

CR SERIES REFRIGERATED COMPRESSED AIR DRYERS

FOR A CLEAN, DRY COMPRESSED AIR SYSTEM

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Since 1854, CURTIS Air Compressors has earned the reputation of building the most rugged industrial duty equipment you can buy. Today, FSCURTIS® continues the tradition with our CR Series line of refrigerated compressed air dryers. The easy to install compact package saves valuable floor space and allows for quick installation. Visit your local FSCURTIS dealer and see for yourself the quality that is built into all our products.

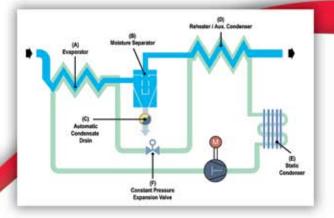


SYSTEM RELIABILITY

- 38°F pressure dew point removes troublesome moisture to extend equipment life
- Fully automatic operation saves money by adjusting to system needs without complicated controls
- High efficiency tube on tube heat exchangers minimize power usage
- Moisture separator with non-clogging condensate drain automatically removes moisture

STANDARD FEATURES

- Lighted on-off switch
- Dew point indicator on models CR25 CR500
- Non clogging float drain on models CR10 CR15
- Non clogging timer drain on models CR25 CR500
- Environmentally friendly R-134a refrigeration system, CFC-free
- Reheated outlet air eliminates cold sweaty piping



HOW IT WORKS

- A) Warm saturated air enters the evaporator where it is cooled by an air to refrigerant process.
- B) Water vapor condenses into liquid form and is collected in the moisture separator.
- C) Automatic drain discharges condensate from separator.
- D) Cold dry discharge air is then reheated as it passes through reheater.
- E) Condenser radiates waste system heat to ambient.
- F) Refrigerant control valve modulates the flow of refrigerant to eliminate freeze-ups and ensure automatic dew point control.

Genuine. FSCURTIS.

SPECIFICATIONS AND PERFORMANCE

		Inlet	Power	Input		Dimensions	Shipping
Model	Capacity ¹	Outlet	Supply	Power ²	Refrigerant	H x W x D	Weight
	SCFM	npt. male		kW		Inches	Lbs.
CR-10	10	3/8		0.20		15 x 13 x 13	64
CR-15	15	3/8		0.24		13 × 13 × 13	69
CR-25	25	3/4	115 / 1 / 60	0.41		22 y 15 y 15	88
CR-35	35	3/4		0.46		22 x 15 x 15	92
CR-50	50	3/4		0.57		22 x 20 x x20	101
CR-75	75	3/4		0.72		20 x 19 x 21	110
CR-100	100	1		0.74	R134a		123
CR-125	125	1		0.76		21 x 13 x 30	133
CR-150	150	1		1.11			153
CR-200	200	1-1/2		1.42		30 x 17 x 36	183
CR-250	250	1-1/2		1.98		50 X 17 X 50	211
CR-300	300	1-1/2	460 / 2 / 60	2.05		30 x 20 x 38	219
CR-400	400	2	460 / 3 / 60	2.50		30 x 21 x 38	232
CR-500	500	2		3.06		32 x 25 x 41	262

1 Rated Flow Capacity - Conditions for rating dryers are in accordance with CAGI (Compressed Air and Gas Institute) Standard ADF 100: Refrigerated Compressed Air Dryers - Methods for Testing and Rating. Conditions for rating above dryers are: compressed air at dryer inlet: 100 psig and 100^oF saturated; ambient temperature: 100^oF; operating on 60 Hz power supply. At rated conditions, pressure drop is less than 5 psi.

2 At 35°F evaporator and 100°F ambient.

TABLE 1	: DRYER	SIZING	CHART				
			Inlet A	ir			
Temp.	F	ressur	e psig C	Correcti	on Fact	or	
°F	80	100	125	150	175	200	250
90	1.17	1.23	1.31	1.37	1.42	1.47	1.49
100	0.95	1.00	1.07	1.13	1.18	1.22	1.24
110	0.79	0.82	0.91	0.95	0.99	1.03	1.05
120	0.66	0.70	0.74	0.80	0.84	0.89	0.91

TABLE 2: CORRECTION FAC	TOR			
Ambient Air Temp. (°F)	80	90	100	110
Correction Factor	1.12	1.06	1.00	0.94

CAPACITY CORRECTION FACTORS To adjust

dryer capacity for conditions other than rated, use Correction Factors (multipliers) from Tables 1 & 2.

OPERATING CO	ONDITI	ONS	
Inlet Air Press	ure (ps	sig)	
	Max.	Min.	
Models 10-50	250	30	
Models 75-500	232	10	
Inlet Air Temp	eratur	e (°F)	
	Max.	Min.	
Models 10-50	120	40	
Models 75-500	120	40	
Ambient Tem	peratu	re (°F)	
	Max.	Min.	
Models 10-50	110	45	
Models 75-500	110	45	



Example: What is the capacity of a 200 scfm model when the compressed air at the inlet to the dryer is 150 psig and 100°F, and the ambient temperature is 90°F?

Answer: 200 scfm (rated flow from Specifications Table) x 1.13 (correction factor for inlet temperature and pressure from Table 1) x 1.06 (correction factor for ambient temperature from Table 2) = 240 scfm.



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