



nano R¹: Compressed Air Dryers

TMC 0510N

510 scfm Thermal Mass Cycling Refrigerated Air Dryer

The nano TMC thermal mass cycling dryer utilizes a glycol cooling loop to match power consumption to the actual demand for dry air. This ensures energy savings during periods of lower air use. With their advanced control systems and efficient design, the TMC thermal mass cycling dryers offer reliable and consistent operation, reducing the likelihood of downtime in compressed air systems. The glycol thermal mass within the dryer allows for efficient heat transfer and storage and produce a stable dew point over a wide operating range. On top of reduced energy consumption the TMC Thermal mass cycling dryers are designed with reduced refrigerant charges minimizing the impact of refrigerants on the environment.

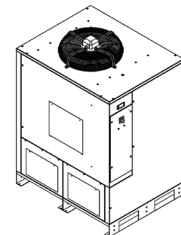
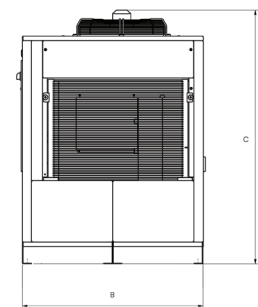


GENERAL CHARACTERISTICS	
Rated capacity (scfm) ⁽¹⁾	510
Absorbed power (kW)	3.74
Power supply (V/Ph/Hz)	460/3/60
Pressure drop over dryer (psid)	1.8
Mean sound pressure level (dB(A))	67
OPERATING LIMITS	
Design operating pressure range (psig)	29 to 210
Minimum/maximum ambient temperature (°F)	41 to 115
Maximum inlet temperature (°F)	140
REFRIGERANT GAS/CIRCUIT	
Refrigerant type	R410A
Refrigerant charge per circuit (lbs)	3.30
COMPRESSORS	
Compressor type	piston
Compressor quantity	1
Independent gas circuit	1
FANS	
Fan type	axial
Fan quantity	1
Cooling air flow (scfm)	5202
AIR CIRCUIT	
Air circuit connections	2 ½" NPT (F)
DEW POINT	
Outlet pressure dew point (°F)	41
ISO air quality class (water content)	5

(1) Rated in accordance with CAGI ADF 100 @ 100 psig, 100°F inlet, 100°F ambient. For all other conditions, contact support@nano-purification.com.

Dimensions & Weight

DIMENSIONS AND WEIGHT	
A (ins)	31.5
B (ins)	43
C (ins)	54.8
Weight (lbs)	737



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Features

- Energy efficient glycol thermal mass cycling design
- Variable cooling capacity adjusts to the actual demand for dry air ensuring energy savings during periods of lower air demand.
- Small footprint - space saving design
- Reduced refrigerant charge, contributing to environmental sustainability by minimizing the impact of refrigerants on the environment.
- Advanced pump technology with permanent magnet synchronous motor ensures high efficiency for glycol circulation with significant benefits in terms of energy saving.
- Zero air loss condensate drain as standard
- Integrated controller for automatic and efficient operation
- Dew point temperature display
- Low pressure drop design heat exchanger

Upgrades

RECOMMENDED PRE- & AFTER FILTRATION	FITS	PART NUMBER
Prefilter	TMC 0320N	GFN 0450 M1
After Filter	TMC 0320N	GFN 0450 M01



Technical specifications subject to change without notice.
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