

nano R<sup>6</sup>: variable speed cycling

nano

## VDR 8450A

460/3/60 - 8450 scfm air cooled refrigerated air dryer

nano R<sup>6</sup> VDR variable speed cycling refrigerated air dryers represent the best in class for energy efficient compressed air dryers. By utilizing VSD scroll compressors the R<sup>6</sup> dryers can exactly match their energy consumption to the compressed air flow. This produces savings of up to 70% compared to non-cycling dryers and savings of up to 35% when compared to thermal mass technology. Equipped with industry proven components the R<sup>6</sup> design is engineered for reliability while producing the required pressure dew points at a variety of operational conditions.



### general characteristics

rated capacity (scfm) <sup>(1)</sup>	8450
pressure drop (psid)	2.8
absorbed power (kW)	28.1
power supply (V/Ph/Hz)	460/3/60
UL fuse rating (A)	(3x80)
sound pressure level (dB(A))	75.6

### operating limits

design operating pressure range (psig)	30 to 203
design ambient temperature range (°F)	45 to 114.8
maximum inlet temperature (°F)	158

### refrigerant gas/circuit

refrigerant type	R410a
refrigerant charge per circuit (lbs)	46.3

### cooling

cooling type	air cooled
cooling air flow (cfm)	21018
fan type	axial
fan motor protection	IP 54

### air circuit

air circuit connections (flange)	8" ANSI
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### ISO class

ISO air quality class (water content)	class 4
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(1) rated flow capacity: at 100 psig & 100°F inlet, 100°F ambient conditions. For all other conditions, contact support@n-psi.com

## scope of supply

### mechanical components

- VSD scroll refrigerant compressors that consume 30% less power than traditional reciprocating refrigeration compressors
- electronic stepper motor control valves used for HGBP and TEV for optimal regulation and maximum efficiency at partial loads
- touch screen nano Vision01 controller
- high efficiency heat exchanger with integral air-air, air-refrigerant and water separator sections
- zero air loss drains standard
- small footprint and simple to install all in one design
- utilizes R410A refrigerant with low GWP – Global Warming Potential
- compressed air flow switch puts unit into standby when no airflow detected

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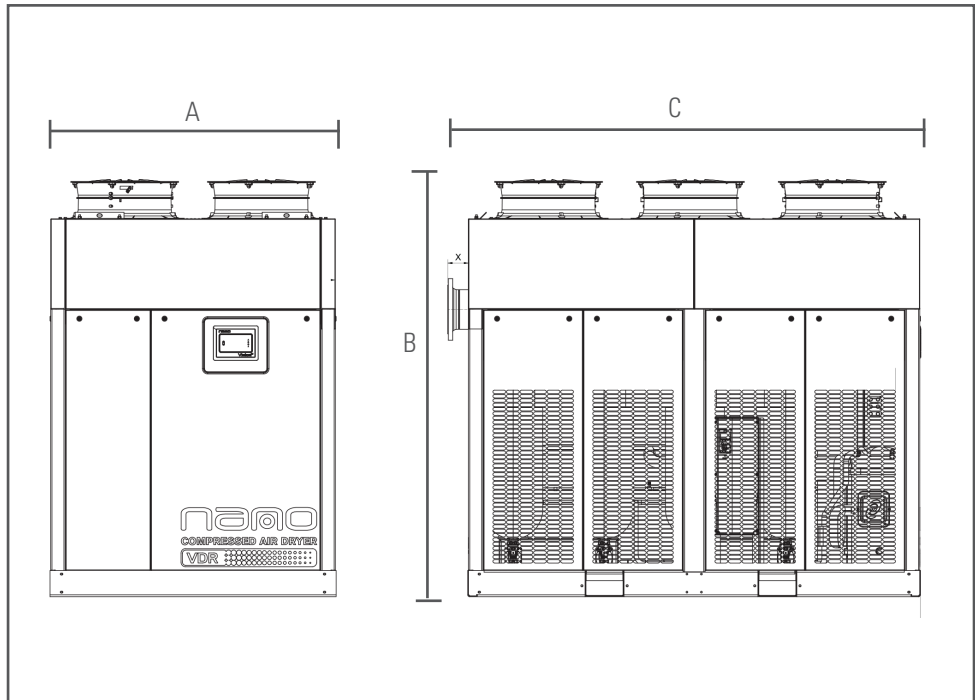
tel: 704.897.2182  
fax: 704.897.2183  
email: support@n-psi.com  
web: www.n-psi.com

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# technical specification

dimensions and weights	
A (in)	98.5
B (in)	90.4
C (in)	62.2
X (in)	6
weight (lbs)	4012



experience