

ECLIPSE™
Desiccant Air Dryers



600ZPB shown in optional NEMA 4 configuration with Moisture Load Control option installed.

ZPB
Heatless Desiccant Air Dryers
90 - 600 SCFM

ZPB heatless desiccant air dryers deliver clean, dry compressed air for critical applications where the presence of even minimal moisture can't be tolerated. They utilize a portion of the dried compressed air volume for regeneration of the desiccant media in a continuous drying process. Part of the ZEKs Eclipse™ dryer line, ZPB models are engineered to provide the operating and service benefits needed most:

- **Proven Reliability**
- **Maintenance-Friendly Design**
- **Options For Energy Savings**
- **Remote Communications**

Standard ZPB dryers include a NEMA 1 enclosure and incorporate a solid state timer that has been field-proven to maintain precise control of the dryer operating sequence. Switching and purge valves are easily accessed and can remain in place during scheduled maintenance.

All models have a low-profile that makes placement in areas with low overhead clearance possible while also minimizing shipping cost. Serviceable parts are positioned within reach to facilitate maintenance.

New Optional Digital Controller!

When equipped in the optional NEMA 4 configuration, dryers include a digital controller with large backlit graphical display that provides access to all dryer functions. Display of maintenance reminders and alarms assures dryers deliver consistent, uninterrupted service. This enhanced controller enables external communication via Modbus that is accessible through a RS-485 port. Integration into Distributed Control Systems (DCS) is assured with user-adjustable baud rate.



ZPB Features

- New • Stainless Steel Valves** - Extend switching and purge valve service interval to five years. Purge valves include position indication.
- Now Standard • Downstream Purge** - Purge air flow from downstream source saves energy and increases air compressor life.
- New • Enhanced Digital Controller** - Displays system status, alarms and maintenance alerts; Precise control of valve sequencing; Modbus-ready; RS-485 communications.
(Included with NEMA 4 Option)
- **Low-Profile Design** - Expands installation options; Maintenance-friendly.
- New Improved Design • External Control Solenoid Valves** - Increased accessibility; Push-To-Test functionality.
- **ASME Coded Towers** - Meet ASME Section VIII, Division 1 requirements.



ZPB dryers can be equipped with options to meet user-preference and need. Among them is *Moisture Load Control* (MLC) that determines purge air consumption based on moisture loading to maximize overall efficiency of the compressed air system. When MLC is combined with the NEMA 4 option, compressed air dew point can be displayed as well. Accuracy is assured through use of a ceramic sensor.

Nine ZPB models are available in a flow range from 90-600 SCFM. Authorized ZEKs Distributors can assist in selection of the Eclipse™ ZPB model that will satisfy all application requirements and they will provide comprehensive service support.

See reverse side for Technical Specifications.

Eclipse™ ZPB Heatless Desiccant Dryer Specifications

MODEL	FLOW CAPACITY SCFM		AIR CONNECTION IN/OUT	DIMENSIONS** INCHES			SHIPPING WEIGHT LBS.
	-40° F*	-100° F*		WIDTH	DEPTH	HEIGHT	
90ZPB	90	72	1.0" NPT	40.5	30.0	63.1	475
120ZPB	120	96	1.0" NPT	40.5	30.0	63.1	563
160ZPB	160	128	1.5" NPT	44.5	32.0	66.1	707
200ZPB	200	160	1.5" NPT	44.5	32.0	66.1	731
250ZPB	250	200	1.5" NPT	48.5	32.0	67.0	869
300ZPB	300	240	2.0" NPT	48.5	32.0	67.0	924
400ZPB	400	320	2.0" NPT	52.5	32.0	68.0	1,115
500ZPB	500	400	2.0" NPT	56.5	33.0	82.5	1,564
600ZPB	600	480	2.0" NPT	56.5	33.0	82.5	1,664

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

* Pressure Dew Point (PDP) at 100 psig, 100°F inlet air, 100°F ambient air.

Pressure vessels are designed and constructed in accordance with ASME requirements.

Maximum Working Pressure is 150 psig.

Minimum Working Pressure is 75 psig.

Desiccant is factory-installed on models 90-600 ZPB.

ZPB dryers are wired for 115V-1Ph-60Hz electrical power.

Standard Features:

- NEMA 1 Electrical Enclosure
- Stainless Steel Switching and Purge Valves
 - 5-year service interval
 - Position indication (Purge Valves)
- -40°F Dew Point Air Quality
- Solid State Timer
- Downstream Purge
- Illuminated Status Indication
- Prominent Purge Pressure Gauge
- Blue Moisture Indicator
- Control Air Filtration/Pressure Regulation
- ASME Coded Towers
- Sound Attenuating Mufflers
- Tower Pressure Gauges
- Pressure Relief Valves
- High Strength Activated Alumina Desiccant
- Low Profile Design
- Side-Mounted Inlet and Outlet Manifolds
- Removable Stainless Steel Diffuser Screens
- Accessible Fill and Drain Ports

Optional Features:

- NEMA 4 Electrical Configuration
 - Digital controller with backlit LCD
 - Graphical interface
 - External communication - Modbus/RS-485 port
 - Maintenance reminders
 - User-adjustable baud rate
 - DynOptic™ Schematic: Dryer ON; Tower status; Alarm annunciation
 - Remote alarm contact
- -100°F Dew Point Air Quality
- Moisture Load Control (MLC)
- Fail-To-Shift alarm
- Dew Point Display (Requires NEMA 4 and MLC)
- High Humidity Alarm
- Pneumatic Controls
- Factory Installed Filtration
- Stainless Steel Control Air Tubing
- Custom Engineered
 - Tower Corrosion Allowance
 - Z-Purge™ Configuration For Class 1, Div. 2 Applications
 - High Pressure
 - Customer Specified Coatings



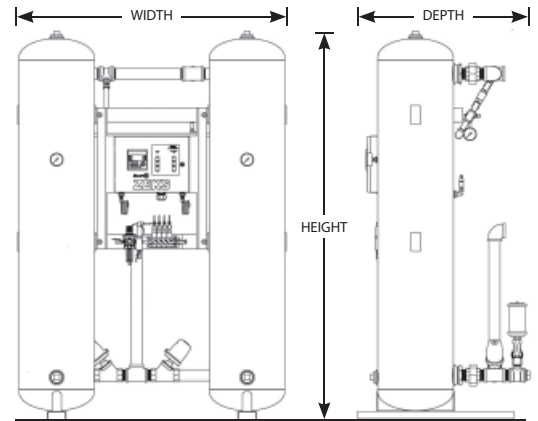
Covered Under ZEKS Standard Warranty
PLUS 5-Year Coverage On Flow Valves[§]

ZEKS Eclipse™ ZPB...with advancements that provide even greater efficiency and reliability to compressed air users.

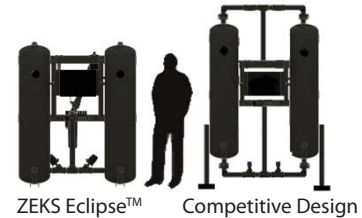
[§] Refer to ZEKS Product Warranty Policies And Procedures

ZEKS Eclipse™ Desiccant Air Dryers are not designed, intended or approved for breathing air applications.

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Dimensions shown are for base models only.
Optional equipment may alter dryer dimensions.
Dimensions and weights are approximate.



Eclipse™ manifold positioning facilitates maintenance and improves worker safety compared to competitive designs.

ZEKS

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