

Aircel

Desiccant Air Dryers

AZP Series

Zero Purge Desiccant Air Dryer

800 - 10,000 scfm



AZP Series Zero Purge

Zero Purge Desiccant Dryer

800 - 10,000 scfm

Since 1994, Aircel has been delivering quality, industry leading compressed air dryers and accessories for production lines and facilities all over the world.

Our precise engineering and designs provide reliable products that will protect your operations for years to come.

Based in Maryville, Tennessee, Aircel is a multi-industry manufacturing leader. Aircel's highly-specialized, engineered products and technologies are powering facilities all over the world. Our products serve industries such as textile, food and beverage, automotive, production, PET market, breathing air, pneumatic instrumentation, and more.



The Aircel AZP series is a desiccant air dryer with a unique closed loop cooling system that utilizes externally heated atmospheric air for regeneration of the desiccant bed.

The AZP is perfect for applications that cannot afford heat bumps or dew point spikes. The unique closed loop cooling system reconditions the desiccant bed all without having to use purge air. With the ability to use 100% inlet air, an efficient double heat exchanger set up, and consistent dew point performance the AZP will always produce constant, reliable, high quality air.

AZP Series Product Features And Benefits



100% Air Usage

- The AZP is able to use 100% of inlet air because of the closed loop cooling design

No Dew Point Spike

- The AZP is able to produce consistent high quality air without dew or heat spike



Energy Management

- Desiccant in-bed sensor saves on regeneration costs and promotes efficiency

Additional Standard Features

- Painted corrosion resistant finish
- NEMA 4 electrical enclosure standard
- Superalloy heater elements that resist corrosion
- TEFC motor that provides reliable self cooling
- Air actuated rather than electronic valves
- Energy management system
- Stainless steel butterfly valves

Optional Equipment

- Nema 4X electrical construction
- -100F pressure dew point
- Dew point monitor
- Pre-piped filters and bypass valve packages
- Visual moisture indicator
- High outlet temperature alarm
- Low ambient temperature alarm
- Ability to design a customized footprint

Dimensions (in.)

Model Number	Capacity	Voltage	Connection (FLG)	Heater kW (full load)	Blower HP	FLA	Weight (lbs)	Height	Width	Depth
AZP 800	800	460-3-60	3"	18	5	31.3	5,500	103	95	65
AZP 1,000	1,000		3"	22	7.5	39.7	6,400	103	100	65
AZP 1,200	1,200		4"	27	7.5	46	6,800	109	105	70
AZP 1,400	1,400		4"	32.5	10	55.9	7,600	110	110	70
AZP 1,600	1,600		4"	37	10	61.5	9,800	112	125	75
AZP 2,000	2,000		4"	45	15	78.6	10,800	120	130	80
AZP 2,500	2,500		6"	52	10	80.4	12,200	120	135	85
AZP 3,000	3,000		6"	64	15	102.4	16,100	129	155	90
AZP 3,500	3,500		6"	78	20	126	15,600	129	165	95
AZP 4,000	4,000		6"	90	20	141.1	17,900	135	165	98
AZP 5,000	5,000		6"	110	20	166.2	22,300	142	175	110
AZP 6,000	6,000		8"	120	20	178.7	26,800	150	185	118
AZP 7,000	7,000		8"	150	25	223.4	31,300	C/F	C/F	C/F
AZP 8,000	8,000		8"	175	25	254.7	35,800	C/F	C/F	C/F
AZP 10,000	10,000		10"	200	40	304.1	44,700	C/F	C/F	C/F

Capacity rated in accordance with CAGI ADF 200 @ 100 psig, 100°F inlet, 100°F ambient and a PDP of -40°F

Operating pressure: 60 to 135 psig | Ambient air temperature: 38°F to 120°F | Inlet air temperature: 40°F to 120°F

For larger capacities and custom dryer options, please contact an Aircel factory representative

Capacity Correction Factors

To Size the Dryer Capacity for Actual Conditions

Adjusted Capacity = scfm x C1 x C2

Example:
 Dryer Model: AZP-600
 Standard Capacity: 600 scfm
 Actual Operating Conditions:
 80°F ambient: C1 = 1.15
 90 psig system pressure: C2 = 0.91

Adjusted Capacity: 600 scfm x 1.15 x 0.91 = 628 scfm

To Size the Dryer Model for Actual Conditions

Adjusted Capacity = scfm / (C1 x C2)

Example:
 Given Flow: 1,200 scfm
 Actual Operating Conditions:
 80°F inlet: C1 = 1.15
 130 psig system pressure: C2 = 1.27

Adjusted Capacity: 600 scfm / (1.15 x 1.27) = 410 scfm
 Selected Dryer Model: AZP 600

Correction Factors for Differing Inlet Air Temperature (C1)

Inlet Temperature (°F)	70	80	90	100	105	110	120
Correction Factor	1.2	1.15	1.1	1	0.9	0.8	0.6

Correction Factors for Differing System Air Pressure (C2)

System Pressure (psig)	60	70	80	90	100	110	120	130	140	150
Correction Factor	0.65	0.73	0.82	0.91	1	1.09	1.18	1.27	1.35	1.44