)
- Timed solenoid drain (9SS and 11SS, up to 1,500 psig MAWP)
- NEMA 1 electrical
- Fully enclosed, powder coated cabinet

OPTIONAL FEATURES

- Water-cooled condenser (5-11SS)
- Timed solenoid drain (digital control, up to 1,500 psig MAWP)
- NEMA 4 electrical



HeatSink™ High Pressure Dryer Sizing and Model Selection

Air treatment capacity is based on total flow volume (scfm) and the pressure rating of the air system. Capacities indicated in the chart below are for 680 through 6,000 psig pressure rating - depending on the model. Select the dryer model that meets or exceeds the maximum flow volume of the air system at this rating. Consult factory for correct model selection at different operating pressures.

Technical Specifications

MODEL	CAPACITY	PRESSURE DROP PSI	DIMENSIONS			SHIPPING	AIR	DRAIN	REFRIG.	ODED ATIL: 5	DEEDIC	MAX.	
	SCFM* @ (psig)		W	IN. D	Н	WEIGHT LBS.	CONNECT IN/OUT	CONNECT FPT	COMP. HP	OPERATING KW**	REFRIG. TYPE	WORKING Pressure	VOLTAGES
SCFX	340 (680)	.9	28	30	58	610	11/2" MPT	1/4"	1	1.66	R404A	680 psig	
OSCFX	355 (680)	.81	28	30	58	635	11/2" MPT	1/4"	11/2	2.01	R404A	680 psig	
1SCFX	475 (680)	1.2	28	30	58	635	2"MPT	1/4"	2	2.54	R404A	680 psig	
2SCFX	620 (680)	1.1	28	30	58	735	2"MPT	1/4"	21/2	3.24	R404A	680 psig	
13SCFX	875 (680)	1.3	42	40	62	1,100	3"FLG	1/4"	31/2	4.52	R404A	680 psig	
14SCFX	920 (680)	1.1	42	40	62	1,275	3"FLG	1/4"	41/2	4.82	R404A	680 psig	460/3/60
15SCFX	1,100 (680)	1.3	42	40	62	1,315	3"FLG	1/4"	41/2	5.79	R404A	680 psig	380/420/3/50
16SCFX	1,350 (680)	1.3	42	40	62	1,345	3"FLG	1/4"	5	6.50	R404A	680 psig	230/208/3/60 240/220/3/50 575/3/60
17SCFX	1,620 (680)	1.4	32	72	69	2,355	4" FLG	1/4"	61/2	8.90	R404A	680 psig	
8SCFX	2,060 (680)	1.6	32	72	69	2,435	4" FLG	1/4"	9	10.50	R404A	680 psig	
19SCFX	2,840 (680)	1.7	32	72	69	2,765	4" FLG	1/4"	101/2	13.10	R404A	680 psig	
20SCFX	3,190 (680)	1.2	32	91	91§	3,925	6"FLG	1/4"	131/2	14.00	R404A	680 psig	
21SCFX	3,550 (680)	1	32	91	91§	4,150	6"FLG	1/4"	131/2	15.80	R404A	680 psig	
SS	30 (1000) 31 (3000) 32 (6000)	.8	20	20	25	150			1/2	.42	R134A		115/1/60
BSS	50 (1000) 51 (3000) 52 (6000)	1.5	20	20	31	170	Determined By Pressure	Determined By Pressure	1/2	1/2 .75 R404A 100/1/ 220/1/	115/1/60 100/1/50 220/1/50 230/208/1/60		
5SS	72 (1000) 74 (3000) 75 (6000)	.38	29	26	39	590			3/4	1.35	R404A	1,000 psig 1,500 psig 2,500 psig	
7SS	170 (1000) 175 (3000) 175 (6000)	1.4	29	26	53	850	Consult Factory	Consult Factory	2	2.54	R404A	3,000 psig 3,500 psig	460/3/60
9SS	350 (1000) 357 (3000) 360 (6000)	1	39	27	60	1,300			4	3.85	R404A	6,000 psig	380/420/3/50 230/208/3/60 240/220/3/50
11SS	490 (1000) 500 (3000) 500 (6000)	.6	61.5	28.5	68.5	2,500			51/2	7.00	R404A		575/3/60

^{*} Performance based on ISO 7183, Table 2, Option A2. (Pressure dew point at pressure indicated, 100°F inlet air temperature; 100°F ambient air temperature)

Dimensions subject to change without notice.

Air-cooled dimension. Water-cooled dimension is 76.12"

Specifications indicated are for air-cooled models.

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 $ZEKS\ Heat Sink {}^{TM}\ High\ Pressure\ compressed\ air\ dryers\ are\ not\ designed,\ intended\ or\ approved\ for\ breathing\ air\ applications.$

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^{**} Average of total kilowatts per hour of dryer operation at full rated capacity.