

## VDR 4200W

460/3/60 - 4200 scfm water 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>                | 4200         |
| pressure drop (psid)                                | 2.8          |
| absorbed power (kW)                                 | 8.3          |
| power supply (V/Ph/Hz)                              | 460/3/60     |
| UL fuse rating (A)                                  | (3x60)       |
| 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)                 | 74.5         |
| heat dissipated by cooling water flow (approx) (kW) | 44.5         |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>VSD scroll refrigerant compressors that consume 30% less power than traditional reciprocating refrigeration compressors</li> <li>electronic stepper motor control valves used for HGBP and TEV for optimal regulation and maximum efficiency at partial loads</li> <li>touch screen nano Vision01 controller</li> <li>high efficiency heat exchanger with integral air-air, air-refrigerant and water separator sections</li> </ul> | <ul style="list-style-type: none"> <li>zero air loss drains standard</li> <li>small footprint and simple to install all in one design</li> <li>utilizes R410A refrigerant with low GWP – Global Warming Potential</li> <li>compressed air flow switch puts unit into standby when no airflow detected</li> </ul> |

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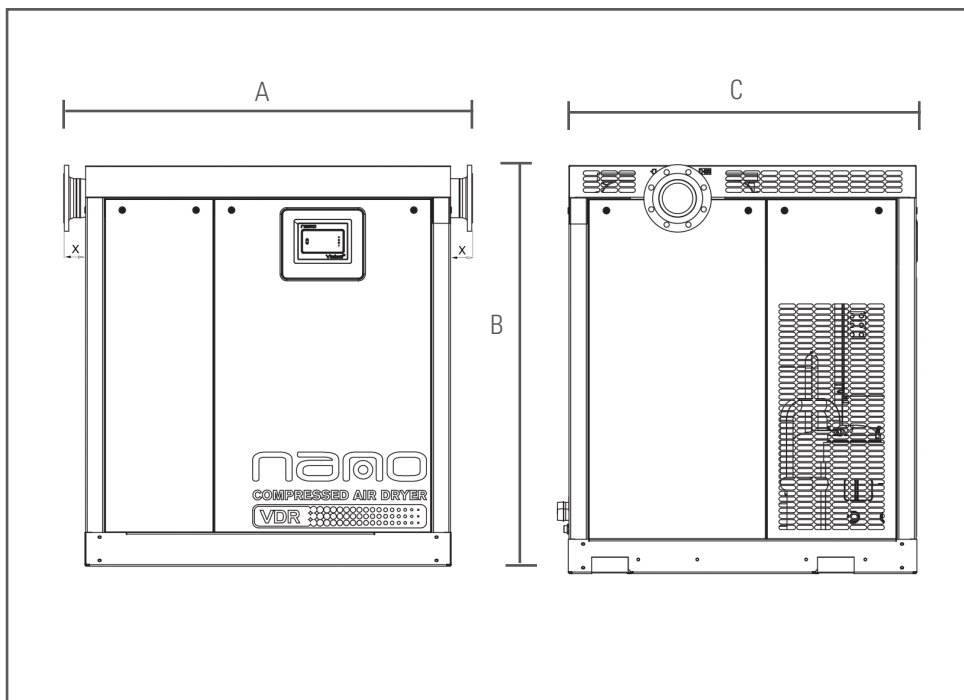
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## technical specification

### dimensions and weights

|              |      |
|--------------|------|
| A (in)       | 58   |
| B (in)       | 67.9 |
| C (in)       | 62.2 |
| X (in)       | 5    |
| weight (lbs) | 1907 |



experience