



CNC SERIES

REFRIGERATED AIR DRYERS



CNC SERIES eNERGY CONSCIOUS

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Another cool idea from FSCURTIS®

RELIABLY DRY COMPRESSED AIR

Since 1854, CURTIS Air Compressors has empowered generations with the air power needed to turn visions into reality. Today, FSCURTIS' reliable CNC Series refrigerated dryers deliver performance and value through traditional non-cycling technology in the most space-saving package available. Integrated drying process chambers deliver dry air at all flows, and cool savings with energy saving low pressure drop. Improved productivity, long life, and reliable performance are yours with FSCURTIS CNC Series available from 10 through 250 scfm at pressures to 203 psig.

OPERATE LEAN & GREEN

Typical plant air demand levels vary greatly. CNC Series balances reliability and value with technology and energy efficiency. Unscheduled maintenance decreases while productivity increases when you operate with dry compressed air. Want lower electric bills? Ask any compressed air professional and they'll agree that your biggest opportunity to lower your electric bill is to reduce system pressure drop.

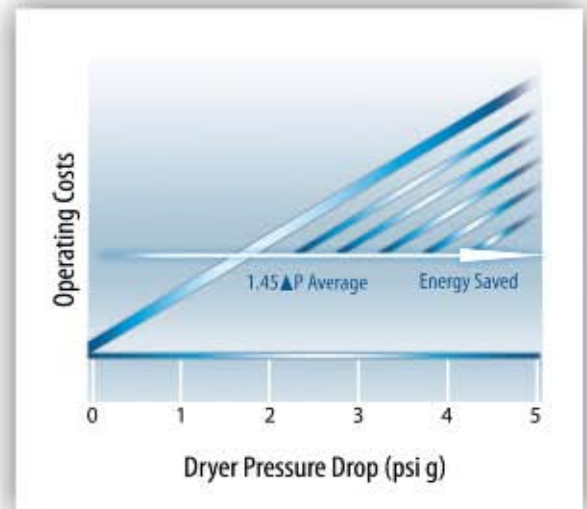


Figure (1): Energy Savings via Reduced Pressure Drop

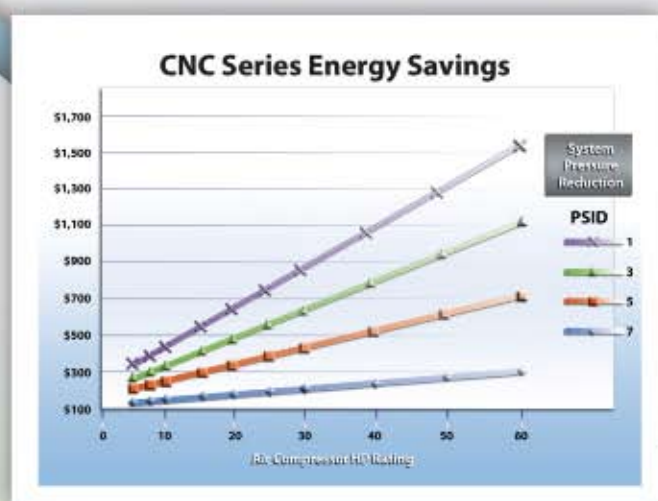
That is why FSCURTIS engineered energy conscious CNC Series with an average 1.45 psid pressure drop – the lowest in the industry. Our heavily insulated heat exchange modules integrate oversized cooling channels, environmentally friendly refrigerant, an expansive demister cavity for stable dew points at all flow rates, and level sensing automatic float drain to wring out the moisture. Designed to take the heat, our condensers are oversized to allow operation in ambient conditions to 122 °F. Dew point indicators are standard. CNC Series keeps your air system dry and lets you operate lean and green.

Did you know...

...the difference in pressure drop for FSCURTIS CNC Series refrigerated dryers versus typical refrigerated dryers can save you at least 1.5% in compressor drive motor energy? At 10 cents/kWh, that's over \$100/year in savings for each air compressor HP. Ask us how!



Figure (2): Assumes 8,760 hours/year, 10 cents/kWh, EPA motor efficiencies. *Pounds per Square Inch Differential



US REFRIGERATED AIR DRYERS

eNERGY SAVING DESIGN

FSCURTIS CNC Series dryers are engineered for durability and performance. Exceptional dew point stability is maintained across the entire design flow range due to our slow flow process velocities. Broad bore heat exchangers and expansive demister cavities are designed to provide the smallest pressure drop in the industry. This reduces input energy requirements and maximizes energy savings with lower air compressor pressure settings.

Robust aluminum heat exchangers are encapsulated in an insulated thermal shield to protect against heat degradation of the cold storage. Rugged reciprocating refrigeration compressors and oversized condensers add durability and keep the unit running on the hottest of days. CNC Series comes ready to run, just pipe it in and turn it on. Our low refrigerant charge eliminates the need to let it sit or warm up before you can use it. Each comes with a level sensing float drain as standard. Prefer a timer operated drain? Let us know and we'll swap it out for you. Either way, we've even left a section of the cabinet open to allow you easy access for quick drain maintenance. CNC Series is designed to operate lean and green and to give you complete peace of mind.

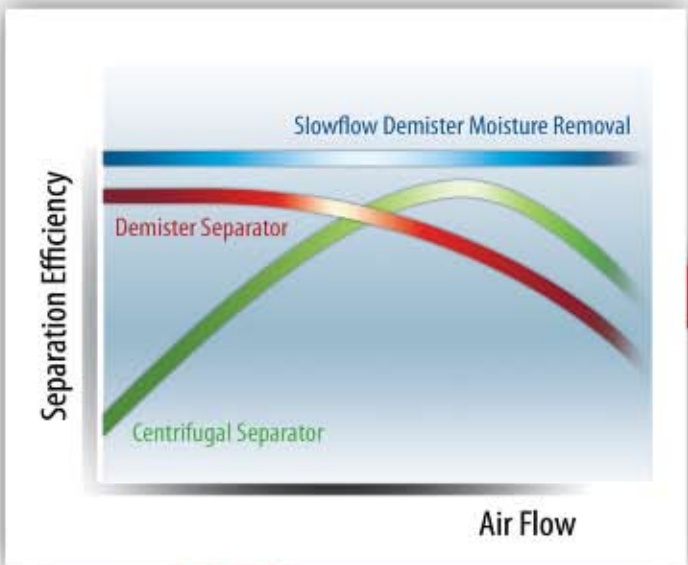


Figure (3):
Energy saving potential



STANDARD FEATURES INCLUDE:

- Lighted Compressor On/Off Switch
- At-a-glance dew point performance
- Environmentally friendly refrigerant
- Reciprocating compressors
- Oversized condensers for ambient up to 122°F
- Automatic level sensing float drains
- 115 volt operation and grounded 6 foot power cord (CNC5 through CNC125)

SPECIFICATIONS AND PERFORMANCE

Model	Pipe Size NPT-F	Nominal Flow			Dimensions L x W x H		Voltages V / Ph / Hz	Recommended Filtration		Weight	
		scfm	Nm ³		inches	mm		General Purp. Coalescer	Oil Aerosol & Liquid Removal	lbs	Kg
			hr	min				Pre-filter	Afterfilter		
CNC5	1/2	5	8	0.1	17.7x8.3x17	450x210x430	115 / 1 / 60	CES21GP050	CES21C050	42	19
CNC10	1/2	10	17	0.3							
CNC15	1/2	15	26	0.4							
CNC25	1/2	25	43	0.7							
CNC35	1/2	35	60	1.0							
CNC50	3/4	50	85	1.4	19.7x8.3x19.9	500x210x505	115 / 1 / 60	CES42GP050	CES42C050	52	24
CNC75	3/4	75	127	2.1							
CNC100	3/4	100	170	2.8	20.5x8.9x22.3	520x225x565	115 / 1 / 60	CES42GP050	CES42C050	52	24
CNC125	1-1/2	125	212	3.5							
CNC150	1-1/2	150	255	4.2	21.8x16.7x23.8	555x425x605	230 / 1 / 60	CES127GP075	CES127C075	68	31
CNC175	1-1/2	175	297	5.0							
CNC200	1-1/2	200	340	5.7	22.0x28.0x37.0	559x711x940	230 / 1 / 60	CES127GP075	CES127C075	77	35
CNC250	1-1/2	250	425	7.1							
					41.0x28.0x42.0	1041x711x1067	230 / 3 / 60 460 / 3 / 60	CES127GP100	CES127C100	115	52
								CES233GP150	CES233C150	128	52
								CES233GP150	CES233C150	132	60
								CES233GP150	CES233C150	183	83
								CES339GP150	CES229C150	287	130

*Capacities are based upon: Ambient temperature, Inlet temperature and Working pressure.

Model	C1			C2			C3		
	Ambient Temperature			Inlet Temperature			Working Pressure		
	F	C	Correction Factor	F	C	Correction Factor	psi g	bar g	Correction Factor
CNC5 - CNC175	60	16	1.34	90	32	1.24	60	4	0.83
	70	21	1.26	100	38	1.00	80	6	0.93
	80	27	1.17	110	43	0.81	100	7	1.00
	90	32	1.09	120	49	0.67	125	9	1.07
	100	38	1.00	140	60	0.45	150	10	1.12
	110	43	0.91	149	65	0.43	175	12	1.16
	120	49	0.82				200	12	1.16
						230	16	1.22	
CNC200 - CNC250	70	21	1.22	90	32	1.22	50	3	0.77
	80	27	1.15	100	38	1.00	80	6	0.93
	90	32	1.05	110	43	0.82	100	7	1.00
	100	38	1.00	120	49	0.68	125	9	1.07
	110	43	0.94	130	54	0.56	150	10	1.12
	120	49	0.79	140	60	0.46	174	12	1.15
	122	50	0.71				203	14	1.18

AIR FLOW CORRECTION FACTORS:

Capacity correction factors to be used when operating conditions differ from those shown above.

To obtain dryer capacity at new conditions multiply **nominal capacity** * C1 x C2 x C3

- Maximum ambient temperature – 122°F (50°C)
- Maximum inlet temperature – Models CNC5-CNC175: 149°F (65°C) | Models CNC200-CNC250: 140°F (60°C)
- Minimum ambient temperature – 41°F (5°C)
- Maximum inlet pressure – Models CNC5-CNC175: 232 psi g (16 bar g) | Models CNC200-CNC250: 203 psi g (14 bar g)
- Refrigerant – Models CNC5-CNC175: R134a | Models CNC200-CNC250: R407C

Distributed By:



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