

VDR 3150W

460/3/60 - 3150 scfm water cooled refrigerated air dryer

nano R⁶ VDR variable speed cycling refrigerated air dryers represent the best in class for energy efficient compressed air dryers. By utilizing VSD scroll compressors the R⁶ 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 R⁶ design is engineered for reliability while producing the required pressure dew points at a variety of operational conditions.



| general characteristics | |
|---|--------------|
| rated capacity (scfm) ⁽¹⁾ | 3150 |
| pressure drop (psid) | 2.6 |
| absorbed power (kW) | 6.6 |
| power supply (V/Ph/Hz) | 460/3/60 |
| UL fuse rating (A) | (3x50) |
| sound pressure level (dB(A)) | 68.7 |
| 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) | 28.7 |
| cooling | |
| cooling type | water cooled |
| cooling water flow (GPM 84°F water) | 71.3 |
| heat dissipated by cooling water flow (approx) (kW) | 34.1 |
| maximum effective cooling water pressure (psig) | 145 |
| air circuit | |
| air circuit connections (flange) | 6" ANSI |
| ISO class | |
| ISO air quality class (water content) | class 4 |

(1) rated flow capacity: at 100 psig & 100°F inlet, 84°F cooling water 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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technical specification

| dimensions and weights | |
|------------------------|------|
| A (in) | 58 |
| B (in) | 67.9 |
| C (in) | 62.2 |
| X (in) | 5 |
| weight (lbs) | 1797 |

