



ABP 5000

460VAC/60Hz - 5000 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) ⁽¹⁾	5000
regeneration air (scfm) ⁽²⁾	101
half cycle time (hours)	4
dryer pressure drop (psid)	6

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)	3296
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	166.2
controller type	programmable logic controller (PLC) in NEMA 4 enclosure
energy management system	dew point control standard
blower type	centrifugal
regeneration blower (hp)	20
heater absorbed power (kW)	110
insulation ⁽³⁾	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

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United Kingdom

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Erkelenz, Germany

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Singapore

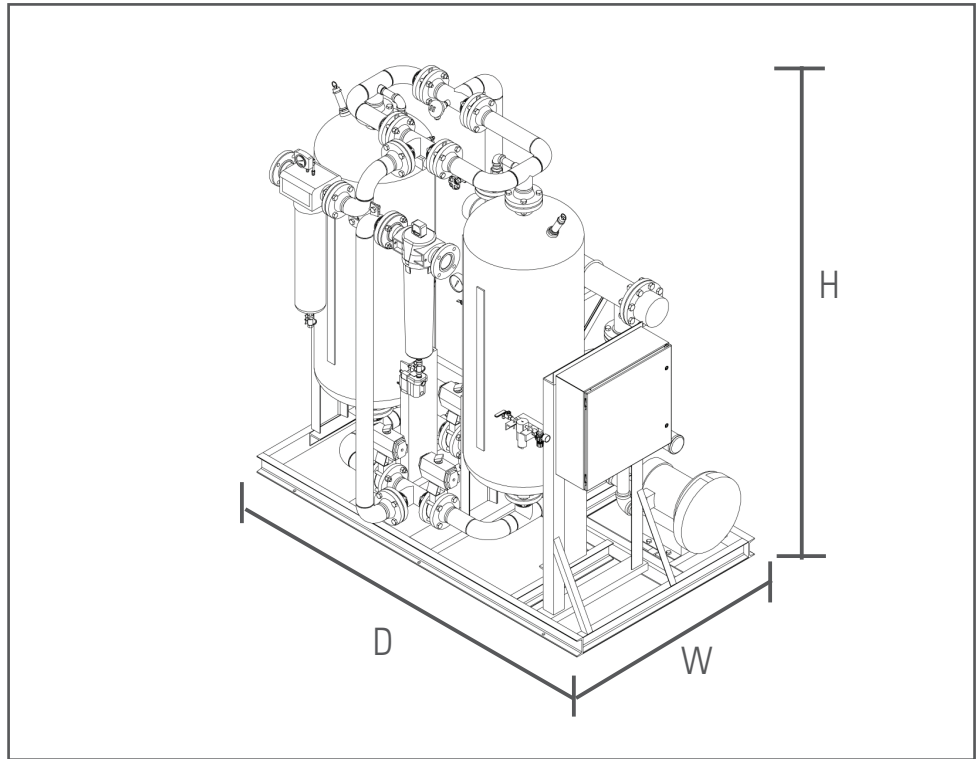
Tel: 704.897.2182
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Email: support@nano-purification.com

technical specification

dimensions & weight

width (in)	109
depth (in)	163
height (in)	138
weight* (lbs)	22300

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



experience

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