

High Pressure

Refrigerated Compressed Air Dryers

SCFX Series

680 PSIG Maximum Working Pressure

HSFHP Series

750 PSIG Maximum Working Pressure

SS Series

6,000 PSIG Maximum Working Pressure



*With Energy Saving
HeatSink™ True-Cycling™ Performance*

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Specialized High Pressure Compre

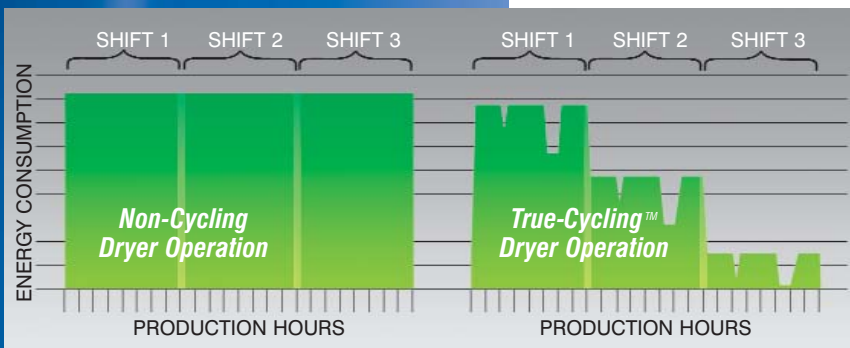
Energy Saving HeatSink™ REFRIGERATED COMPRESSED AIR DRYERS

Compressed air systems operating at pressures greater than 200 psig require air compressors and air treatment equipment designed specifically for the demands of high pressure air. Such systems provide air for specialized equipment, tools and manufacturing processes, all of which require clean dry air to ensure operation at peak efficiency. Contaminants in the airstream can ultimately affect the operation of the compressed air equipment. The compression process itself causes concentrations of water, compressor lubricant and air-borne particulate to increase to levels that can damage tools, increase maintenance requirements or spoil finished product. ZEKS SCFX Series, HSFHP Series and SS Series Refrigerated Dryers are designed to dry high pressure compressed air continuously, economically and reliably, thereby ensuring safe and efficient operation of downstream equipment and processes.

True-Cycling™ Dryer Operation

SCFX, HSFHP 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 then discharged 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 demand while the dryer continues 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.



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

ZEKS offers three True-Cycling™ dryer models for high pressure applications. All feature fully hermetic refrigeration systems and ZEKS' exclusive moisture separators, and are designed to deliver a 38°F pressure dew point.

- **SCFX Series** includes ZEKS' exclusive 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.
- **HSFHP Series** uses ZEKS' proven copper heat exchanger design enhanced for high pressure applications. HSFHP dryers are manufactured as gas coolers, enabling them to be used where cooling high pressure compressed air is required. Maximum operating pressure - 750 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. Similar to HSFHP models, SS dryers are designed as gas coolers, reducing the temperature of the air before use in downstream operations.



Dryer Features

SCFX Series 120-3,550 scfm

Standard Features

- 38°F pressure dew point
- High quality, fully hermetic refrigerant compressor
- High pressure moisture separator
- 680 psig maximum operating pressure
- Stainless steel CFX® heat exchangers
- Digital Performance Control
- Refrigerant suction pressure gauge
- High pressure solenoid condensate drain
- Fully enclosed, powder coated cabinet

Optional Features

- Water-cooled condenser (9-21SCFX)
- NEMA 4 electrics (9-21SCFX)
- Complete stainless steel air circuit



HSFHP Series 13-66 scfm

Standard Features

- 38°F pressure dew point
- High quality, fully hermetic refrigerant compressor
- High pressure moisture separator
- 750 psig maximum operating pressure
- Specialized copper heat exchangers
- Refrigerant suction pressure gauge
- Fully enclosed, powder coated cabinet

Optional Features

- High pressure solenoid condensate drain
- Digital Dryer Control



SS Series 30-500 scfm

Standard Features

- 38°F pressure dew point
- High quality, fully hermetic refrigerant compressor
- 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)
- Fully enclosed, powder coated cabinet
- Timed solenoid drain (9SS and 11SS, up to 1500 psig MAWP)

Optional Features

- Water-cooled condenser (5-11SS)
- Timed solenoid drain (digital control, up to 1500 psig MAWP)
- NEMA 4 electrics



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 - 38° PDP

MODEL	CAPACITY SCFM* @ (psig)	PRESSURE DROP** PSI	DIMENSIONS IN.			SHIP WEIGHT LBS.	AIR CONNECT IN/OUT	DRAIN CONNECT FPT	REFRIG COMP HP	OPERATING KW***	REFRIG TYPE	MAX WORKING PRESSURE	VOLTAGES
5SCFX	120 (680)	1	14	35	31	250	1/2" MPT	1/4"	1/3	.78	R404A	680 psig	115/1/60
6SCFX	160 (680)	.83	14	35	31	265	1/2" MPT	1/4"	1/2	.96	R404A	680 psig	100/1/50
7SCFX	240 (680)	1.5	14	35	31	300	1/2" MPT	1/4"	3/4	1.35	R404A	680 psig	230/208/1/60
8SCFX	300 (680)	1.5	14	35	31	300	1/2" MPT	1/4"	1	1.29	R404A	680 psig	200/1/50
9SCFX	340 (680)	.9	23	31	55	610	1/2" MPT	1/4"	1	1.66	R404A	680 psig	220/1/50
10SCFX	355 (680)	.81	23	31	55	635	1/2" MPT	1/4"	1 1/2	2.01	R404A	680 psig	230/208/1/60 200/1/50 460/3/60 380/420/3/50 230/208/3/60 240/220/3/50
11SCFX	475 (680)	1.2	23	31	55	635	2" MPT	1/4"	2	2.54	R404A	680 psig	
12SCFX	620 (680)	1.1	23	31	55	735	2" MPT	1/4"	2 1/2	3.24	R404A	680 psig	
13SCFX	875 (680)	1.3	40	40	61	1,100	3" FLG	1/4"	3 1/2	4.52	R404A	680 psig	
14SCFX	920 (680)	1.1	40	40	61	1,275	3" FLG	1/4"	4 1/2	4.82	R404A	680 psig	
15SCFX	1,100 (680)	1.3	40	40	61	1,315	3" FLG	1/4"	4 1/2	5.79	R404A	680 psig	
16SCFX	1,350 (680)	1.3	40	40	61	1,345	3" FLG	1/4"	5	6.50	R404A	680 psig	
17SCFX	1,620 (680)	1.4	32	72	64	2,355	4" FLG	1/4"	6 1/2	8.90	R404A	680 psig	
18SCFX	2,060 (680)	1.6	32	72	64	2,435	4" FLG	1/4"	9	10.50	R404A	680 psig	
19SCFX	2,840 (680)	1.7	32	72	64	2,765	4" FLG	1/4"	10 1/2	13.10	R404A	680 psig	
20SCFX	3,190 (680)	1.2	32	86	91	2,894	6" FLG	1/4"	13 1/2	14.00	R404A	680 psig	
21SCFX	3,550 (680)	1	32	86	92	3,900	6" FLG	1/4"	13 1/2	15.80	R404A	680 psig	
10HSFHP	13 (750)	.2	14	14	18	103	1/2" MPT	1/4"	1/5	.42	R134A	750 psig	115/1/60 220/1/50 ^
18HSFHP	24 (750)	.5	14	14	18	103	1/2" MPT	1/4"	1/5	.59	R134A	750 psig	
24HSFHP	32 (750)	.8	16	20	23	115	1/2" MPT	1/4"	1/3	.74	R404A	750 psig	
35HSFHP	46 (750)	.5	16	20	23	185	3/4" MPT	1/4"	1/3	1.20	R404A	750 psig	
50HSFHP	66 (750)	.9	20	16	23	185	3/4" MPT	1/4"	1/2	1.36	R404A	750 psig	
1SS	30 (1000) 31 (3000) 32 (6000)	.8	20	20	25	150	Determined By Pressure	Determined By Pressure	1/4	.42	R134A	750 psig 1000 psig 1500 psig 2500 psig 3000 psig 3500 psig 6000 psig	115/1/60 100/1/50 220/1/50 230/208/1/60
3SS	50 (1000) 51 (3000) 52 (6000)	1.5	20	20	31	170			1/2	.75	R404A		
5SS	72 (1000) 74 (3000) 75 (6000)	.38	29	26	39	590			3/4	1.35	R404A		
7SS	170 (1000) 175 (3000) 175 (6000)	1.4	29	26	53	850			2	2.54	R404A		
9SS	350 (1000) 357 (3000) 360 (6000)	1	39	27	60	1,300			4	3.85	R404A		
11SS	490 (1000) 500 (3000) 500 (6000)	.6	61.5	28.5	68.5	2,500			5 1/2	7.00	R404A		

* Performance data obtained as per ISO 7183, Table 2, Option A2.
Pressure dew point at pressure indicated, 100°F inlet air, 100°F ambient air.

** Pressure drop ± .5 psi.

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

Dimensions subject to change without notice.

Specifications indicated are for air-cooled models.

^ 50Hz for export only



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