

Nirvana

Cycling Refrigerated Air Dryers

An advanced cycling dryer, the Nirvana provides significant savings because it does not waste energy through continuous operation of its refrigeration system, as do traditional non-cycling dryers. Dryer operation, and therefore energy draw, is reduced to match to the incoming heat load. Each component of the Nirvana has been designed to provide not only durability, but maximum energy efficiency. This combination of system design and individual component design adds up to the most energy efficient cycling refrigerated dryer available.



Provides true customer value through:

- High operating efficiency for lower energy consumption
- Superior heat exchange design to ensure continuous pressure dew point performance
- Reliable centrifugal separation that pulls unwanted moisture from the air to discard through a reliable float-type or timed electric solenoid drain
- Optional cleanable panel filter is also available to further protect the refrigeration system condenser

 **Ingersoll Rand**
Industrial Technologies

Cycling Refrigerated Air Dryers

D127NC-D255NC Features/Benefits:

Thermal Mass with Submerged Evaporator

- Fully insulated to maintain a cold well of propylene glycol-water, which is pumped to the air chiller to provide a low pressure dew point.

Superior Heat Exchanger Design

- Durable, corrosion-resistant 304L stainless steel provides optimal heat transfer to ensure low pressure dew point and unmatched low pressure drop.
- Pre-cooler/re-heater removes initial heat load from compressed air to properly precondition to reduce energy costs and re-heat dry air. This ensures low RH% that protects the compressed air system.

D17NC-D85NC Features/Benefits:

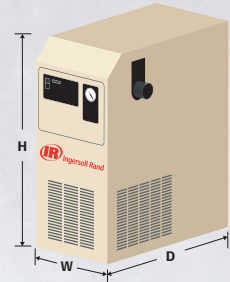
ISO Class 4 Pressure Dew Point

- Reliable system provides 38°F dew point to protect your process.

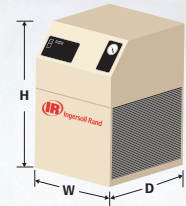
Fully Submerged Heat Exchanger

- Simple thermal mass design ensures continuous and reliable performance.
- Copper tube exchangers ensure low pressure dew point while measured in a continuously monitored, temperature controlled glycol mass.
- Automatic controls reduce energy draw by shutting down the refrigerated compressor as quickly as possible yet maintains continuous performance.

D127NC-D255NC Dimensions



D17NC-D85NC Dimensions



Cycling Refrigerated Air Dryer Data

Model	Capacity		kW 60 Hz	Pressure Drop psig	Dimensions in (mm)			Weight		Connection Size and Type
	scfm	m ³ /min			W	D	H	lbs	kg	
D17NC	10	0.3	0.31	0.66	14 (355.6)	14 (355.6)	18 (457.2)	75	34	1/2" FPT
D31NC	18	0.5	0.51	1.91	14 (355.6)	14 (355.6)	18 (457.2)	75	34	1/2" FPT
D41NC	24	0.7	0.66	3.23	14 (355.6)	14 (355.6)	18 (457.2)	90	41	1/2" FPT
D59NC	35	1.0	0.79	1.80	20 (508.0)	16 (406.4)	23 (584.2)	165	75	3/4" FPT
D85NC	50	1.4	0.94	3.44	20 (508.0)	16 (406.4)	23 (584.2)	165	75	3/4" FPT
D127NC	75	2.1	0.78	1.56	14 (355.6)	35 (889.0)	31 (787.4)	140	64	1" MPT
D170NC	100	2.8	0.96	2.06	14 (355.6)	35 (889.0)	31 (787.4)	175	80	1" MPT
D212NC	125	3.5	1.35	1.90	14 (355.6)	35 (889.0)	31 (787.4)	175	80	1-1/2" MPT
D255NC	150	4.2	1.29	2.60	14 (355.6)	35 (889.0)	31 (787.4)	175	80	1-1/2" MPT

Performance data in accordance with CAGI standard ADF 100: under 100°F inlet temperature, 100°F ambient temperature, 100 psig conditions and 38°F dew point. All models are air-cooled only; max pressure: 230 psig; max inlet temperature: 125°F; voltages: 115-1-60 and 220-1-50, D127NC - D255NC available in 230-1-60. NEMA 1 electrical enclosures standard; dimensions subject to change without notice; standard ETL-certified.

Models D17NC - D85NC

50°F/113°F min/max ambient temperature
R22 refrigerant

Models D127NC - D255NC

40°F/113°F min/max ambient temperature
R404A refrigerant



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