

PRA Series

Refrigerated Compressed Air Dryers

- **Removes Damaging Water and Contaminants**
- **Economical Operation**
- **Proven Reliability**



70 - 2,000 scfm

PREMIER PRA Series Refrigerated Compressed Air Dryers

Maintain Compressed Air Productivity

PRA Series air dryers remove water and contaminants from compressed air before they cause damage to pneumatic valves, tools, air system piping, downstream processes, and finished product. The compression process itself causes air to become saturated with water, compressor lubricant aerosols, and other contaminants. If left untreated, rust and scale may form in air system piping and ice may build up inside air piping that passes through freezing ambient conditions.

Warm air at low pressure holds the most water in vapor form and the moisture holding capacity of air doubles with each 20°F increase in air temperature. When compressed to useful pressure of 80 – 100 psi, air becomes saturated with water making treatment necessary. A properly sized air dryer is essential for efficient removal of water before the air is used.

PRA Dryer Operation

PRA refrigerated dryers incorporate a non-cycling refrigeration system, heat exchanger, separator, and drain to provide treatment for clean and dry compressed air applications. The refrigeration system and heat exchanger are used to cool compressed air as it flows through the dryer. Cooling causes moisture in the saturated air to condense so it can be separated from the air, collected and discharged through a drain. Air is clean and dry when it exits the dryer to flow downstream for use. All PRA dryer components are sized to provide high efficiency – even at full rated flow.

Superior Heat Exchanger Design

PRA heat exchanger assemblies are engineered exclusively for compressed air drying. They have a high heat transfer coefficient that provides optimum air treatment efficiency. Exchanger assemblies are made entirely of stainless steel for corrosion resistance and durability, and they include a unique multi-path internal flow pattern that reduces fouling potential. Low pressure drop keeps compressed air energy consumption as low as it can be.

Installation Flexibility

PRA Series dryers are compact in size, requiring little floor space. Convenient electric service and condensate drain connections are provided along with common air system piping sizes for installation ease.

Following the air compressor, installation of a PRA Series dryer will provide reliable treatment for applications that require clean, dry compressed air and a steady dew point.



PRA70B-PRA200B



PRA275B-PRA500B

PRA TECHNICAL SPECIFICATIONS

| Model | PRA70B | PRA100B | PRA125B | PRA160B | PRA200B | PRA275B | PRA325B |
|-----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------------------|--------------------------------------|
| Flow Capacity* scfm | 70 | 100 | 125 | 160 | 200 | 275 | 325 |
| Pressure Drop psid | 1.4 | 2.0 | 2.2 | 3.0 | 5.0 | 3.6 | 4.2 |
| Length** In. | 21 | 21 | 21 | 21 | 21 | 31 | 31 |
| Width** In. | 14 | 14 | 14 | 14 | 14 | 28 | 28 |
| Height** In. | 31 | 31 | 31 | 31 | 31 | 40 | 40 |
| Ship Weight Lbs. | 140 | 255 | 255 | 270 | 270 | 410 | 430 |
| Air Connection IN/OUT | 1" FPT | 1" FPT | 1½" MPT | 1½" MPT | 1½" MPT | 1½" MPT | 1½" MPT |
| Drain Connection In. | ¼ FPT | ¼ FPT | ¼ FPT | ¼ FPT | ¼ FPT | ¼ FPT | ¼ FPT |
| Refrigeration HP | .5 | .8 | .4 | .5 | .8 | 1 | 1 |
| Max. Work Pres.† psig | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| Operating kW*** | 1.04 | 1.51 | .81 | 1.04 | 1.51 | 1.6 | 1.6 |
| Voltages | 115-1-60 230/208-1-60 | 115-1-60 230/208-1-60 | 115-1-60 230/208-1-60 | 115-1-60 230/208-1-60 | 115-1-60 230/208-1-60 | 230/208-3-60 460-3-60 575-3-60 | 230/208-3-60 460-3-60 575-3-60 |

* Performance data obtained as per ISO 7183, Table 2, Option A2.

Pressure dew point calculated at 100 psig inlet air pressure; 100°F inlet air temperature; 100°F ambient air temperature conditions

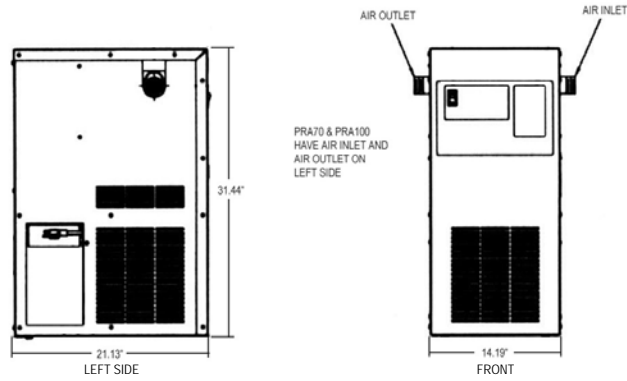
** Overall dimension

*** Average kilowatts per hour of dryer operation at full rated capacity

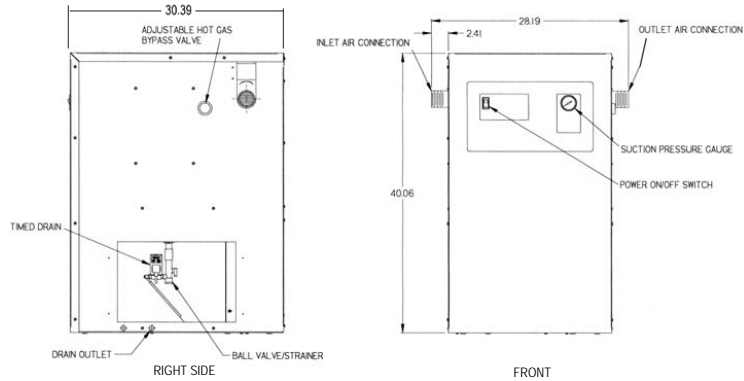
† Maximum Working Pressure is limited to condensate drain rating – see specific drain data. Actual dryer pressure rating is 300 psig.

PRA Series General Arrangements

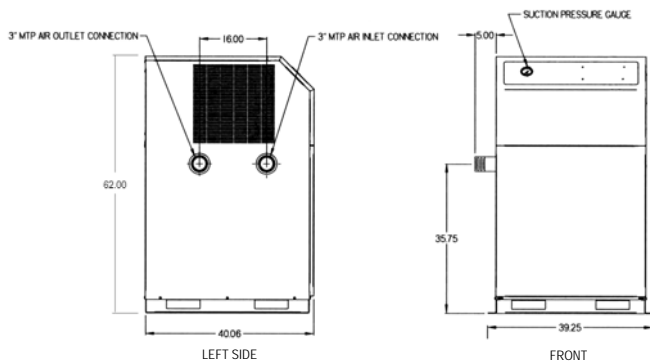
PRA70B; PRA100B; PRA125B; PRA160B; PRA200.



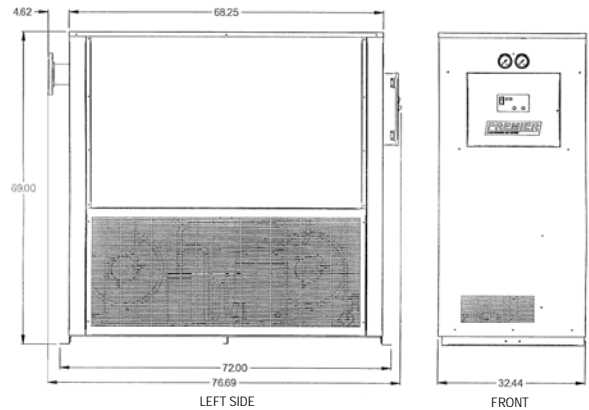
PRA275B; PRA325B; PRA400B; PRA500B



PRA650B; PRA800B; PRA900B; PRA1000B



PRA1250B; PRA1500B; PRA2000B



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