



nano D<sup>5</sup>: Compressed Air Dryers

# HL0500

## 500 scfm Desiccant Air Dryer

Manufactured in our Maryville, Tennessee facility, the nano D<sup>5</sup> HL heatless desiccant air dryers employ expanded dry purge air to regenerate the offline bed. These straightforward yet highly effective dryers provide a continuous supply of clean, dry air within a dependable and cost-efficient framework.

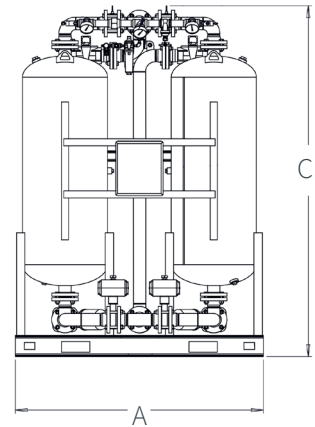


GENERAL CHARACTERISTICS	
Rated capacity (scfm) <sup>(1)</sup>	500
Regeneration air (scfm)	75
Absorbed power (kW)	0.35
OPERATING LIMITS	
Minimum / design / maximum operating pressure (psig)	60 / 100 / 200
Minimum / design / maximum ambient temperature range (°F)	38 / 100 / 120
Minimum / design / maximum inlet temperature (°F)	38 / 100 / 120
DESICCANT CHAMBERS	
Desiccant type	activated alumina
Desiccant weight per tower (lbs)	250
CONTROLS / DESIGN	
Dryer design	PSA heatless regenerative
Controller type	PLC
Power supply (V/Ph/Hz)	115/1/60
NEMA rating	NEMA 4X
AIR CIRCUIT	
Air circuit connections (NPT(F))	2"
Filters	GFN0700 (M01/M1)
ISO CLASS	
ISO air quality class (water content)	class 2 (-40°F pdp)

\* 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](mailto:support@nano-purification.com).

## Dimensions & Weight

DIMENSIONS AND WEIGHT	
A (ins)	50.8
B (ins)	42.3
C (ins)	86.4
Weight (lbs)	1100



## D<sup>5</sup>: Twin Tower Heatless Desiccant Air Dryers

### Features

- UL/cUL compliant
- ASME U-stamped pressure vessels
- CRN pressure vessels up to HL1500
- Mounted 0.01 micron GFN prefilter and 1 micron GFN after filter included
- Adjustable purge valve
- Low Noise exhaust mufflers
- NEMA 4X control panel
- High performance valves
- Made in the USA activated alumina desiccant
- Lifting lugs and/or fork lift pockets on all products
- Robust and reliable **Basic PLC** control HL0070 to HL0750
  - 'Power On', 'Hours Run' and 'Service Required Indicators'.
  - Memory retention built into the plc enables the controller to pick up where it left off in the drying cycle, ensuring consistently clean and dry air downstream.
  - Compressor synchronization is a standard energy saving feature on HL range which starts and stops the dryer with a signal from the compressor to eliminate purge loss when drying is not required.
- **Advanced Allen-Bradley PLC** controller HL1000 to HL3000
  - Digital Interface
  - Digital LED display
  - Outlet air dew point indication (with ES option)
  - Compressor synchronization is a standard energy saving feature on HL range which starts and stops the dryer.
  - User programable operating parameters
  - Alarm Indication

### Optional Upgrades

- Integral energy saving (ES) outlet dew point control
- Valved filter and dry by-passes
- 230V or 12V power supply
- Stainless steel control air tubing
- Low ambient package for operation down to +20°F
- Corrosion resistant paint and material design
- Advanced Allen-Bradley PLC controller for HL0070 to HL0750 models

Technical specifications subject to change without notice.  
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**nano**

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