

PNA Series 275-1,000 SCFM

Premier

Non-Cycling Refrigerated Compressed Air Dryers



The Need For High Quality Compressed Air...

Because of its adaptability and versatility, compressed air is commonly used to power tools and equipment, in production and finishing processes and to control valves and instruments. If left untreated, concentrations of water, compressor lubricant aerosols and particles present in the air can damage tools, spoil finished product and increase the need for repair and maintenance.

Premier™ air dryers from ZEKS remove water and impurities, helping compressed air users optimize production processes with high quality air. All dryer models include innovations and features that maximize operating efficiency and reliability while minimizing the cost of ownership.

ZEKS Quality and Performance In A High Value Package

ZEKS PremierTM Refrigerated Dryers provide a reliable and economical way to remove harmful moisture and contaminants from compressed air, guarding against process waste, product spoilage and production downtime.

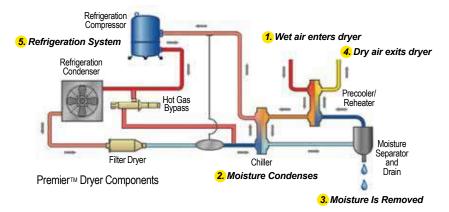
High Operating Efficiency, Proven Reliability

All PremierTM dryer models have been engineered for continuous operation and delivery of consistent pressure dew point in all moisture load conditions. They are a simple, low maintenance drying solution, offering reliability that has been proven in years of use.

Superior Features, Outstanding Value

Premier[™] dryers include features typically found in more expensive models, including: insulated stainless steel heat exchangers, specialized moisture separator and electrically controlled and adjustable timed solenoid drain. While dryer operation is automatic, adjustment to meet ambient and seasonal conditions is easily completed. All dryers are factory run-tested to assure promised performance.

Premier™ Dryer Operation Explained



- Hot, moisture-laden air from the air compressor flows into the Premier™ dryer where the temperature is reduced as it passes through the Precooler/Reheater.
- The air then passes through the Chiller where it is further cooled to a degree at which moisture present in vapor form condenses.
- 3. Condensed liquid is then separated from the air stream in the Moisture Separator.

 An automatic drain is used to discharge accumulated liquid from the dryer.
- The temperature of the air which is now dry, is raised before it exits the dryer and flows into the compressed air system.
- A refrigeration system is employed to generate the cold energy that's used to cool the air.







erecooler/Reheater - Optimizes dryer operating efficiency; Reduces or eliminates the condensation that often forms on air system piping

Stainless Steel Heat Exchangers - Patented design and construction provide superior corrosion resistance and durability; Flow path is optimized for high energy efficiency and low fouling potential

High Efficiency Moisture Separator - Removes entrained moisture and contamination from the air stream with 99% efficiency

Hermetic Refrigeration Compressor - Quiet and efficient; Reliability proven over years of use

Environmentally-Friendly Refrigerant - Safe R404A refrigerant is not harmful to the atmosphere

Right-Sized Condenser - Ensures consistent pressure dew point in all ambient conditions

Accessible Hot-Gas Valve Adjustment - Bypass valve is positioned for convenient seasonal adjustment

Suction Pressure Gauge - Clear and continuous display of refrigeration system status

Timed Electric Drain - Adjustable to match conditions; Large port resists blockage

Durable Powder Coat Finish - Provides years of **pr**otection and attractive appearance



The High Value Choice From ZEKS.



Non-Cycling Refrigerated Compressed Air Dryers

Choose The Right Premier™ Model

ZEKS Premier™ dryer models are available in eight capacities ranging from 275 - 1,000 scfm. All are compatible in air systems with reciprocating or rotary screw compressors that include aftercoolers. Use the table below to select the PNA dryer model that matches or exceeds the maximum output capacity of the air compressor in use.

Overall Dimensions ZEKS Left Side View Front View

Technical Specifications

| MODEL | FLOW CAPACITY SCFM* | W IN. | MENSION D In. | NS H IN. | SHIPPING WEIGHT LBS. | IN/OUT AIR CONNECTION | DRAIN CONNECTION | MAX. OPERATING PRESSURE† | REFRIG. COMPRESSOR HP | OPERATING kW** | AVAILABLE VOLTAGES |
|---------|---------------------------|----------|---------------------|----------------|----------------------------|-----------------------------|------------------|--------------------------------|-----------------------------|----------------|----------------------------------|
| PNA275 | 275 | 23 | 33 | 43 | 410 | 1.5" NPT | 1/4" NPT | 230 psig | 1.0 | 1.8 | 230-3-60 208-3-60 460-3-60 |
| PNA325 | 325 | 23 | 33 | 43 | 430 | 1.5" NPT | 1/4" NPT | 230 psig | 1.0 | 2.24 | |
| PNA400 | 400 | 23 | 33 | 43 | 450 | 2.0" NPT | 1/4" NPT | 230 psig | 1.5 | 2.4 | |
| PNA500 | 500 | 23 | 33 | 43 | 490 | 2.0" NPT | 1/4" NPT | 230 psig | 2.5 | 3.74 | |
| PNA650 | 650 | 42 | 40 | 62 | 770 | 3.0" NPT | 1/4" NPT | 300 psig | 2.5 | 3.7 | |
| PNA800 | 800 | 42 | 40 | 62 | 890 | 3.0" NPT | 1/4" NPT | 300 psig | 3.0 | 4.6 | |
| PNA900 | 900 | 42 | 40 | 62 | 890 | 3.0" NPT | 1/4" NPT | 300 psig | 3.5 | 5.5 | |
| PNA1000 | 1,000 | 42 | 40 | 62 | 900 | 3.0" NPT | 1/4" NPT | 300 psig | 4.0 | 5.9 | |

^{*} Performance data obtained per ISO 7183, Table 2, Option A2.

Standard Features

- Stainless Steel Heat Exchangers
- Hermetic Refrigeration Compressor
- Refrigerant Suction Pressure Gauge
- 404A Refrigerant
- · Generously Sized Refrigeration Condenser
- High Efficiency Moisture Separator
- Panel-Mounted ON/OFF Switch
- Easily Accessed Hot-Gas Bypass Valve
- Adjustable Automatic Condensate Drain
- Single Point Electric Service Connection
- Powder-Coated Cabinet

Warranty

All ZEKS Premier™ compressed air dryers are backed by a comprehensive warranty. Refer to the ZEKS Product Warranty Policies and Procedures publication for details.



 ${\sf ZEKS\ Premier^{TM}\ Compressed\ Air\ Dryers\ are\ not\ designed,\ intended\ or\ approved\ for\ breathing\ air\ applications.}$

Specifications, illustrative materials and descriptions contained herein were as accurate as known at the time this publication was approved for printing. The company reserves the right to change specifications, discontinue models, equipment or design without notice and without incurring obligation. The information set out in this brochure is for preliminary information only and is not intended to constitute any representation or warranty by ZEKS to potential customers or to form the basis of a contract with any customer.



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^{**} 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.