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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)