



PNEUMATIC PRODUCTS

Improved Performance for your Compressed Air and Gas System.

The HA Heat-Les® Dryer 2-50 scfm

DESCRIPTION

The HA Heat-Les Desiccant Air Dryer is designed for flows ranging from 2 scfm to 50 scfm at pressures ranging from 60 psig to 150 psig. Pressure Dewpoints available from -40°F to -100°F. Other design options like 300 psig also available.

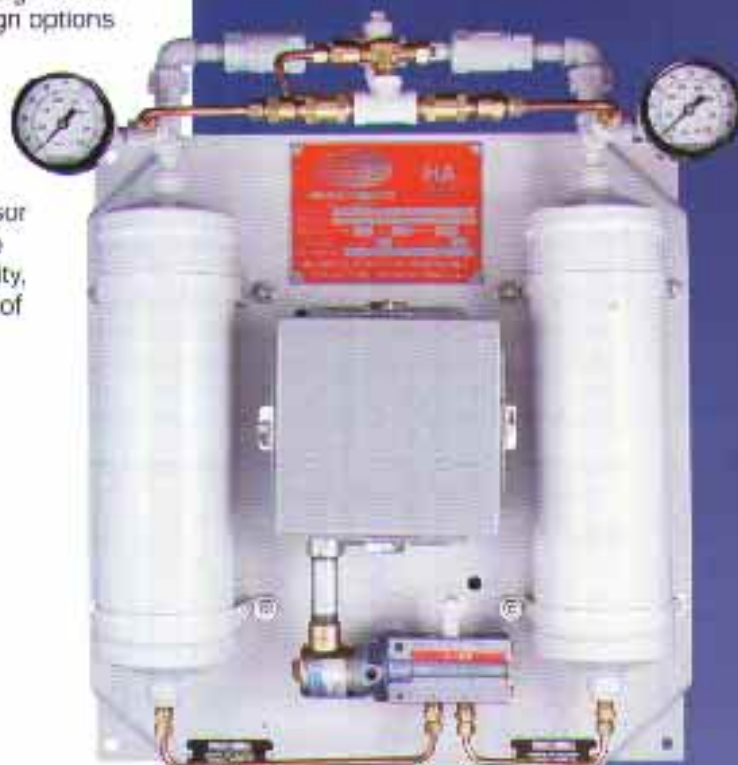
APPLICATIONS

The HA Dryer, with a 30-year heritage, is suited for all compressor types and ambient conditions. The system affords very simple installation and electrical hook-up to 115 VAC. The HA's versatility, with unrivaled performance and reliability, allows for a variety of applications:

- Laboratory Air
- Air Gauging
- Purging
- Pneumatic Controls
- Pneumatic Instruments
- Painting
- Packaging
- Blanketing
- Coating
- Mixing
- Padding
- Bag Cleaning
- Conveying
- and much more

FEATURES AND BENEFITS

Simple Design	Low Initial Cost
Few Moving Parts	Low Maintenance
Unique "Ceramic" Switching Valves	Long Life
Industrial Grade Components	High Reliability
No Heaters Required for Regeneration	Long Desiccant Life
Warranty	(1) One Year



HA Air Dryer

Product Information Sheet HW-320e

Because of our policy of continuous improvement, some information, specifications and dimensions contained herein may be revised. For our finest accuracy, always refer to factory publications.



PNEUMATIC PRODUCTS

A United Dominion Company

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OCALA, FLORIDA 34474 (352) 237-3500, FAX: (352) 673-5187

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HOW PPC SMALL FLOW HEAT-LES[®] DRYERS OPERATE

In Figure 1, wet incoming air passes through switching valve (A) and is directed upward through chamber ① where it contacts the desiccant. Activated alumina desiccant is used to remove water vapor from the air. Air drying takes place by adsorption which occurs because the moisture level in the air stream is greater than the moisture level on the desiccant surface. Adsorption is an exothermic (heat releasing) process. As drying takes place, heat is released and is stored in the desiccant bed for use in the regeneration cycle.

Dry air exits the left chamber and passes through check valve (B) and continues downstream.

While air is being dried in chamber ①, the desiccant in chamber ② is being regenerated. At the start of regeneration the right chamber is depressurized from operating pressure to atmospheric pressure in a downward flow direction through valve (A), and out the purge exhaust.

A portion of the dry outlet gas passes through adjusting valve (C), purge flow indicator (D)*, and downward through the regenerating right chamber. This dry purge air and the heat of adsorption generated during the previous drying period remove the moisture from the desiccant surface. The purge air carries this moisture through valve (A) and out the purge exhaust to atmosphere. The regenerating purge air flow is counter-current to the direction of drying air flow to ensure desiccant regeneration.

When the regeneration cycle is complete, inlet gas is then switched over to chamber ② (Figure 2) for drying.

*OPTIONAL

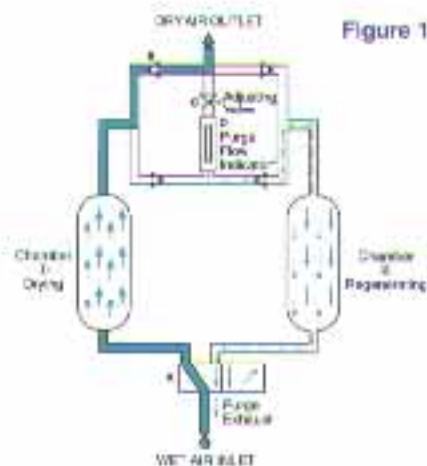


Figure 1

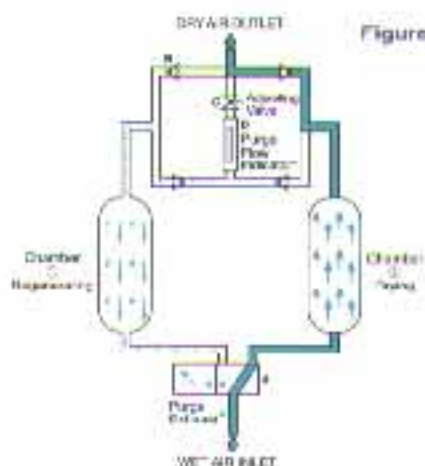


Figure 2

REFERENCE DATA

DRYER SPECIFICATIONS			APPROXIMATE DIMENSIONS				
SIZE	CAPACITY SCFM	PURGE FLOW SCFM	HEIGHT INCHES	WIDTH INCHES	DEPTH INCHES	WEIGHT LBS.	CONNECTION SIZE
2HA	1.9	3	25	20	7	40	1/4" NPT
5HA	4.6	7	25	20	7	40	1/4" NPT
1CHA	3	1.2	25	20	7	50	1/4" NPT
25HA	25	3.9	35	25	10	140	1/2" NPT
25HA	51	7.7	35	30	20	240	3/4" NPT

Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8
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SELECT-A-SYSTEM

Table 1 <table border="1"> <tr><th>MODEL NO.</th></tr> <tr><td>2</td></tr> <tr><td>5</td></tr> <tr><td>12</td></tr> <tr><td>25</td></tr> <tr><td>35</td></tr> </table>	MODEL NO.	2	5	12	25	35	Table 2 <table border="1"> <tr><th>CODE</th><th>ELECTRICAL NEMA CLASS</th></tr> <tr><td>4</td><td>Wet to Wet-dart & Dust-dart</td></tr> <tr><td>7</td><td>Wet to Oil-dart & Hazardous Group D (Division 1) Location</td></tr> </table>	CODE	ELECTRICAL NEMA CLASS	4	Wet to Wet-dart & Dust-dart	7	Wet to Oil-dart & Hazardous Group D (Division 1) Location	Table 3 <table border="1"> <tr><th>CODE</th><th>CYCLE</th></tr> <tr><td>0</td><td>Stopper, 10 Minutes (-40°F Dewpoint)</td></tr> <tr><td>4</td><td>4 Minutes (-102°F Dewpoint)</td></tr> </table>	CODE	CYCLE	0	Stopper, 10 Minutes (-40°F Dewpoint)	4	4 Minutes (-102°F Dewpoint)	Table 4 <table border="1"> <tr><th>CODE</th><th>ELECTRICAL INPUT</th></tr> <tr><td>01</td><td>Standard 115VAC/1</td></tr> <tr><td>13</td><td>115VAC/1</td></tr> <tr><td>02</td><td>100VAC/1</td></tr> <tr><td>03</td><td>100VAC/1</td></tr> </table>	CODE	ELECTRICAL INPUT	01	Standard 115VAC/1	13	115VAC/1	02	100VAC/1	03	100VAC/1						
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