Cycling Refrigerated Dryers



Pneumatech Pride

Pneumatech has been manufacturing energy-efficient refrigerated dryers for 50 years. Pneumatech cycling refrigerated dryers only operate according to the air flow, unlike non-cycling refrigerated dryers that operate continuously even if the air flow is changing.

The AC 15-2100 is an innovative and energy efficient product at a competitive value. If you are in need of a lower dew point, Pneumatech offers desiccant dryers as well.



AC-15 to AC-2100 (Air Cooled)

AC(W)-1250 to AC(W)-2100 (Water Cooled)

Design standards	AC 15-200	AC 250-600	AC 650-2100 37 °F	
Dew point	37 °F	37 °F		
Pressure range	60-232 psi (AC 125-200: 189 psi)	60-203 psi	60-203 psi	
Voltages	115-230 V	230 or 460 V	460 V	
Controller	Advanced	Purelogic™controller	Purelogic™controller	
Technology	Refrigerant R134a (AC 125-200 R410A)	Refrigerant R410A	Refrigerant R410A	
Usage	Continuous	Continuous	Continuous	
Transportability	Easy to transport	Forklift slots	Forklift slots	
Common applications	Textile, general industry, wood, pulp and paper, automotive	Textile, general industry, wood, pulp and paper, cement, mining	Textile, general industry, wood, pulp and paper, cement, mining	

Important features & benefits
Purelogic™ with Saver Cycle Control
Integrated water separator
No loss of expensive compressed air during drain discharge
Steady cooling in a wide range of ambient temperatures
Energy savings even at full load
No-loss electronic level drain, with manual back-up drain
Hot gas bypass valve (prevents freezing at lower loads)
Remote control possibilities
Individual fan cycling switches
Heavy duty fan motors with permanently lubricated ball bearings

Options	AC 15-200	AC 250-600	AC 650-2100
NEMA 2	✓	✓	✓
Anchor pads	_	_	•
Purelogic [™] controller	_	✓	✓
Remote start/stop (sales kit)	•	✓	✓
Automatic hot gas bypass	✓	✓	_
Electronic hot gas bypass	_	_	✓
Flow switch	-	✓	✓
Saver cycle control	✓	✓	✓
Pressure dew point alarm	✓	✓	✓

- √ Standard
- Field Kit
- Not Available













Technical data



Pure air . Pure gas

Model	40 °F PDP (scfm*)	Pressure Drop (psid)	Operating kW (AC/WC)	In/Out Conn. Size	Max. Working Pressure (psig)	Refrig. Type	Dimensions L x W x H (in)	Shipping Weight (lb)
AC-15	13	1.02	0.23	NPT 3/4	210	R134a	20 x 15 x 18	65
AC-20	22	1.60	0.23	NPT 3/4	210	R134a	20 x 15 x 18	70
AC-30	32	1.74	0.34	NPT 3/4	210	R134a	20 x 15 x 18	72
AC-40	42	1.74	0.53	NPT 3/4	210	R134a	20 x 15 x 18	75
AC-50	53	2.47	0.53	NPT 3/4	210	R134a	20 x 15 x 18	80
AC-65	64	3.63	0.53	NPT 3/4	210	R134a	20 x 15 x 18	110
AC-85	85	2.90	0.73	NPT 1	210	R134a	27 x 15 x 26	125
AC-100	106	2.90	0.79	NPT 1	210	R134a	27 x 15 x 26	160
AC-125	127	3.19	1.02	NPT 1	189	R410A	27 x 20 x 27	160
AC-150	148	3.19	1.01	NPT 1	189	R410A	27 x 20 x 27	219
AC-200	201	3.19	1.48	NPT 1	189	R410A	27 x 20 x 27	205
AC-250	254	1.60	1.10	NPT 1.5	189	R410A	35 x 27 x 40	210
AC-300	318	2.32	1.30	NPT 1.5	189	R410A	35 x 27 x 40	290
AC-350	392	3.19	1.50	NPT 2.5	189	R410A	37 x 32 x 40	330
AC-450	466	1.74	1.80	NPT 2.5	189	R410A	37 x 32 x 40	340
AC-500	519	2.61	2.10	NPT 2.5	189	R410A	37 x 32 x 40	355
AC-600	604	3.19	2.30	NPT 2.5	189	R410A	37 x 32 x 40	370
AC-650	657	3.30	4.30	NPT 3	203	R410A	52 x 34 x 47	440
AC-850	869	3.00	4.50	NPT 3	203	R410A	52 x 34 x 54	490
AC-1050	1081	2.90	7.30	NPT 3	203	R410A	63 x 34 x 54	580
AC(W)-1250	1293	2.47	7.60/3.90	ANSI 4	203	R410A	41 x 42 x 65	715
AC(W)-1600	1611	2.47	8.10/4.50	ANSI 4	203	R410A	49 x 42 x 66	860
AC(W)-1800	1844	2.03	10.20/5.80	ANSI 6	203	R410A	49 x 42 x 66	905
AC(W)-2100	2141	2.47	11.90/6.20	ANSI 6	203	R410A	62 x 42 x 65	1020

^{*} Scfm flow at 100 °F inlet temperature, 100 °F ambient temperature, and 100 psig pressure

Correction factors should be applied if the conditions are deviating from the reference conditions.

Correction Factor Example

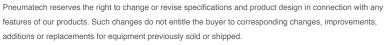
Pressure	bar	6	7	8	10	13	16
	psig	85	100	116	145	188	232
	C1	0.97	1	1.03	1.07	1.12	1.16
Inlet temperature	С	24-35	38	40	46	50	55
	F	75-95	100	105	115	122	131
-40°F (AA)	C2	1.06	1	0.95	0.79	0.67	0.57
Ambient Temperature	С	35	38	40	46		
		95	100	105	115		
	C3	1.03	1	0.95	0.93		

Which dryer will handle the following conditions for a PDP of +39°F:

85 SCFM Actual Flow, 145 psig inlet pressure,

115°F inlet temperature, 100°F Ambient Temperature

- 1) Correction factors for the table: C1 = 1.07, C2 = 0.79, C3 = 1
- 2) Calculate: Nominal Flow = Actual Flow/(C1 x C2 x C3) = 100.5
- 3) Select an AC-100 for this application



© 2016 Pneumatech. All rights reserved.











Pneumatech

1800 Overview Drive Rock Hill, SC 29730 USA 1-800-336-2285 www.pneumatech.com



⁽W) indicates water cooled units are available