

SCFX & HSEHP Series

HIGH PRESSURE DRYERS, 13-3,550 scfm

SS Series

STAINLESS STEEL HIGH PRESSURE DRYERS, 30-500 scfm



HeatSink™

REFRIGERATED COMPRESSED AIR DRYERS

With
TRUE-CYCLING™ OPERATION



Specialized High Pressure Comp

HeatSink™

REFRIGERATED
COMPRESSED AIR DRYERS

Reliability
Efficiency
Innovation

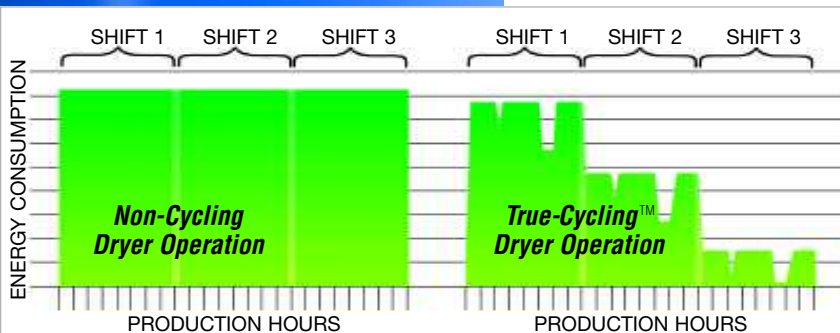
Compressed air systems operating at pressures greater than 200 psig require air compressors and air treatment equipment specifically designed for the demands of high pressure compressed air. Such systems provide air for specialized equipment, tools and manufacturing processes, all of which require clean dry air to insure operation at peak efficiency. Contaminants present at the intake of the air compressor can ultimately affect the operation of the compressed air equipment. In addition, 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, HSEHP Series and SS Series High Pressure Refrigerated Air Dryers are designed to dry high pressure compressed air continuously, economically and reliably, thereby insuring safe and efficient operation of downstream equipment and processes.

Dryer Operation

SCFX, HSEHP and SS Dryers use a refrigeration system to cool a thermal mass, which in turn cools the compressed air. 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 via an automatic drain.

Having the ability to store cool energy in the 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 True-Cycling™ dryer operation enables considerable energy savings during periods of reduced demand on the air treatment system.

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

- **SCFX** – The newest addition to the cycling high pressure line, ZEKS SCFX dryers include ZEKS' exclusive CFX® heat exchangers. These durable exchangers have a high heat transfer coefficient and low fouling potential, insuring trouble-free operation at peak efficiency. Made of all 304L stainless steel, CFX® exchangers provide protection against corrosion and come with ZEKS 10-year CFX® exchanger warranty. SCFX dryers are designed for 120–3,550 SCFM at 680 psig.
- **HSEHP** – Designed for nominal flow rates up to 66 SCFM, HSEHP dryers use ZEKS proven copper heat exchanger design enhanced for high pressure applications. HSEHP dryers are manufactured as gas coolers, enabling them to be used where cooling high pressure compressed air is required. Maximum working pressure for HSEHP dryers is 750 psig.
- **SS** – SS dryers have the ability to handle high pressure compressed air applications up to 6000 psig. Constructed with a complete stainless steel air circuit, these dryers are well suited to compressed air applications where contaminants within the airstream may be detrimental to copper or aluminum. Similar to HSEHP dryers, the SS dryers are designed as gas coolers, making them suitable for applications where the temperature of the air must be reduced for downstream operations or equipment.



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: dew point display; energy savings display; remote alarm; suction pressure (17-21SCFX); refrigerant discharge pressure (13-21SCFX); refrigerant suction temperature (17-21SCFX)
- Refrigerant suction pressure gauge
- High pressure solenoid condensate drain
- Fully enclosed, powder coated cabinet

Optional Features

- Water-cooled condenser (9-21SCFX)
- Weatherproof protection against rain and splashing water
- NEMA 4 electrics (9-21SCFX)
- Complete 304L stainless steel air circuit



HSEHP 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

- Weatherproof protection against rain and splashing water
- High pressure solenoid condensate drain



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; remote alarm
- 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)
- Weatherproof protection against rain and splashing water
- 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			SHIP WEIGHT LBS.	AIR CONNECT IN/OUT	DRAIN CONNECT FPT	REFRIG COMP HP	OPERATING KW***	REFRIG TYPE	MAX WORKING PRESSURE	VOLTAGES		
			W	D	H										
5SCFX	120 (680)	1	14	35	31	250	1 1/2" MPT	1/4"	1/3	.78	R404	680 psig	115/1/60		
6SCFX	160 (680)	.83	14	35	31	265	1 1/2" MPT	1/4"	1/2	.96	R404	680 psig	100/1/50		
7SCFX	240 (680)	1.5	14	35	31	300	1 1/2" MPT	1/4"	3/4	1.35	R404	680 psig	230/208/1/60		
8SCFX	300 (680)	1.5	14	35	31	300	1 1/2" MPT	1/4"	1	1.29	R404	680 psig	200/1/50		
9SCFX	340 (680)	.9	23	31	55	610	1 1/2" MPT	1/4"	1	1.66	R404	680 psig	220/1/50		
10SCFX	355 (680)	.81	23	31	55	635	1 1/2" MPT	1/4"	1 1/2	2.01	R404	680 psig	230/208/1/60 200/1/50 460/3/60 380/420/3/50 230/208/3/60 240/220/3/50 460/3/60 380/420/3/50 230/208/3/60 240/220/3/50		
11SCFX	475 (680)	1.2	23	31	55	635	2" MPT	1/4"	2	2.54	R404	680 psig			
12SCFX	620 (680)	1.1	23	31	55	735	2" MPT	1/4"	2 1/2	3.24	R404	680 psig			
13SCFX	875 (680)	1.3	40	40	61	1,100	3" MPT	1/4"	3 1/2	4.52	R404	680 psig			
14SCFX	920 (680)	1.1	40	40	61	1,275	3" MPT	1/4"	4 1/2	4.82	R404	680 psig			
15SCFX	1,100 (680)	1.3	40	40	61	1,315	3" MPT	1/4"	4 1/2	5.79	R404	680 psig			
16SCFX	1,350 (680)	1.3	40	40	61	1,345	3" MPT	1/4"	5	6.50	R404	680 psig			
17SCFX	1,620 (680)	1.4	32	72	64	2,355	4" FLG	1/4"	6	7.03	R22	680 psig			
18SCFX	2,060 (680)	1.6	32	72	64	2,435	4" FLG	1/4"	9	8.72	R22	680 psig			
19SCFX	2,840 (680)	1.7	32	72	64	2,765	4" FLG	1/4"	10 1/2	11.48	R22	680 psig			
20SCFX	3,190 (680)	1.2	32	86	91	2,894	6" FLG	1/4"	13 1/2	13.18	R22	680 psig			
21SCFX	3,550 (680)	1	32	86	92	3,900	6" FLG	1/4"	13 1/2	14.29	R22	680 psig			
10HSEHP	13 (750)	.2	14	14	18	103	1/2" MPT	1/4"	1/5	.27	R22	750 psig	115/1/60 100/1/50 220/1/50		
18HSEHP	24 (750)	.5	14	14	18	103	1/2" MPT	1/4"	1/5	.48	R22	750 psig			
24HSEHP	32 (750)	.8	14	14	18	115	1/2" MPT	1/4"	1/3	.72	R22	750 psig			
35HSEHP	46 (750)	.5	20	16	23	185	3/4" MPT	1/4"	1/3	.82	R22	750 psig			
50HSEHP	66 (750)	.9	20	16	23	185	3/4" MPT	1/4"	1/2	1.00	R22	750 psig			
1SS	30 (1000) 31 (3000) 32 (6000)	.8	20	20	25	150	Determined By Pressure	Determined By Pressure	1/5	.48	R22	750 psig 1000 psig 1500 psig 2500 psig 3000 psig 3500 psig 6000 psig	115/1/60 100/1/50 220/1/50		
3SS	50 (1000) 51 (3000) 52 (6000)	1.5	20	20	31	170			1/3	.75	R22				
5SS	72 (1000) 74 (3000) 75 (6000)	.38	29	26	39	590			1/2	1.0	R22		115/1/60 100/1/50 230/208/1/60 200/1/50 220/1/50		
7SS	170 (1000) 175 (3000) 175 (6000)	1.4	29	26	53	850			Consult Factory	Consult Factory	1 1/2			2.10	R22
9SS	350 (1000) 357 (3000) 360 (6000)	1	42	40	62	1,300			3	3.40	R22			460/3/60 380/420/3/50 230/208/3/60 240/220/3/50 575/3/60	
11SS	490 (1000) 500 (3000) 500 (6000)	.6	61.5	28.5	68.5	2,500	5	6.41	R22						

* Performance data presented in accordance with CAGI Standard No. ADF 100, "Refrigerated Compressed Air Dryers - Methods for Testing and Rating." Pressure dew point at pressure indicated, 100°F inlet air, 100°F ambient air.

** Pressure drop ±.5 psi. Pressure drop shown for SS models valid up to 3500 psig.

*** 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.



1302 Goshen Parkway
West Chester, PA 19380
Phone: 610-692-9100 800-888-2323
Fax: 610-692-9192
Web: www.zeks.com

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