

CHAMPION[®]

7-1200 SCFM | NON-CYCLING DRYER

CGDA Series





Refrigerated Global Design

CGDA series refrigerated air dryers offer the perfect balance between technology and simplicity to dry compressed air systems to a stable ISO 8573-1 Air Quality, Class 5 to 6 pressure dew point.

Design Features



Copper "Tube-on-Tube"
Heat Exchanger

CGDA 7-15 SCFM

- Smooth bore, copper tube-on-tube heat exchangers
- Static condenser design provides trouble free, quiet operation
- Electronic drain valve
- Sustainable R513a refrigerant

CGDA 25-50 SCFM

- Microprocessor Controller, with alarm display and record history
- Compact three-in-one heat exchanger
- Electronic drain valve with controller test capabilities
- Sustainable R513a refrigerant

CGDA 75-1200 SCFM

- Stainless steel, cross flow heat exchangers optimize heat transfer and service life
- Compact design saves floor space
- Stainless steel inlet/outlet connections to prevent corrosion
- Timed electric condensate drain
- Integral demister/separator



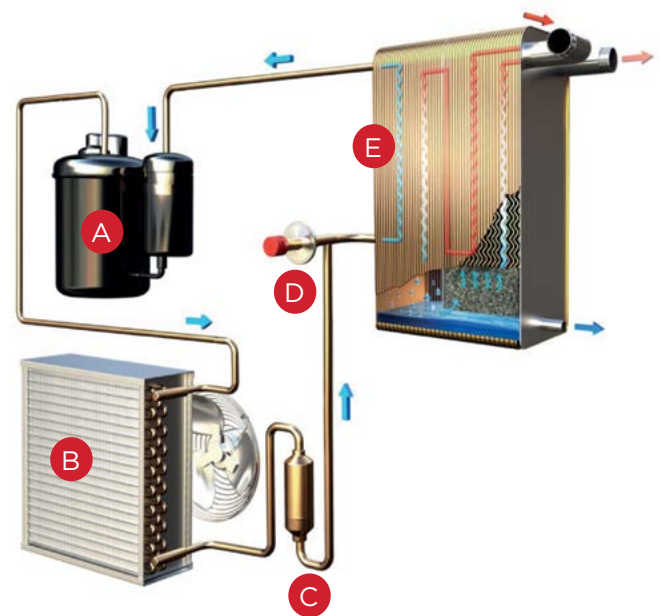
Stainless Steel Demister/Separator

How it Works

Refrigeration Circuit

A hermetically sealed refrigerant compressor (A) takes in evaporated refrigerant and compresses it to a higher pressure. The air cooled condenser (B) turns the high pressure gas into a high pressure refrigerant. An in-line filter dryer (C) removes contaminants from the high pressure refrigerant gas. A constant pressure valve (D) reduces the pressure and regulates the flow of refrigerant into the heat exchanger (E).

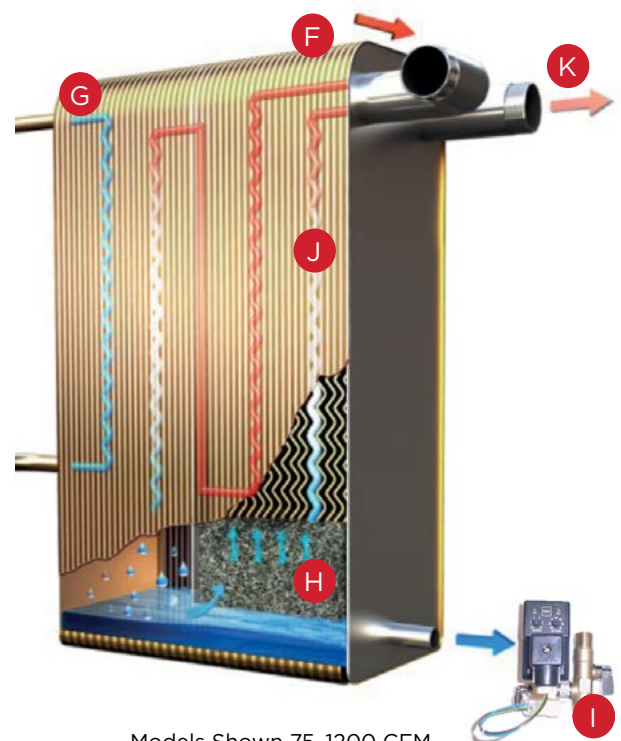
Refrigerant is continuously circulated through the system



Models Shown 75-1200 CFM

Air Circuit

Warm, saturated compressed air enters the air to air heat exchanger (F) and is cooled by the exiting air. The precooled air (G) then enters the air to refrigerant heat exchangers and is further chilled causing water vapor to condense. Condensed moisture is collected from the air stream by an integral separator (H) with stainless steel demister. Liquid condensate is removed from the separator by a (I) high performance drain. Cold air is then reheated in the air-to-air heat exchanger (J) to eliminate pipe line sweat. Clean dry air exits (K) the dryer and is now conditioned for use.



Models Shown 75-1200 CFM

Safety First - Environmentally Friendly

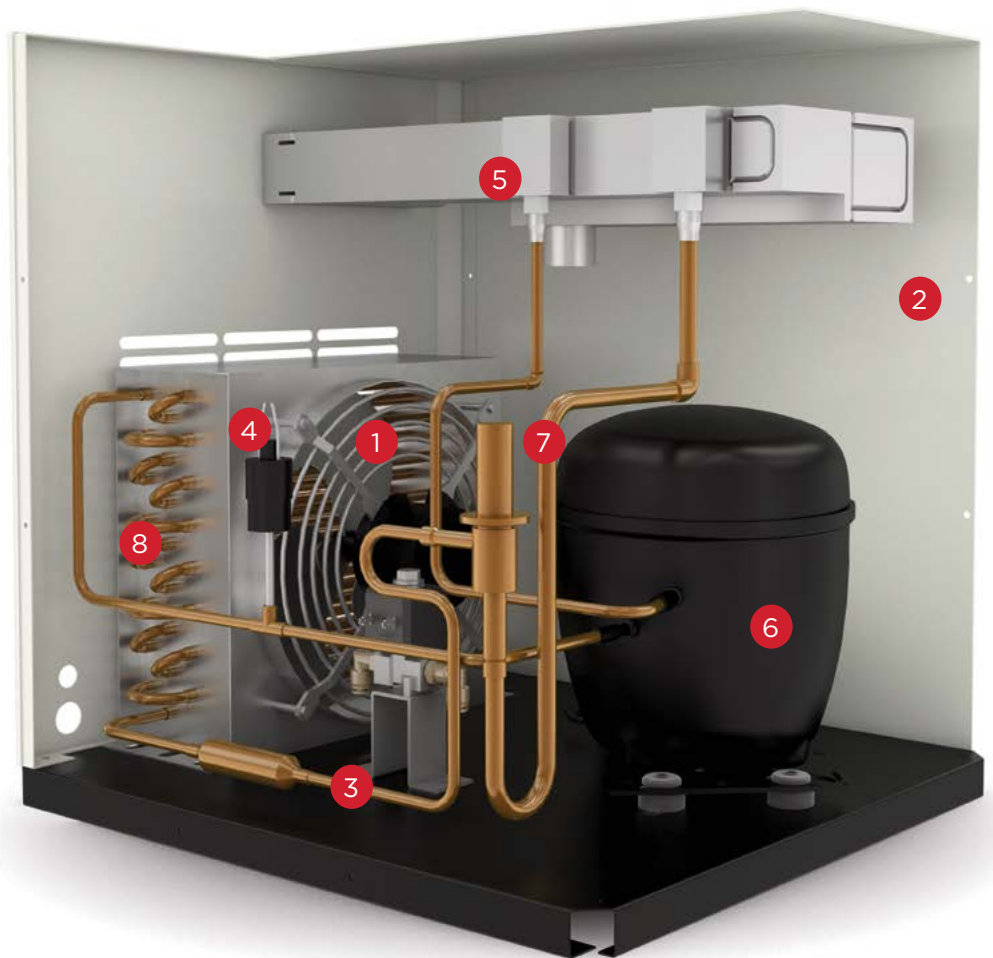
- All models 7-1200 scfm are using R513A refrigerant
- Performance Testing: ISO Guidelines, CAGI ADF 100
- Electrical: Listed to UL 60335-1 & 60335-2-40

Value at its Best

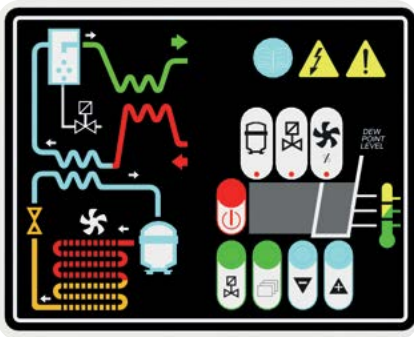
Efficient Condensate Management

- Increased calming zone and integral demister/separator captures liquid condensate and solid particles
 - Effectively removes condensate from 0-100% flow conditions without moisture carry-over
- Furnished with condensate drain
 - Electronic or timed electric (dependent on scfm range).

- 1 Fan motor and blade assembly
- 2 Epoxy powder-coated sheet steel cabinet
- 3 Condensate drain area
- 4 Stainless steel cross-flow heat exchanger
- 5 Integral demister separator
- 6 Refrigerant compressor
- 7 Refrigerant circuit tubing
- 8 Air-cooled condenser core



Take Control



Models 25-50 SCFM

- LED Indicator for refrigerant compressor, drain, and fan power
- Drain Test Button
- Alarm Display & History Record



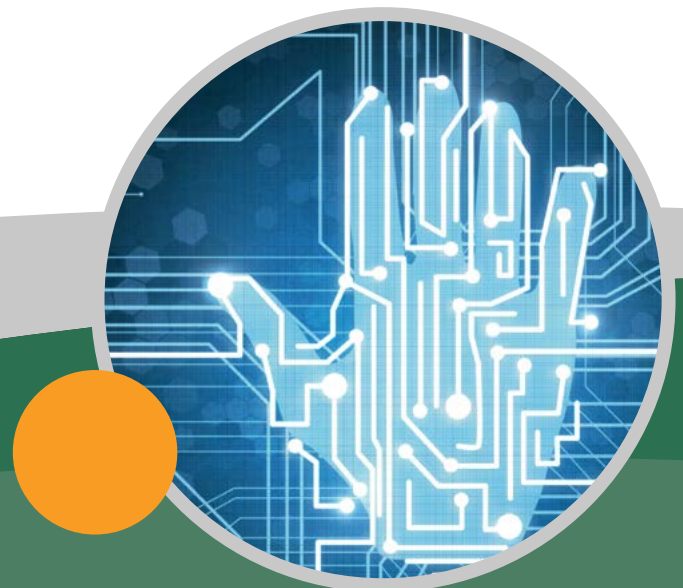
Models 75-150 SCFM

- Illuminated on/off switch
- Dew point temperature display to monitor inlet load conditions



Models 200-1200 SCFM

- Illuminated on/off switch
- Digital Control Board
- Dewpoint Level Monitoring
- Drain Timer Control



International Air Quality Class Standards

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: solid particles, water and oil contaminants. These forms are classified and assigned to a quality class, ranging from Class 0 being the highest purity level to a Class 6, which is the most relaxed level.

Champion's CGDA series refrigerated air dryers provide dry compressed air at a stable ISO 8573-1 Air Quality Class 5 to 6 pressure dew point.



Pre-Filtration Option

CFL Series—Grade C Filtration removes solids 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 & larger
- Remaining oil content 2.0 mg/m³

After-Filtration Option

CFL Series—Grade E 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 $\geq$ 0.01 micron
- Remaining oil content < 0.01 mg/m³

CGDA SPECIFICATIONS

MODEL	INLET FLOW	VOLTAGES	IN/OUT AIR CONNECT SIZE	POWER CONSUMPTION	REFRIGERANT	OVERALL DIMENSIONS			SHIP WEIGHT
	SCFM					HEIGHT	WIDTH	DEPTH	
				KW		IN.	IN.	IN.	LBS.
CGDA7A1	7	115/1/60	3/8" MNPT	0.15	R513A	15.3	12.6	12.6	45
CGDA11A1	11	115/1/60	3/8" MNPT	0.16	R513A	15.3	12.6	12.6	45
CGDA15A1	15	115/1/60	3/8" MNPT	0.16	R513A	15.3	12.6	12.6	45
CGDA25A1	25	115/1/60	1/2" FNPT	0.27	R513A	17.5	15.4	16.9	58
CGDA32A1	32	115/1/60	1/2" FNPT	0.27	R513A	17.5	15.4	16.9	58
CGDA42A1	42	115/1/60	1/2" FNPT	0.51	R513A	17.5	15.4	16.9	69
CGDA50A1	50	115/1/60	1/2" FNPT	0.52	R513A	17.5	15.4	16.9	69
CGDA75A1	75	115/1/60	1"	0.48	R513A	32.3	19.3	37.2	123
CGDA100A1	100	115/1/60	1"	0.61	R513A	32.3	19.3	37.2	129
CGDA125A1	125	115/1/60	1"	0.97	R513A	32.3	19.3	37.2	135
CGDA150A1	150	115/1/60	1"	1.12	R513A	32.3	19.3	37.2	152
CGDA200A4	200	460/3/60	2"	1.49	R513A	36.3	24.4	41.5	196
CGDA250A4	250	460/3/60	2"	1.51	R513A	36.3	24.4	41.5	204
CGDA300A4	300	460/3/60	2"	1.87	R513A	38.2	24.4	48.7	252
CGDA400A4	400	460/3/60	2"	1.99	R513A	38.2	24.4	48.7	279
CGDA500A4	500	460/3/60	2"	2.7	R513A	38.2	24.4	48.7	328
CGDA600A4	600	460/3/60	2"	3.01	R513A	38.5	26.1	48.7	467
CGDA800A4	800	460/3/60	3"	4.18	R513A	64.6	34.9	49.2	836
CGDA1000A4	1000	460/3/60	4"	5.73	R513A	68.9	34.9	49.2	889
CGDA1200A4	1200	460/3/60	4"	6.69	R513A	68.9	34.9	53.1	961

Maximum Inlet Air Temperature: 120°F (49°C) Maximum Operating Pressure: 203 psig (Models CGDA7-50), 232 psig (Models CGDA75-1200).
Above conditions tested at 100°F inlet air temperature, 100% saturated inlet air, 100 psig operating pressure and 100°F ambient air temperature.

OPERATING CONDITIONS

MODEL	MAX INLET AIR PRESSURE		MIN INLET AIR PRESSURE		MAX INLET AIR TEMPERATURE		MIN INLET AIR TEMPERATURE		MAX AMBIENT AIR TEMPERATURE		MIN AMBIENT AIR TEMPERATURE	
SCFM	PSIG	BARG	PSIG	BARG	°F	°C	°F	°C	°F	°C	°F	°C
5-10 to 50	250	17	30	2	120	49	40	4	110	43	45	7
75-500	232	16	10	1	120	49	40	4	110	43	45	7
600-1200	232	16	43	3	120	49	45	7	110	43	34	1

Premium
Warranty

2 Years—Standard
3 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®

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