BAMD Series 03-50 scfm

Dryer Operation

The BAMD Series Air Dryers use the proven "Pressure Swing Adsorption" (PSA) method for drying wet compressed air. This requires having two identical towers containing hygroscopic desiccant.

Incoming wet air enters the dryer through a shuttle valve where it is directed to the bottom of the tower containing dry desiccant. The desiccant in this tower removes 99.7+% of the water vapor from the air when operated at catalog conditions. The dried air leaving the top of the tower is directed to the outlet through a second shuttle valve. In this outlet shuttle valve a built-in orifice allows a portion of the dried air to flow into the other tower being regenerated. The orifice reduces the high pressure air down close to atmospheric pressure which lowers the dew point of the dried air even further. The tower being regenerated/purged of moisture is connected to an energized solenoid valve for a controlled period of time. The electrical signal to the solenoid is monitored by an LED light on the solid state timer. After the desiccant is regenerated, the timer shuts off the power to the solenoid valve. Air continues to flow through the orifice to repressurize the regenerated tower to line pressure. The middle light on the timer indicates the repressurization function.

Next, the timer opens the valve on the tower containing the wet desiccant. This shifts the shuttle valve balls, and the tower with the wet desiccant is regenerated while the other tower continues to dry the air.

Unique Energy Saving Design can start and stop dryer with a compressor or point-of-use equipment to eliminate purge loss when off. Solid State Memory starts dryer where it left off in drying cycle to prevent wet air downstream.



BAMD Series

Mini Desiccant Dryers



STANDARD DESIGN FEATURES

BAMD Air Dryers

• Solid state timer with LED display for visual monitoring and built in timer memory.

• Low velocity air through the desiccant for more efficient drying.

- Large internal air passages to reduce pressure drop.
- NEMA 4 Components. (protects against water spray and dust)
- Minimal threaded connections, for fewer leak points than competitive units.

DIMENSIONS (INCHES)

Model	н	w	Depth	Ρ	Inlet (scfm)	Out (scfm)	Weight (Ibs)	In/Out (NPT)
BAMD03	13.6	7.4	5.2	9.3	3.0	2.2	8.0	3/8"
BAMD06	18.2	7.4	5.2	13.0	6.0	4.4	9.0	3/8"
BAMD09	17.3	7.4	5.2	12.1	9.0	6.6	10.0	3/8"
BAMD12	20.1	7.4	5.2	14.9	12.0	8.8	11.0	3/8"
BAMD16	33.0	9.5	6.5	20.7	16.0	12.6	29.0	1/2"
BAMD25	42.0	9.5	6.5	29.5	25.0	19.6	34.0	1/2"
BAMD35	39.3	10.0	7.0	26.5	35.0	27.2	59.0	1/2"
BAMD50	46.3	10.0	7.0	33.4	50.0	39.2	65.0	1/2"

Pressure Correction Factor : 50 psig: 0.56 x Standard Flow, 150 psig: 1.4 x Standard Flow. Orifice change required. Inlet Temperature Correction: Standard is 100'F. Below 100'F (to 32'F) no correction required. Temperatures above 100'F wil reduce performance— consult factory for proper rating.

Standard flows (SCFM) at 100 psig and 100'F inlet with -40'F pressure dew point.

Consult Factory for - 100'F dew point and performance at other inlet pressure (50-150 psig).



Gauge Option

- **B** = Dryer/Filter 3-Valve By-pass Piping Kit (Order filters separately)
- E = Electronic Humidity Alarm with Shut-off Valve (Shipped loose for remote mounting)
- **F** = Filters Kit (5.0 micron and 0.01 micron)
- H = High Humidity Alarm Panel with local light and dry contacts (Shipped loose for remote mounting)
- M = Moisture Indicator Kit
- P = Tower Pressure Gauges
- S = Floor Stand Kit V1 = Higher Pressure Valving (Up to 175 psig)
- X = Explosion Proof Control Box

• Components are all easily serviced and field replaceable. (no special tools)

- 2-Year Limited Warranty. (parts only excluding contaminated desiccant and solenoid wear parts)
- Repressurization before tower switch-over cause less
- shocking of the desiccant and no pressure drop at switch over.
- 6-ft. Electric Power Cord.



SPECIFICATIONS

Voltage: 115/1/50/60 or 230/1/50/60 Max. Inlet Temperature: 120°F Min. Ambient Temperature: 32°F Max. Inlet Pressure: 150 psig Inlet Filtration Recommended_5 0 micron Inlet Filtration Required: 0.01 micron (Coalescing) Outlet Filtration Recommended_1.0 micron (Particulate)





Please Recycle



20 Shea Way, Suite 204, Newark, DE 19713 Phone: 302-456-1660 Fax: 302-456-1660 Email: de.sales@comcast..net