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**Maryville, TN**

***SCOPE***

Model: ABP-1400\_\_\_ Application: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Options: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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***OPERATING CONDITIONS***

Inlet Design Flow Rate: **1,400** scfm, (Std. 70°F/14.7 psia)

Inlet Design Pressure: **100** psig

Inlet Design Temperature: **100** ° F

System Design Pressure: **150** psig

Outlet Compressed Air Flow Rate: **1,371** scfm (Average)

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

Compressed Air Purge Losses: **28** scfm (time average)

Decompression Air Losses: **1** scfm (time average)

NEMA Cycle Time:  **8** Hrs (4 Hrs drying; 4 Hrs Regen.)

Ambient Air Temperature: **38** °F (Min.); **105**°F (Max.)

Ambient Relative Humidity: **70 % at 105°F**

System Pressure Loss with Clean, Dry Filter Elements**: 7** psi (calculated)

***SYSTEM COMPONENTS***

Prefilter: Coalescing filter with 0.01 μm elements

Condensate Drain: Zero-loss Electronic Drain

After Filter: Particulate filter with 1 μm elements

Final Filter: Not Applicable

Desiccant Type: Activated Alumina

Desiccant Quantity: 1,150 lbs./vessel

Desiccant Vessel: ASME Section VIII Division 1, “U” stamped, 150 psig at 450°F

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

Controller Model: A-B 1100

Energy Management System: Downstream humidity sensor

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

Switching Valves: 3” pneumatically operated High Performance butterfly valves

Regeneration Blower: Vortex Regenerative Blower with 10 HP motor

Regeneration Heater: 32.5 KW

Regeneration Cooler: Not Applicable

Piping: 3 In. NPS Sch. 40

Insulation: Heater shell and hot air piping protected (vessels by customer)

***DRYER ASSEMBLY***

Height: 106 inches

Length: 105 inches

Depth: 70 inches

Connection Size: 3 In. ANSI 150 lb RF Flange

Dryer Assembly Weight: 6,800 pounds (estimated)