### aircel-logo

**Maryville, TN**

***SCOPE***

Model: BHD-450 Application: \_\_\_\_\_\_\_\_\_\_\_\_\_ Options: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***OPERATING CONDITIONS***

Inlet Design Flow Rate:  **450** scfm, (Std. 70°F/14.7 psia)

Inlet Design Pressure: **100** psig

Inlet Design Temperature: **100** ° F

System Design Pressure: **200** psig

Outlet Compressed Air Flow Rate:  **360** scfm (Average)

Outlet Dewpoint at Design Conditions: **-40** ° F pressure dew point

Compressed Air Purge Losses: **85** scfm (time average)

Decompression Air Losses:  **5** scfm (time average)

NEMA Cycle Time: **10** Minutes (5 minutes per vessel)

Ambient Air Temperature: **38** °F (Min.); **120**°F (Max.)

Ambient Relative Humidity: **100 %**

System Pressure Loss with Clean, Dry Filter Elements**: 6** psid

***SYSTEM COMPONENTS***

Prefilter: Coalescing filter with 1 μm element

Condensate Drain: Zero-loss Electronic Drain

After Filter: Activated carbon filter 0.01 μm rated

Final Filter: Particulate filter with 0.01 μm element

Desiccant Type: 13X Molecular Sieve, Activated Alumina, and Carulite

Desiccant Quantity: 290 lbs./vessel

Desiccant Vessel: ASME Section VIII Division 1, “U” stamped, 200 psig at 450°F

Controller Type: Programmable Logic Controller (PLC) in NEMA 4 Enclosure

Controller Model: APC

Energy Management System: Not available on BHD air purifiers.

Hygrometer (optional): Capacitive Humidity Sensor, -112°F to +68°F dew point

Carbon Monoxide Monitor: Electrochemical cell, alarm set at 5 ppm by volume

Switching Valves: 2 In. Pneumatically operated slanted seat globe valves

Regeneration Blower: Not Applicable

Regeneration Heater: Not Applicable

Regeneration Cooler: Not Applicable

Piping: 2 In. Sch. 40

***DRYER ASSEMBLY***

Height: 89 inches

Width: 50 inches

Depth: 30 inches

Connection Size: 2” NPT

Dryer Assembly Weight: 1,550 pounds