



CYCLING REFRIGERATED DRYER | 10-24000 CFM

XGCYA Series



X Series: NeXt-Generation Gardner Denver Air Treatment

XGCYA SERIES | CYCLING REFRIGERATED DRYERS

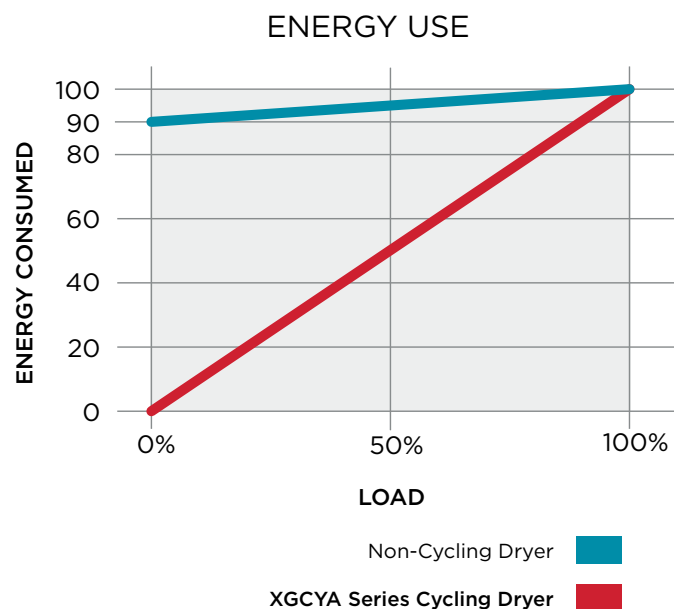
The XGCYA Series is more than just a dryer—it's a commitment to performance, protection, and energy savings. Engineered for industrial reliability, it ensures your compressed air system stays clean & dry under all operating conditions. With a patented heat exchanger and advanced cycling technology, the XGCYA Series delivers consistent results while dramatically reducing energy consumption. It's the smart choice for operations that demand both uptime and sustainability.

Why Thermal Mass Works

The XGCYA Series uses a thermal mass to store cold energy. This allows the refrigeration system to cycle off during low demand—saving energy without sacrificing performance. Even when the compressor isn't running, the dryer continues to remove moisture and maintain a steady dew point by circulating the thermal mass through the exchanger. Combined with a centrifugal separator and smart system design, this approach ensures constant dew point control, even under partial loads.

Key Features

- **TRUE CYCLING OPERATION:** Runs only when needed—no wasted energy.
- **PATENTED HEAT EXCHANGER:** High heat transfer, low pressure drop, and self-cleaning design.
- **THERMAL MASS EFFICIENCY:** Circulates cold energy for continued drying during off cycles.
- **CONSISTENT DEW POINT:** Centrifugal separator ensures reliable moisture removal.
- **CERTIFIED SAFE & SUSTAINABLE:** UL 60335-1 & UL 60335-2-40 compliant. Uses R513A refrigerant in smaller frames and R454B refrigerant in larger frames, both low-GWP for reduced environmental impact.



Premium Warranty[†]

1 Year—Standard

4 Years—Extended

5 Years—Total

[†]Parts and labor included. Contact your local distributor for more details.

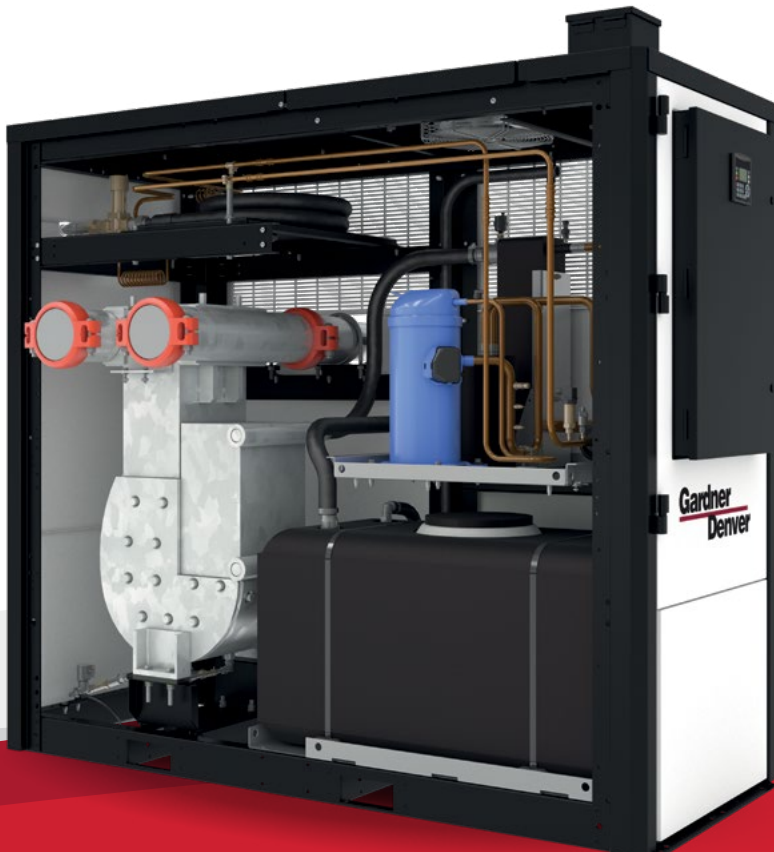
High Heat Transfer at Work

The superior performance of the XGCYA Series dryer can be attributed to the effective heat transfer capabilities of the exchanger design utilized throughout the compressed air circuit. The dryer design includes a pre-cooling system with heat exchangers to properly condition the air for drying. A re-heater section of the dryer's air side also uses these high performance heat exchangers to prepare the dried compressed air for re-entry into the air system. This prevents pipe sweating and readies the compressed air for use in process applications.

1 100% CORROSION-RESISTANT CONSTRUCTION
permits optimal heat transfer, resulting in a consistent pressure dew point.

2 XGCYA SERIES DRYER'S AIR CIRCUIT HEAT EXCHANGERS
combine a high heat transfer coefficient with unmatched low pressure drop.

3 CORROSION-RESISTANT MATERIAL
is used in all the XGCYA Series dryer's air circuit heat exchangers, providing durability in environments unsuitable for copper or other metals.



Advanced Microprocessor Controllers

The easy-to-use controller automatically manages dryer operation for optimum air treatment and for maximum energy efficiency.

- Simple and easily read interface
- Digital display of chiller temperature available at a glance to ensure optimal dryer performance
- Maintenance reminders to help keep particulate filters working optimally. (Pressure drop monitoring optional) 300-800 cfm
- Automatic dryer restart in the event of a sudden loss of power
- Microprocessor control constantly monitors dryer functions including thermal mass temperature and provides alarms to minimize dryer downtime
- Optional inlet/outlet pressure and temperature monitoring on 300-24000 cfm models



10-250 cfm

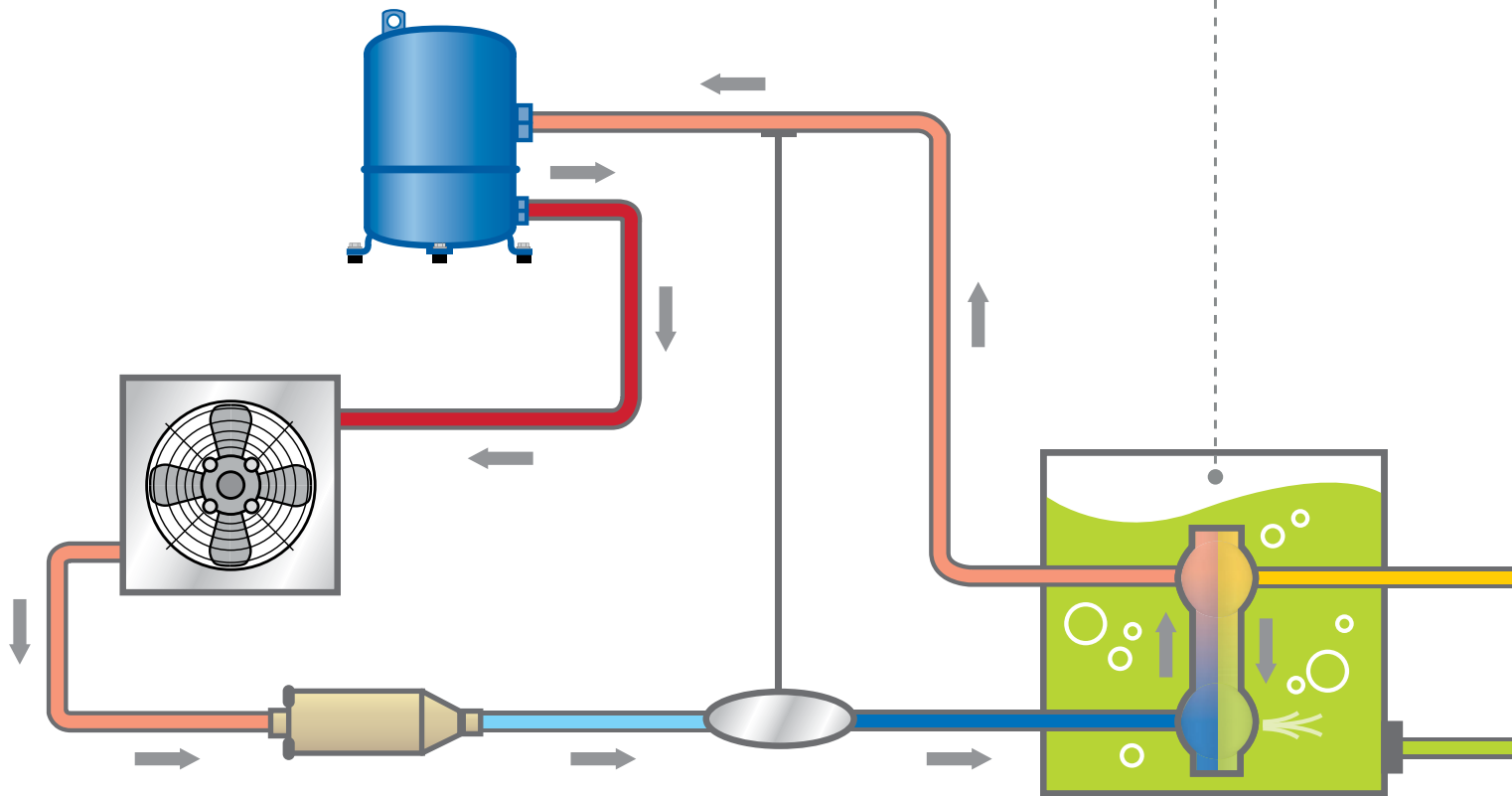


300-24000 cfm

Inside the Cycle

SUBMERGED EVAPORATOR THERMAL MASS STORAGE TANK

is fully insulated to maintain a consistently cold propylene glycol-water mixture for continuous pressure dew point control. The thermal tank temperature is monitored by the controller permitting the refrigerant compressor to cycle off during low heat loads resulting in energy savings.



REFRIGERATION SYSTEM

employs a reliable, time-proven hermetic reciprocating compressor.

THERMAL MASS COOLING SYSTEM

circulates the thermal mass fluid to provide a continuous cold medium for heat transfer.

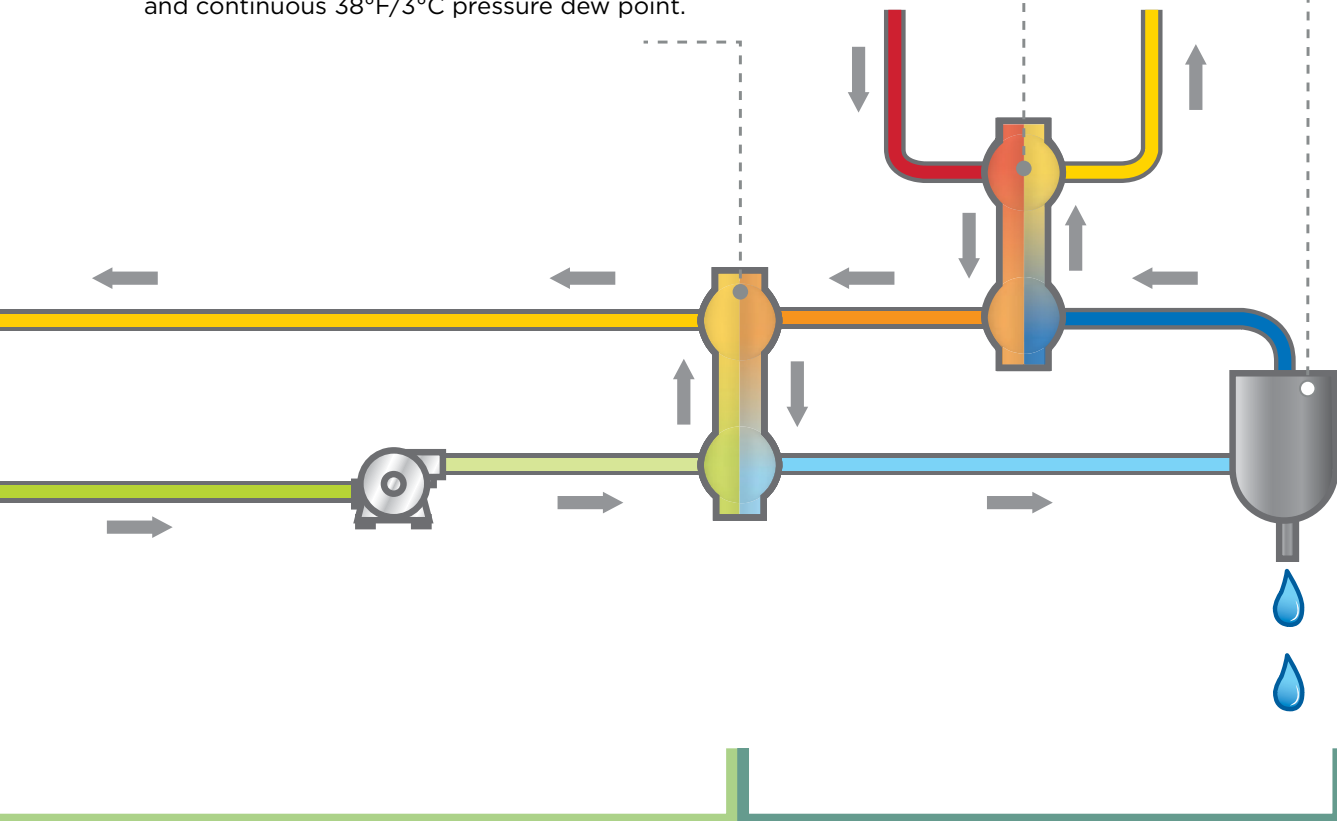
CENTRIFUGAL AIR/MOISTURE SEPARATOR

efficiently and effectively removes moisture for all applications even under partial load conditions.

PRE-COOLER/RE-HEATER

assures that compressed air is properly conditioned for cooling while simultaneously reducing the energy costs of removing the initial heat load. Clean, dry air leaving the dryer is reheated to maintain low relative humidity in the process air, further protecting the compressed air system.

AIR CHILLER uses corrosion-resistant corrugated heat exchangers to provide efficient heat transfer between the compressed air and the dryer's cooling thermal mass, assuring a consistent and continuous 38°F/3°C pressure dew point.



COMPRESSED AIR SIDE SYSTEM

pre-cools the inlet air, chills the air to 38°F/3°C, removes moisture through the centrifugal separator and is re-heated for process use.

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.

According to ISO standards, compressed air systems face three primary contaminants: solid particles, water, and oil. The XGCYA Series addresses all three with pre- and post-filtration, enhancing overall air quality and protecting downstream manufacturing tools and equipment.

XGCYA 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.



10-250 cfm including ship loose
XG Series pre & post filters.

Integrated filtration
from 300-24000 CFM

Included Pre-Filtration

XG Series GP grade filtration (included as standard) removes solid and oil contaminants from the air stream before entering the dryer.

Two pre-filters are included with our 2,000-24,000 cfm models.

Grade GP | General Purpose Protection

Particle removal down to 0.1 micron including coalesced liquid, water and oil, providing a maximum remaining oil aerosol content of 0.1 ppm (0.1 mg/m³) @ 69°F (21°C).

Included After-Filtration

XG Series HE grade filtration (included as standard on 10-1,600 cfm models) provides high efficiency oil removal protecting downstream equipment.

Grade HE | High Efficiency Oil Removal Filtration

Particle removal down to 0.01 micron including water and oil aerosols, providing a maximum remaining oil aerosol content of 0.01 ppm (0.01 mg/m³) @ 69°F (21°C).



XGCYA SERIES | 10-1,600 SCFM SPECIFICATIONS

MODEL*	INLET FLOW		PRESSURE DROP	VOLTAGE	IN/OUT AIR CONNECT SIZE	POWER CONSUMPTION***	REFRIG-ERANT	OVERALL DIMENSIONS**						SHIP WEIGHT	
	SCFM*	NM ³ /H	PSI			KW		D IN.	H IN.	W IN.	D MM	H MM	W MM	LBS.	KG
XGCYA10	10	17	0.46	115/1/60	1/2" FPT	0.35	R-513A	19.7	15.2	26.5	500.4	386.1	673.1	130	59
XGCYA18	18	31	0.8	115/1/60	1/2" FPT	0.43	R-513A	19.7	15.2	26.5	500.4	386.1	673.1	130	59
XGCYA25	25	42	1.22	115/1/60	1/2" FPT	0.45	R-513A	19.7	15.2	26.5	500.4	386.1	673.1	135	61
XGCYA35	35	60	2.1	115/1/60	1/2" FPT	0.53	R-513A	19.7	15.2	26.5	500.4	386.1	673.1	140	65
XGCYA50	50	85	0.77	115/1/60	3/4" FPT	0.68	R-513A	19.7	15.2	26.5	500.4	386.1	673.1	145	66
XGCYA75	75	128	1.38	115/1/60	1" FPT	0.94	R-513A	22.4	16.6	30.4	569.0	421.6	772.2	175	80
XGCYA100	100	170	2.36	115/1/60 230/1/60	1" FPT	0.98	R-513A	22.4	16.6	30.4	569.0	421.6	772.2	180	82
XGCYA125	125	213	3.56	115/1/60 230/1/61	1" FPT	1.1	R-513A	22.4	16.6	30.4	569.0	421.6	772.2	185	84
XGCYA150	150	255	1.8	115/1/60 230/1/62	1.5" FPT	1.25	R-513A	19.6	30.3	37.5	497.8	769.6	952.5	263	119
XGCYA200	200	340	1.9	230/3/60 460/3/60	1.5" FPT	1.9	R-513A	22.9	32.5	49.3	581.7	825.5	1252.2	490	222
XGCYA250	250	425	2.1	230/3/60 460/3/61	1.5" FPT	2.1	R-513A	22.9	32.5	49.3	581.7	825.5	1252.2	490	222
XGCYA300A	300	510	1.9	460/3/60	2" MNPT	2.4	R-513A	34.0	49.2	55.6	863.6	1249.7	1412.3	875	397
XGCYA300W	300	510	1.9	460/3/60	2" MNPT	1.5	R-513A	34.0	49.2	48.1	863.6	1249.7	1221.8	815	370
XGCYA400A	400	680	2.7	460/3/60	2" MNPT	3	R-513A	34.0	49.2	55.6	863.6	1249.7	1412.3	895	406
XGCYA400W	400	680	2.7	460/3/60	2" MNPT	1.9	R-513A	34.0	49.2	48.1	863.6	1249.7	1221.8	840	381
XGCYA500A	500	850	1	460/3/60	3" MNPT	2.7	R-513A	41.4	57.5	59.8	1051.6	1460.5	1519.0	1341	608
XGCYA500W	500	850	1	460/3/60	3" MNPT	2.2	R-513A	41.4	57.5	53.4	1051.6	1460.5	1356.4	1299	589
XGCYA600A	600	1020	1.1	460/3/60	3" MNPT	2.9	R-513A	41.4	57.5	59.8	1051.6	1460.5	1519.0	1366	620
XGCYA600W	600	1020	1.1	460/3/60	3" MNPT	2.6	R-513A	41.4	57.5	53.4	1051.6	1460.5	1356.4	1325	601
XGCYA700A	700	1190	1.7	460/3/60	3" MNPT	4.4	R-513A	41.4	57.5	59.8	1051.6	1460.5	1519.0	1391	631
XGCYA700W	700	1190	1.7	460/3/60	3" MNPT	1.7	R-513A	41.4	57.5	53.4	1051.6	1460.5	1356.4	1349	612
XGCYA800A	800	1360	2.2	460/3/60	3" MNPT	4.8	R-513A	41.4	57.5	59.8	1051.6	1460.5	1519.0	1416	643
XGCYA800W	800	1360	2.2	460/3/60	3" MNPT	2.2	R-513A	41.4	57.5	53.4	1051.6	1460.5	1356.4	1376	625
XGCYA1000A	1000	1699	1.8	460/3/60	4	11	R-454B	40.7	78.9	82.5	1034.0	2004.0	2096.0	1928	875
XGCYA1200A	1200	2039	2.51	460/3/60	4	12.3	R-454B	40.7	78.9	82.5	1034.0	2004.0	2096.0	1928	875
XGCYA1600A	1600	2718	4.4	460/3/60	4	15.7	R-454B	40.7	78.9	82.5	1034.0	2004.0	2096.0	1928	875
XGCYA1000W	1000	1699	1.8	460/3/60	4	9.8	R-454B	40.7	78.9	72.2	1034.0	2004.0	1834.0	1964	891
XGCYA1200W	1200	2039	2.51	460/3/60	4	10.8	R-454B	40.7	78.9	72.2	1034.0	2004.0	1834.0	1964	891
XGCYA1600W	1600	2718	4.4	460/3/60	4	12.7	R-454B	40.7	78.9	72.2	1034.0	2004.0	1834.0	1964	891

XGCYA SERIES | 2,000-24,000 SCFM SPECIFICATIONS

MODEL*	INLET FLOW		PRESSURE DROP	VOLTAGE	IN/OUT AIR CONNECT SIZE	OPERATING KW***		REFRIG-ERANT	OVERALL DIMENSIONS**						SHIP WEIGHT	
	SCFM*	NM ³ /H	PSI			AC	WC		W IN.	D IN.	H IN.	W MM	D MM	H MM	LBS.	KG
XGCYA2000	2000	3398	3.2	460/3/60	6" FLG	9.6	6.7	R454B	33.9	90.4	95.8	861.1	2296.2	2433.3	3398	1541
XGCYA2400	2400	4078	3.4	460/3/60	6" FLG	12.3	7.6	R454B	33.9	90.4	95.8	861.1	2296.2	2433.3	3419	1551
XGCYA3000	3000	5097	3.6	460/3/60	6" FLG	15.3	10.1	R454B	33.9	90.4	95.8	861.1	2296.2	2433.3	3560	1615
XGCYA4000	4000	6796	3.7	460/3/60	8" FLG	19.3	13.6	R454B	80.8	98.6	97.8	2052.3	2504.4	2484.1	6937	3147
XGCYA4800	4800	8155	3.9	460/3/60	8" FLG	24.7	15.4	R454B	80.8	98.6	97.8	2052.3	2504.4	2484.1	6979	3166
XGCYA6000	6000	10194	4.1	460/3/60	8" FLG	30.7	20.3	R454B	80.8	98.6	97.8	2052.3	2504.4	2484.1	7572	3435
XGCYA7200	7200	12233	3.9	460/3/60	10" FLG	36.9	23.0	R454B	114.9	100	103.9	2918.5	2540	2639.1	10124	4592
XGCYA9000	9000	15291	4.1	460/3/60	10" FLG	46.0	30.4	R454B	114.9	100	103.9	2918.5	2540	2639.1	12194	5531
XGCYA12000	12000	20388	4.1	460/3/60	14" FLG	61.3	40.4	R454B	149.2	100.2	105.5	3789.7	2545.1	2679.7	16682	7567
XGCYA15000	15000	25485	4.1	460/3/60	14" FLG	76.6	50.5	R454B	179.4	100.2	105.5	4556.8	2545.1	2679.7	19624	8901
XGCYA18000	18000	30582	4.1	460/3/60	14" FLG	91.8	60.6	R454B	217.3	100.2	106.5	5519.4	2545.1	2705.1	23081	10469
XGCYA21000	21000	35679	4.1	460/3/60	14" FLG	107.1	70.6	R454B	251.3	638.3	27365	12413	2545.1	2705.1	27365	12413
XGCYA24000	24000	40776	4.1	460/3/60	14" FLG	122.4	80.7	R454B	285.4	7249.2	31661	14361	2545.1	2705.1	31661	14361

*Performance based on ISO 7183, Table 2, Option A2 (100 PSIG Inlet Air Pressure; 100 F Inlet Air Temperature; 100 F Ambient Air Temperature; 100% Relative Humidity)

**Overall dimensions & shipping weights are for air cooled models. Consult engineering datasheets for water cooled data.

***Average kilowatts per hour of dryer operation at full rated capacity. AC = Air Cooled; WC = Water Cooled. NEMA 1 electrical, standard

See Price Book for additional Voltages

The leader in every market we serve
by continuously improving all business processes
with a focus on innovation and velocity

Gardner
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Quincy, IL 62305
www.gardnerdenver.com



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