



## ABP 3000

460VAC/60Hz -3000 scfm desiccant air dryer

The nano aircel brand twin tower blower purge desiccant air dryer provides clean dry air for a wide range of industrial applications. These dryers use a blower and an external heater to provide heated ambient air for regeneration. With purge air usage less than 2% (averaged over cycle) and a zero purge option, these dryers offer the lowest cost of operation for most applications.



### general characteristics

rated capacity (scfm) <sup>(1)</sup>	3000
regeneration air (scfm) <sup>(2)</sup>	61
half cycle time (hours)	4
dryer pressure drop (psid)	5

### operating limits

min/design/max operating pressure range (psig)	60 / 100 / 150
outlet dew point at design conditions (°F)	-40
min/design/max inlet temperature (°F)	38 / 100 / 120

### system components

inlet air filter	coalescing filter with 0.01 µm element
after filter	high temp particulate filter with 1 µm element
condensate drain	zero-loss electronic drain
inlet valve(s)	butterfly
purge exhaust valves	butterfly

### desiccant chambers

desiccant type	activated alumina
desiccant weight per vessel (lbs)	1928
desiccant vessels	ASME Section VIII Division 1, "U" stamped, 200 PSIG at 450 °F

### controls/design

dryer design	PSA externally heated regenerative dryer
power supply (V/Ph/Hz)	460/3/60
full load amps	102.4
controller type	programmable logic controller (PLC) in NEMA 4 enclosure
energy management system	dew point control standard
blower type	centrifugal
regeneration blower (hp)	15
heater absorbed power (kW)	64
insulation <sup>(3)</sup>	heater shell and hot air piping protected

### air circuit

air circuit connections (Flg)	6"
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### ISO class

ISO air quality class (water content)	class 2 (-40°F pdp)
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(1) in compliance with CAGI (ADF 100) / NFPA (class H): inlet temperature 100°F, ambient temperature 100°F, inlet pressure 100 psig, pressure dew point -40°F. For all other conditions, contact support@nano-purification.com

(2) based on a timed cycle at full flow

(3) vessels by customer

(4) specifications subject to change without notice

nano-purification solutions  
Charlotte, North Carolina  
United States

nano-purification solutions TN  
Maryville, Tennessee  
United States

nano-purification solutions Canada  
St. Catharines, Ontario  
Canada

nano-purification solutions Ltd.  
Gateshead, Tyne and Wear  
United Kingdom

nano-purification solutions GmbH  
Erkelenz, Germany

nano-purification solutions Asia Pacific  
Singapore

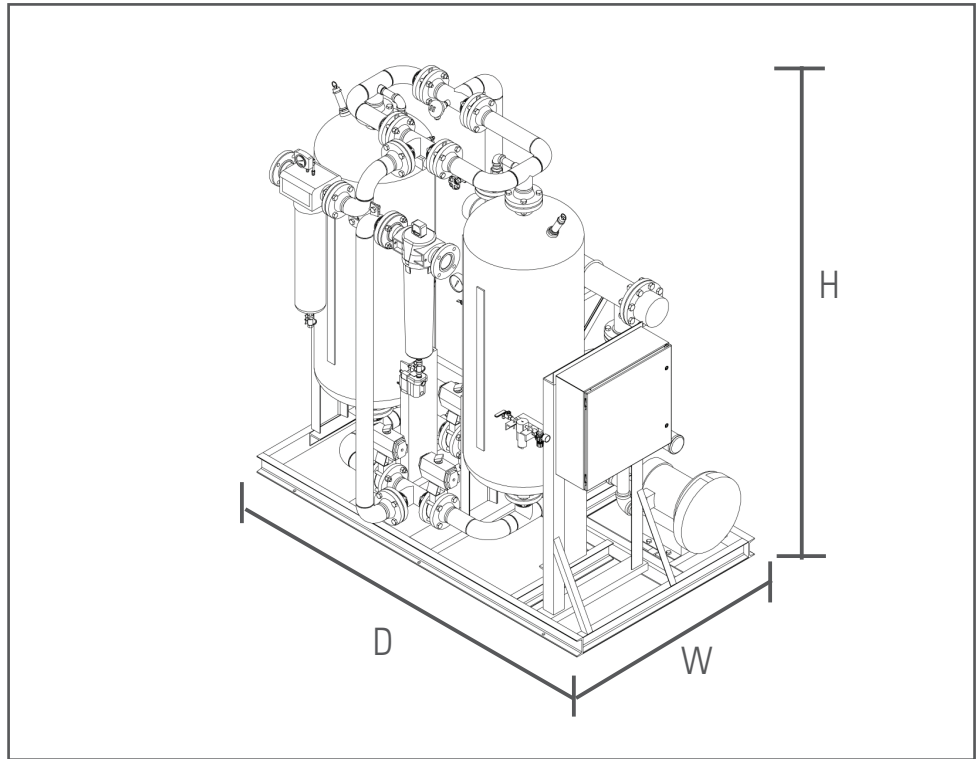
Tel: 704.897.2182  
Fax: 704.897.2183  
Email: support@nano-purification.com

## technical specification

### dimensions & weight

width (in)	111
depth (in)	131
height (in)	127
weight* (lbs)	13400

\*desiccant is included in total weight. Units 2500 scfm and above desiccant is shipped loose



## features

- made in the USA
- rugged steel frame
- UL/cUL compliant
- ASME U-stamped pressure vessels
- dew point control
- pre and after filters included as standard
- Allen-Bradley PLC controller
- NEMA 4

experience