

CHAMPION

NON-CYCLING REFRIGERATED DRYER | 7-1,200 CFM

XCNC Series



X Series: NeXt-Generation Champion Air Treatment

XCNC SERIES | NON-CYCLING REFRIGERATED DRYERS

Designed for Worry-Free Air Quality

Champion Refrigerated Dryers make providing continuous dry air as easy as piping a self-contained unit into your compressed air supply line.

Corrosion-resistant heat exchangers, an enhanced control-system and high-efficiency moisture-separation ensure a steady long-term supply of dry air. This virtually eliminates cost due to ruined product finishes, scrapped materials or replacement of pneumatic tools and manufacturing equipment destroyed by wet air.

Designed for Optimum Efficiency

Our dryers offer multiple design features to ensure a constant dew point at all load levels, and to deliver continuous dry-air performance that satisfies ISO7183 and CAGI ADF100 industry standards. The dryer's full function control with enhanced control parameters, diagnostics and alarms is more sophisticated and powerful than similarly sized competitive products. We also test every unit to ensure leak-free operation and compliance with operating specifications.

Standard units are rated for 115°F (46°C) ambient air conditions and are suited for most applications.



Affordable Reliability

At Champion, equipment reliability is paramount to our design and manufacturing. Not only does our line of refrigerated dryers reflect our stringent quality standards, but with minimal downtime and almost non-existent maintenance, these dryers deliver highly affordable reliability that our customers can count on year after year.

High quality design and component selection are the key to our dryers' unmatched reliability. A refrigeration system and heat exchanger combine to cool compressed air as it passes through the dryer. Cooling causes moisture and contamination to condense so they can be removed from the air stream via a high efficiency separator, and then automatically discharged through a disposal drain.

The precoolers/reheater improves efficiency by reducing the refrigeration compressor power and also warming the outlet air to eliminate pipe sweating. Dryer components are carefully sized and matched to ensure consistent dew point at full or partial loading and in all ambient conditions.



Minimize lifecycle costs with an efficient, reliable and environmentally-sound solution for cleaner, drier air.



7-64 CFM

Lowest Cost of Ownership

Refrigerated dryers offering design features that reduce energy consumption and improve reliability:

- 1 CORROSION-RESISTANT HEAT EXCHANGERS**
reduce air flow restrictions, providing more efficient throughput with less wasted energy. A built-in stainless steel demister efficiently removes all moisture.
- 2 MICROPROCESSOR CONTROL**
easy-to-use graphic interface lets you adjust and manage system parameters easily and efficiently.

- 3 VARIABLE-SPEED FANS**
reduce power consumption when units operate at less than maximum cooling capacity, while ensuring a consistent dew point.
- 4 RELIABLE, FULLY HERMETIC COMPRESSORS**
use environmentally friendly R134A refrigerant.
- 5 FULLY ADJUSTABLE, PROGRAMMABLE ELECTRONIC DRAIN VALVE**
helps minimize air loss.

75-1,200 CFM

Our refrigerated dryers provide the features and benefits that give you the **reliability, quality and performance** that you need from your compressed air system.

Designing and building the highest performance refrigerated dryers in the industry requires a unique set of engineering, manufacturing and testing capabilities... ones that only Champion can deliver. Our dryers integrate a unique combination of components and features that ensures maximum productivity and longest service life. From our patented corrosive-resistant heat exchangers to our unique refrigeration system, Champion refrigerated dryers are simply unsurpassed in both quality and performance.

A QUIET COMPRESSOR

Highest quality, fully hermetic compressor offers quiet, reliable operation.

B SUPERIOR HEAT EXCHANGER

100% corrosive-resistant heat exchanger delivers superior heat transfer, lowest pressure drop and extreme reliability.

C HIGHLY EFFICIENT SEPARATOR

High efficiency separator removes moisture for all applications, even under partial load conditions.

D CLOG RESISTANT CONDENSATE DRAIN

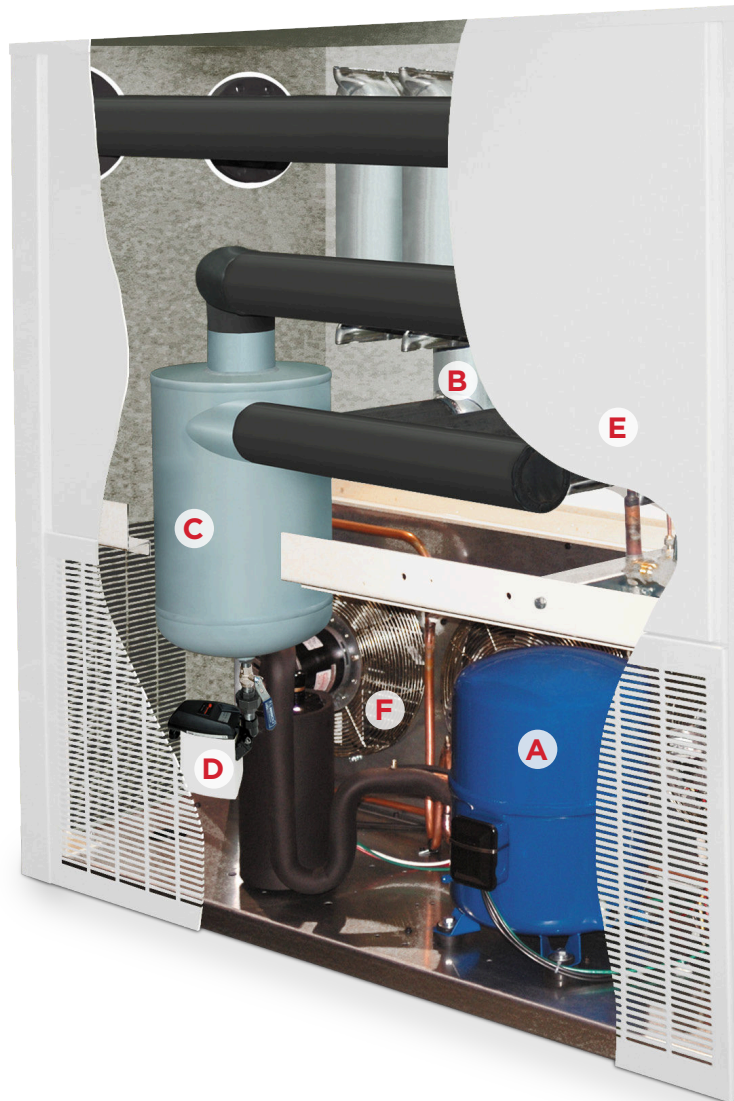
Adjustable electric condensate drain with large port resists clogging.

E HIGH QUALITY ENCLOSURE

Full cabinet made from heavy gauge steel, powder coated to yield a durable finish.

F LARGE CONDENSERS

Generously-sized condensers precisely positioned to avoid any accumulation of dust or debris.



International Air Quality Class Standards

ISO 8573-1 Air Quality Standard

ISO 8573-1, the international standard for compressed air quality, defines the amount of contamination permissible in compressed air.

The ISO standard identifies three primary forms of contamination in compressed air systems: solid particles, water and oil. These contaminants are classified and assigned a quality class, ranging from Class 0, the highest purity level, to Class 6, the most relaxed.

XCNC Series refrigerated air dryers offer the perfect balance between technology and simplicity to dry compressed air systems to ISO 8573-1 Air Quality Class 4-5 pressure dew points.

Note: Bundle filtration option when purchased with the Dryer (FP)



Optional Pre-Filtration

XC Series GP grade filtration removes solid and oil contaminants from the air stream before entering the dryer.

ISO Air Quality Class:

- Solids – Class 2
- Remaining oil – Class 4
- Removes solids 1.0 micron and larger
- Remaining oil content < 2.0 mg/m³

Optional After-Filtration

XC Series HE grade filtration provides high efficiency oil removal protecting downstream equipment.

ISO Air Quality Class:

- Solids – Class 1
- Remaining oil – Class 1
- Removes 99.999+% of solids ≥ 0.01 micron
- Remaining oil content < 0.01 mg/m³

Specifications



XCNC SERIES | NON-CYCLING REFRIGERATED DRYER

MODEL	INLET FLOW		PRESSURE DROP PSI	VOLTAGE**	IN/OUT CONNECTIONS	POWER CONSUMPTION KW	REFRIGERANT	DIMENSIONS H x W x D		WEIGHT	
	SCFM	NM ³ /H						INCHES	MM	LBS	KG
XCNC7	7	12	C/F	115/1/60	¾" FNPT	0.22	R-134A	16 x 12 x 16	406 x 305 x 406	40	18
XCNC11	11	19	C/F	115/1/60	¾" FNPT	0.22	R-134A	16 x 12 x 16	406 x 305 x 406	40	18
XCNC15	15	26	C/F	115/1/60	½" FNPT	0.22	R-134A	18 x 16 x 18	457 x 406 x 457	40	18
XCNC25	25	43	C/F	115/1/60	½" FNPT	0.27	R-134A	18 x 16 x 18	457 x 406 x 457	60	27
XCNC32	32	54	C/F	115/1/60	½" FNPT	0.49	R-134A	18 x 16 x 18	457 x 406 x 457	62	28
XCNC42	42	71	C/F	115/1/60	½" FNPT	0.53	R-134A	18 x 16 x 18	457 x 406 x 457	62	28
XCNC64	64	109	C/F	115/1/60	¾" FNPT	0.66	R-134A	22.5 x 16.5 x 21.5	572 x 419 x 546	77	35
XCNC75	75	128	1.4	115/1/60	¾" FNPT	0.82	R-134A	24.25 x 15.19 x 19.68	616 x 386 x 500	94	43
XCNC100	100	170	2.1	115/1/60	¾" FNPT	1.11	R-134A	24.25 x 15.19 x 19.68	616 x 386 x 500	99	45
XCNC150	150	255	1.4	115/1/60	1½" FNPT	1.15	R-134A	37.5 x 19.66 x 30.25	953 x 499 x 768	154	70
XCNC200	200	340	2	115/1/60	1½" FNPT	1.66	R-134A	37.5 x 19.66 x 30.25	953 x 499 x 768	170	77
XCNC250	250	425	3.1	460/3/60	1½" MNPT	2.2	R-404A	43 x 28.09 x 32.62	1092 x 713 x 829	340	154
XCNC300	300	510	2	460/3/60	2" MNPT	2.4	R-404A	43 x 28.09 x 32.62	1092 x 713 x 829	375	170
XCNC400	400	680	2.9	460/3/60	2" MNPT	3.6	R-404A	43 x 28.09 x 32.62	1092 x 713 x 829	375	170
XCNC500	500	850	2.9	460/3/60	3" MNPT	3.7	R-404A	61.5 x 42.62 x 40.25	1562 x 1083 x 1022	950	431
XCNC600	600	1020	3	460/3/60	3" MNPT	4.6	R-404A	61.5 x 42.62 x 40.25	1562 x 1083 x 1022	950	431
XCNC700	700	1190	2.7	460/3/60	3" MNPT	5.9	R-404A	61.5 x 42.62 x 40.25	1562 x 1083 x 1022	1050	476
XCNC800	800	1360	3	460/3/60	3" MNPT	5.9	R-404A	61.5 x 42.62 x 40.25	1562 x 1083 x 1022	1050	476
XCNC1000	1000	1700	2.4	460/3/60	4" CLS 150 FLN	7.4	R-404A	69 x 32.44 x 76.25	1753 x 824 x 1937	1700	771
XCNC1200	1200	2040	3.1	460/3/60	4" CLS 150 FLN	9.5	R-404A	69 x 32.44 x 76.25	1753 x 824 x 1937	1725	782

Performance data presented in accordance with ISO 7183 (Option A2) conditions: 100°F inlet temperature, 100°F ambient temperature and 100 psig conditions.

Overall dimensions include base, threaded conn., elec enclosure protrusions.

**See pricebook for other voltages.

*Premium Warranty**

1 Year—Standard

4 Years—Extended

5 Years—Total

*Parts and labor included.
Contact your local distributor for more details.

Champion is committed to
delivering superior products built with
the exceptional standards you expect.

CHAMPION[®]

1301 North Euclid Avenue
Princeton, Illinois 61356 USA
www.ChampionPneumatic.com

