

PUROAIR Refrigerant Air Dryer

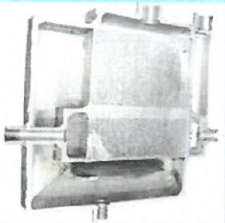
Poor Air Quality Makes Many Problems and Costs You Money

- Tools and equipment break down much more rapidly.
- Contaminated air will shorten the lifetime of production equipment.
- Poor air quality makes the compressed air pipe corroded and blocks valves.

The Solution : All-in-One Module Design

- “All-in-one” patented by hot gas by-pass design.
- Modulization the air-to-air (pre-cooler), air to evaporator and gas-water separator.
- Aluminum Heat Exchanger a corrosion resistant material.
- Pre-cooler heat-exchange efficiency could reclaim nearly 90%, reducing the load on the evaporator.

Aluminum heat exchanger



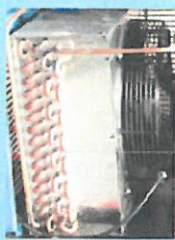
- High efficiency heat exchanger
- A corrosion resistant system
- Condensate water separation system
- Compact size, 50% less than shell-and-tube type



Compressor

- Horse power raises 20%
- High efficiency & quality refrigerant compressor.

Efficiency



- The condenser and fan combination was synergistic in function
- It achieves a higher acceptable inlet temp.



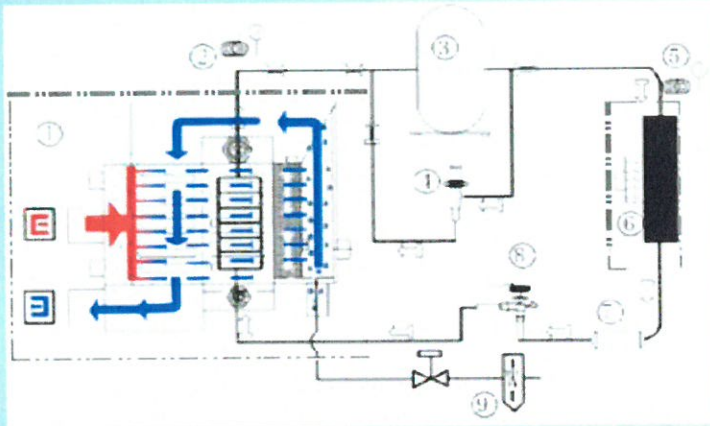
Compact & Lightweight

- 50% volume reduced
- 30% weight reduced
- Less restriction on space

Correction Factor

A. Inlet Air Pressure (barg)	3	4	5	6	7	8	9	10	11	12
Pressure Correction Factor	0.69	0.79	0.88	0.95	1	1.05	1.09	1.12	1.15	1.18
B. Inlet Air Temperature (°C)	30	35	40	42	45	50	55	60		
Temperature Correction Factor	1.48	1.29	1.08	1	0.9	0.75	0.63	0.52		
C. Ambient Temperature (°C)	20	25	30	35	40					
Temperature Correction Factor	1.16	1.12	1.08	1	0.9					
D. Cooling Water Temperature (°C)	30	32	34							
Temperature Correction Factor	1	0.97	0.97							

Technical data of YC Series refrigerant dryers



1. Aluminum Heat Exchanger
2. Low Pressure Gauge
3. Freon Compressor
4. Hot Gas Bypass
5. High Pressure Gauge
6. Fan & Condenser
7. Filter Drier
8. Expansion Valve
9. Auto Drain

PUROAIR refrigerant dryers of air-cooled type

Model	Outlet pressure dew point 2-8°C		Electrical supply	Dimensions			Weight	Connections
	Inlet capacity			Length	Width	Height		
Type	m ³ /min	cfm		mm	mm	mm	kg	
YC-7AS	0.8	28	240V/1/60(50)Hz	650	380	520	40	¾"
YC-10AS	1.5	53	240V/1/60(50)Hz	700	400	570	45	¾"
YC-15AS	2.3	81	240V/1/60(50)Hz	800	500	670	65	1"
YC-20AS	2.9	103	240V/1/60(50)Hz	800	500	670	66	1"
YC-30AE	4.3	152	240V/1/60(50)Hz	740	530	930	75	1 ¼"
YC-50AE	7.3	258	240V/1/60(50)Hz	740	600	1020	90	1 ½"
YC-75AE	11.2	396	415V/3/60(50)Hz	873	700	1350	140	2 ½"
YC-100AE	15.0	530	415V/3/60(50)Hz	873	700	1350	140	2 ½"
YC-150AE	22.0	778	415V/3/60(50)Hz	1020	800	1285	250	3'
YC-200AE	30.3	1071	415V/3/60(50)Hz	1050	910	1380	260	3'
YC-250AE	38.0	1343	415V/3/60(50)Hz	1550	1350	1330	270	DN100
YC-300AE	44.2	1562	415V/3/60(50)Hz	1550	1350	1330	270	DN100
YC-350AE	50.0	1768	415V/3/60(50)Hz	1800	1200	1450	500	DN125
YC-400AE	60.0	2121	415V/3/60(50)Hz	1800	1200	1450	500	DN125

Reference Conditions :

Ambient temperature: 35°C

Inlet temperature: 80°C

Working pressure: 7 bar (Max. 16 bar)

Max. cooling water temperature: 35°C

