

## **twin tower high pressure heatless desiccant dryer**

### **FEATURES**

- removal of water vapor from your compressed air stream to -40°F (-4°F and -67°F optional) to ensure a continuous supply of dry air in high pressure applications
- 18 models from 42 to 918 scfm and operating pressures of 1450, 3625 or 5075 psig
- welded, coated steel twin tower design with high-quality, durable coating meets the highest safety standards
- advanced controller monitors and controls the fully automated drying and regeneration cycles
- high pressure filtration connected with high pressure 316 stainless steel pipe work and fittings included as standard (0.01 micron pre filter and 1 micron after filter)
- high quality 2-layer desiccant bed for stable drying and extended desiccant service life
- rugged and reliable control valves provide flow capacity and designed for durability, ease of maintenance and long service life
- easy maintenance
- applications include electronics, marine and offshore, military, chemical manufacturing, aerospace, CNG & biogas



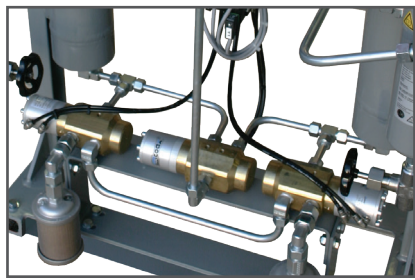
### **dew point control option**

energy savings dew point control continually monitors outlet dew point for maximum energy savings



### **individual valve control**

provides a reliable compressed air supply with no pressure peaks during switch over



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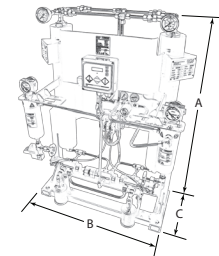
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# SPECIFICATIONS

| dryer model                                      | inlet & outlet                         | rated flow <sup>(1)</sup> |                                        | dimensions (inches) |                                        |      | approx. weight |
|--------------------------------------------------|----------------------------------------|---------------------------|----------------------------------------|---------------------|----------------------------------------|------|----------------|
|                                                  | NPT                                    | scfm                      | Nm <sup>3</sup> /h                     | A                   | B                                      | C    | lbs            |
| DHP / 100 (1450 psig)                            |                                        |                           |                                        |                     |                                        |      |                |
| DHP5/100                                         | ½"                                     | 42                        | 72                                     | 45.4                | 25.0                                   | 15.7 | 220            |
| DHP9/100                                         | ½"                                     | 51                        | 87                                     | 47.4                | 25.0                                   | 15.7 | 243            |
| DHP12/100                                        | ½"                                     | 90                        | 153                                    | 48.0                | 26.9                                   | 15.7 | 254            |
| DHP24/100                                        | ¾"                                     | 167                       | 283                                    | 53.1                | 29.1                                   | 17.7 | 317            |
| DHP37/100                                        | ¾"                                     | 252                       | 429                                    | 55.5                | 31.8                                   | 17.7 | 441            |
| DHP58/100                                        | ¾"                                     | 442                       | 750                                    | 67.3                | 34.2                                   | 17.7 | 606            |
| DHP / 250 (3625 psig)                            |                                        |                           |                                        |                     |                                        |      |                |
| DHP5/250                                         | ½"                                     | 68                        | 115                                    | 45.4                | 25.0                                   | 15.7 | 243            |
| DHP9/250                                         | ½"                                     | 82                        | 140                                    | 47.4                | 25.0                                   | 15.7 | 254            |
| DHP12/250                                        | ½"                                     | 159                       | 270                                    | 48.0                | 26.9                                   | 15.7 | 291            |
| DHP24/250                                        | ¾"                                     | 294                       | 500                                    | 53.1                | 29.1                                   | 17.7 | 430            |
| DHP37/250                                        | ¾"                                     | 471                       | 800                                    | 55.5                | 31.8                                   | 17.7 | 540            |
| DHP58/25                                         | ¾"                                     | 824                       | 1400                                   | 67.3                | 34.2                                   | 17.7 | 827            |
| DHP / 350 (5075 psig)                            |                                        |                           |                                        |                     |                                        |      |                |
| DHP5/350                                         | ½"                                     | 88                        | 150                                    | 45.4                | 25.0                                   | 15.7 | 243            |
| DHP9/350                                         | ½"                                     | 106                       | 180                                    | 47.4                | 25.0                                   | 15.7 | 254            |
| DHP12/350                                        | ½"                                     | 177                       | 300                                    | 48.0                | 26.9                                   | 15.7 | 320            |
| DHP24/350                                        | ¾"                                     | 309                       | 525                                    | 53.1                | 29.1                                   | 17.7 | 496            |
| DHP37/350                                        | ¾"                                     | 500                       | 850                                    | 55.5                | 31.8                                   | 17.7 | 617            |
| DHP58/350                                        | ¾"                                     | 918                       | 1560                                   | 67.3                | 34.2                                   | 17.7 | 915            |
| specifications                                   | DHP / 100                              |                           | DHP / 250                              |                     | DHP / 350                              |      |                |
| maximum particle size (ISO class) <sup>(2)</sup> | class 2 (1 micron)                     |                           | class 2 (1 micron)                     |                     | class 2 (1 micron)                     |      |                |
| maximum water content (ISO class) <sup>(2)</sup> | class 2 (-40°F) <sup>(3)</sup>         |                           | class 2 (-40°F) <sup>(3)</sup>         |                     | class 2 (-40°F) <sup>(3)</sup>         |      |                |
| maximum oil content (ISO class) <sup>(2)</sup>   | class 1 (0.01 mg/m <sup>3</sup> )      |                           | class 1 (0.01 mg/m <sup>3</sup> )      |                     | class 1 (0.01 mg/m <sup>3</sup> )      |      |                |
| minimum operating pressure                       | 435 psig                               |                           | 1450 psig                              |                     | 3625 psig                              |      |                |
| maximum operating pressure                       | 1450 psig                              |                           | 3625 psig                              |                     | 5075 psig                              |      |                |
| recommended operating temperature range          | 40 to 100°F                            |                           | 40 to 100°F                            |                     | 40 to 100°F                            |      |                |
| design operating temperature range               | 35 to 140°F                            |                           | 35 to 140°F                            |                     | 35 to 140°F                            |      |                |
| power supply requirements                        | 120 & 240 VAC, 50/60 Hz <sup>(4)</sup> |                           | 120 & 240 VAC, 50/60 Hz <sup>(4)</sup> |                     | 120 & 240 VAC, 50/60 Hz <sup>(4)</sup> |      |                |
| power consumption                                | <50 W                                  |                           | <50 W                                  |                     | <50 W                                  |      |                |
| control panel protection                         | NEMA 4X                                |                           | NEMA 4X                                |                     | NEMA 4X                                |      |                |
| valve switching power (per valve)                | 80 VA                                  |                           | 80 VA                                  |                     | 80 VA                                  |      |                |

|                          |                                           |
|--------------------------|-------------------------------------------|
| material of construction |                                           |
| vessels                  | carbon steel                              |
| frame & supports         | carbon steel                              |
| valve block housing      | anodized aluminum                         |
| valve seats              | stainless steel & brass                   |
| piping & fittings        | 316 stainless steel                       |
| media                    | 80% 4A molecular sieve, 20% WS silica gel |



(1) at an outlet temperature of 95°F, an inlet pressure of 1450, 3625 or 5075 psig (as applicable) and -40°F outlet dew point. For all other operating conditions, contact support@n-psi.com for sizing assistance

(2) per ISO 8573.1:2010

(3) ISO class 2 (-40°F outlet pressure dew point) is provided as standard. -4°F or -67°F outlet pressure dew point are available as an option

(4) 24VDC available as option

(5) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182