

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**

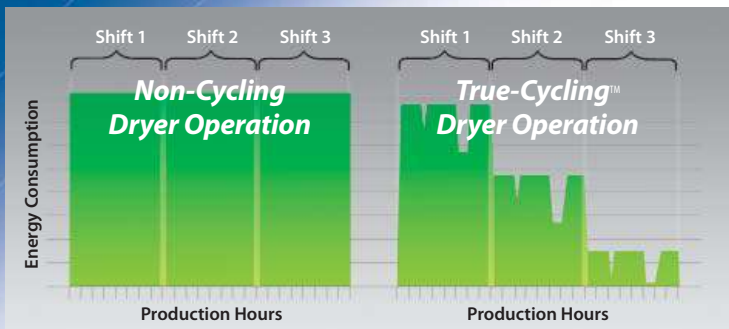
Specialized Dryers For High Pressure Compressed Air Systems

Energy-Saving HeatSink™ Compressed Air Dryers

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.



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.

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 SCFM* @ (psig)	PRESSURE DROP PSI	DIMENSIONS IN.			SHIPPING WEIGHT LBS.	AIR CONNECT IN/OUT	DRAIN CONNECT FPT	REFRIG. COMP. HP	OPERATING KW**	REFRIG. TYPE	MAX. WORKING PRESSURE	VOLTAGES
9SCFX	340 (680)	.9	28	30	58	610	1 1/2" MPT	1/4"	1	1.66	R404A	680 psig	460/3/60 380/420/3/50 230/208/3/60 240/220/3/50
10SCFX	355 (680)	.81	28	30	58	635	1 1/2" MPT	1/4"	1 1/2	2.01	R404A	680 psig	
11SCFX	475 (680)	1.2	28	30	58	635	2" MPT	1/4"	2	2.54	R404A	680 psig	
12SCFX	620 (680)	1.1	28	30	58	735	2" MPT	1/4"	2 1/2	3.24	R404A	680 psig	
13SCFX	875 (680)	1.3	42	40	62	1,100	3" FLG	1/4"	3 1/2	4.52	R404A	680 psig	
14SCFX	920 (680)	1.1	42	40	62	1,275	3" FLG	1/4"	4 1/2	4.82	R404A	680 psig	
15SCFX	1,100 (680)	1.3	42	40	62	1,315	3" FLG	1/4"	4 1/2	5.79	R404A	680 psig	
16SCFX	1,350 (680)	1.3	42	40	62	1,345	3" FLG	1/4"	5	6.50	R404A	680 psig	
17SCFX	1,620 (680)	1.4	32	72	69	2,355	4" FLG	1/4"	6 1/2	8.90	R404A	680 psig	
18SCFX	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"	10 1/2	13.10	R404A	680 psig	
20SCFX	3,190 (680)	1.2	32	91	91 [§]	3,925	6" FLG	1/4"	13 1/2	14.00	R404A	680 psig	
21SCFX	3,550 (680)	1	32	91	91 [§]	4,150	6" FLG	1/4"	13 1/2	15.80	R404A	680 psig	
15S	30 (1000) 31 (3000) 32 (6000)	.8	20	20	25	150	Determined By Pressure	Determined By Pressure	1/2	.42	R134A	750 psig 1,000 psig 1,500 psig 2,500 psig 3,000 psig 3,500 psig	115/1/60 100/1/50 220/1/50 230/208/1/60
35S	50 (1000) 51 (3000) 52 (6000)	1.5	20	20	31	170			1/2	.75	R404A		
55S	72 (1000) 74 (3000) 75 (6000)	.38	29	26	39	590			3/4	1.35	R404A		
75S	170 (1000) 175 (3000) 175 (6000)	1.4	29	26	53	850	Consult Factory	Consult Factory	2	2.54	R404A	460/3/60 380/420/3/50 230/208/3/60 240/220/3/50 575/3/60	
95S	350 (1000) 357 (3000) 360 (6000)	1	39	27	60	1,300	4	3.85	R404A	6,000 psig			
115S	490 (1000) 500 (3000) 500 (6000)	.6	61.5	28.5	68.5	2,500	5 1/2	7.00	R404A				

230/208/1/60
200/1/50
460/3/60
380/420/3/50
230/208/3/60
240/220/3/50

* 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)

** Average of total kilowatts per hour of dryer operation at full rated capacity.
Dimensions subject to change without notice.

§ Air-cooled dimension. Water-cooled dimension is 76.12"
Specifications indicated are for air-cooled models.



ZEKS HeatSink™ High Pressure compressed air dryers are not designed, intended or approved for breathing air applications.

Specifications, illustrative materials and descriptions contained herein were as accurate as known at the time this publication was approved for printing. The company reserves the right to change specifications, discontinue models, equipment or design without notice and without incurring obligation. The information set out in this brochure is for preliminary information only and is not intended to constitute any representation or warranty by ZEKs to potential customers or to form the basis of a contract with any customer.

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