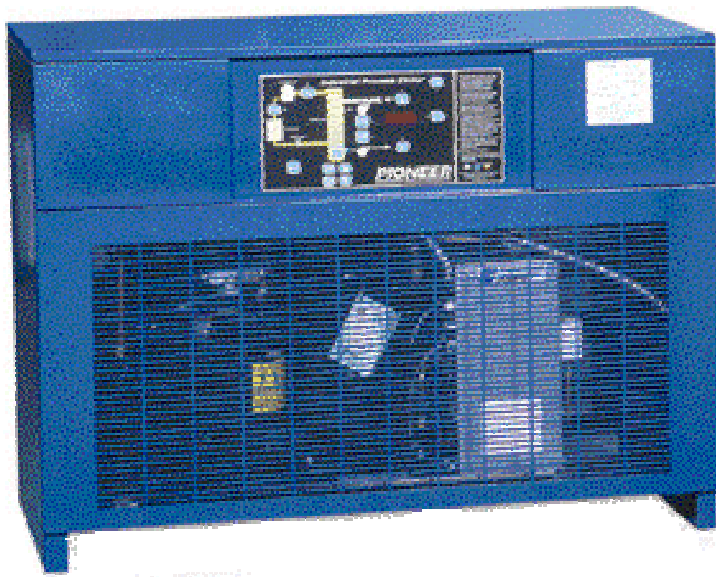


# PIONEER

## Ultra-Low Dew Point Refrigerant Compressed Air Dryers Virtually Oil-Free Compressed Air *Based on New Patent No. 6,712,885*

- ◆ Ultra-clean & Dry Compressed Air
- ◆ No Purge Loss
- ◆ No Desiccant Contamination & Replacement
- ◆ -10 °F to -20 °F Pressure Dew Point
- ◆ Minimal Maintenance
- ◆ Cleanses & Dries Compressed Air - Removes 95 to 99 % of Contaminants – Moisture & lubricants
- ◆ Specially suitable for - Cleaning & Drying Compressed Air for critical applications – Pharmaceutical, Hospital, Food, Electronics etc.
- ◆ Corrosion Resistant - Air flow thru stainless steel
- ◆ Adjustable Dew Point
- ◆ PLC Controls & Monitoring
- ◆ Longest Warranty



4,499,033  
4,638,852  
4,761,986  
5,107,919  
5,207,895  
6,712,885

***SPECIALIZING IN AIR/GAS TREATMENT & WATER COOLING***

Pioneer Air Systems, Inc.

1-800-264-1AIR(1247) ◆ www.pioneerair.com ◆ sales@pioneerair.com  
Tel/Fax (423) 346-6693/3865 ◆ 210 Flatfork Road ◆ Wartburg, Tennessee 37887 USA

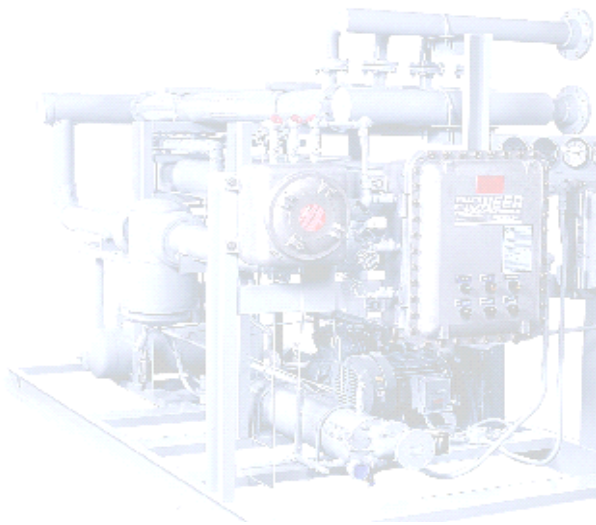
## DESCRIPTION

Removing moisture and lubricants is essential to purifying compressed air.

Conventional method of drying compressed air below +35 °F pressure dew point is to use desiccants. The process requires periodic desiccant replacement. Moreover, most dryers waste up to 15 % of compressed air and/or a significant amount heat for desiccant regeneration.

**PIONEER offers a new and patented “Alternating Evaporator Technology” for providing low dew point, clean compressed air.**

PIONEER'S unique approach involves chilling compressed air to approximately -10 °F to -20 °F in two alternating evaporators. One evaporator chills compressed air while the other is defrosted. Chilling air condenses moisture and most other contaminants. In addition, the uncondensed contaminants dissolve in the condensed moisture, which is separated and drained at various chilling and separation points.



## QUALITY FEATURES

1. **Air-Air Heat Exchanger** - Compressed air is cooled to approximately 50°F with the chilled air.
2. **Duplex Air-Refrigerant Heat Exchangers** - Air is chilled to approximately -10°F to -20°F with refrigeration by a duplex set of evaporators. One heat exchanger chills air while the other is de-frosted, and chilled again to dry compressed air on a continuous basis.
3. **PLC Controlled Valves** – Provide precise temperature control and un-interrupted flow of clean & dry compressed air
4. **Chilled Separator** - Separator is chilled with refrigerant for maximum separation efficiency
5. **Cold Coalescing-** A high performance, 0.1 micron, coalescing filter, installed at a cold point, provides maximum contaminant removal
6. **Re-heating-** Chilled, dry and clean air flows through the air-air heat exchanger, where it's reheated to about 30°F below the incoming air temperature
7. **Automatic drains-** Installed for immediate removal of condensate at each heat exchanger, separator and filter for maximum reliability & efficiency
8. **Rust free construction** – Air flow thru stainless steel components
9. **NEMA 4 Electrical – standard**
10. **No desiccant replacement**
11. **Better air quality**
12. **No purge loss**

## LONGEST WARRANTY

Ten-year prorated heat exchanger & compressor warranty is standard.

For one year from the date of purchase. Pioneer Air Systems, Inc. will replace or repair, or provide free of charge any part or parts found to be defective in material or workmanship.

The customer shall contact factory or obtain authorization before returning equipment or to obtain field services. One-year mechanical parts only warranty applies to equipment outside the mainland, U.S.A., Canada and Mexico.

Pioneer Air Systems Inc. is not responsible for incidental, consequential, shipping and handling costs.



## SPECIFICATIONS & DIMENSIONS

Model No.	Nominal Refrig. KW Required	Standard Voltage	MWP PSIG	SCFM@ 90-110 PSIG & 110 °F	APPROX. Dimensions L x W x H (inches)	In/Out (inches)	Shipp. Weight (lbs.)
UL50A/W	1.5	230/460-3-60	200	50	60 x 36 x 90	1 NPT	1000
UL75A/W	2.0	230/460-3-60	200	75	60 x 36 x 90	1 NPT	1250
UL100A/W	3.0	230/460-3-60	200	100	60 x 36 x 90	2 NPT	1500
UL150A/W	5.0	230/460-3-60	200	150	90 x 48 x 90	2 NPT	2000
UL200A/W	6.0	230/460-3-60	200	200	90 x 48 x 90	2 NPT	2500
UL250A/W	8.0	230/460-3-60	200	250	90 x 60 x 90	2 NPT	3000
UL300A/W	9.0	230/460-3-60	200	300	90 x 60 x 90	2 NPT	3500
UL350A/W	10.0	230/460-3-60	200	350	120 x 70 x 92	2 NPT	4000
UL400A/W	12.0	230/460-3-60	200	400	120 x 70 x 92	3 FLG	4500
UL450A/W	13.0	230/460-3-60	200	450	140 x 72 x 92	3 FLG	5000
UL500A/W	14.0	230/460-3-60	200	500	140 x 72 x 92	3 FLG	5500
UL600A/W	16.0	230/460-3-60	200	600	160 x 72 x 92	3 FLG	6500
UL700A/W	18.0	230/460-3-60	200	700	180 x 72 x 92	3 FLG	7500
UL800A/W	20.0	230/460-3-60	200	800	180 x 72 x 92	3 FLG	8500
UL1000A/W	24.0	230/460-3-60	200	1000	200 x 72 x 92	3 FLG	9900

**NOTE: Models described above are for compressed air drying & cleaning only; consult factory for other applications.**

### STANDARD INSTRUMENTS & CONTROLS

**Dew Point Indicator**  
**Inlet pressure gauge**  
**Outlet pressure gauge**  
**Inlet temperature gauge**  
**Refrigerant analyzer gauge**  
**Refrigerant discharge pressure gauge**

### OPTIONS:

**Duplex filtration with block & by pass valves**  
**Dew Point Meter**  
**Remote Monitoring**  
**Enclosure**  
**TEFC Fan Motors**

### REPRESENTATIVE

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