

A-4400 Series

Refrigerated Air Dryers for Pneumatic Control Systems

Description

The A-4400 Series Refrigerated Air Dryers are designed for continuous operation to supply dry air to pneumatic control systems. All components are selected and assembled to provide dependable service over a long period of time with a minimum amount of maintenance. The air dryer uses R-134a refrigerant, an environmentally friendly HFC, minimizing the risks and/or costs associated with use and disposal of refrigerants.

There are six models available, models can be ordered with or without an optional factory mounted Air Purification System. For air dryers not equipped with an optional factory mounted Air Purification System, a properly configured air supply system must include a coalescing oil removal filter as well as an activated carbon oil vapor removal filter.

Features

- hermetically sealed compressor, heat exchanger, and automatic condensate drain trap
- an insulating sleeve covers the automatic condensate drain trap to eliminate external condensation
- evaporator pressure gauge and the automatic condensate drain trap with particle filter are internally mounted and are easily accessible through the end of the unit
- includes a standard cord and plug for 115 volt 60 Hz single-phase electrical service
- · includes a removable protective cover
- models equipped with optional Air Purification System (A-4412-1, A-4417-1, and A-4423-1) include: coalescing oil removal filter with integral pressure drop indicator, packed column type activated carbon oil vapor removal filter, service bypass valve, pressure reducing valve, safety relief valve, power on/fail lamp



A-4400 Series Refrigerated Air Dryer with Optional Factory Mounted Air Purification System



A-4400 Series Refrigerated Air Dryer without Optional Factory Mounted Air Purification System



Selection Chart

Code Number	Flow Capacity at Rated Condition, scfm (L/s) ¹	Air Purification System	Shipping Weight, lb ²
A-4412-1	12 (5.7)	Yes	72
A-4412-2	12 (5.7)	No	67
A-4417-1	17 (8.0)	Yes	78
A-4417-2	17 (8.0)	No	73
A-4423-1	23 (10.9)	Yes	78
A-4423-2	23 (10.9)	No	72

- The rated condition is 20 psig (140 kPa) supply pressure, 100°F (38°C) saturated inlet air temperature, 100°F ambient temperature, and 80 psig inlet pressure.
- 2. $lb \times 0.454 = kg$

Accessories

Code Number	Description	
A-4000-1054 ¹	Manual Override for Coalescing Oil Filters	

A-4000-1054 manual override is only compatible with newer A-4000-6010 and A-4210-6001 automatic drain assemblies.

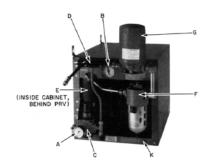
Technical Specifications

reclinical opecinications						
A-4400 Series Refrigerated Air Dryers						
Electrical Rating	115 Volt 60 Hz, Single-Phase Electrical Service					
Current Draw	5.75 Amperes					
Refrigerant	R-134a (HFC)					
Compressor	Hermetically Sealed					
Agency Listings	UL Listed and CSA Approved					
Ambient Operating Temperature Limits	40 to 115°F (4 to 46°C) with Maximum Dew Point of 86°F (30°C), Non-Condensing					
Ambient Storage Temperature Limits	-40 to 140°F (-40 to 60°C)					
Pressure Drop with	A-4412-1: 10 psig (70 kPa);A-4412-2: 4 psig (28 kPa)					
80 psig (560 kPa) Supply and Rated	A-4417-1: 17 psig (117 kPa);A-4417-2: 8 psig (55 kPa)					
Flow	A-4423-1: 33 psig (228 kPa);A-4423-2: 15 psig (103 kPa)					
Maximum Input Pressure	125 psig (862 kPa)					
Connections	3/8 in. Compression Fittings for Polytubing or Copper Tubing					
Finish	Gray Enamel					



Refrigerated Air Dryers for Pneumatic Control Systems (Continued)





Repair Information

Code Number		Item	Description	
For Air Dryers with Date Codes through RY1 9923	For Air Dryers with Date Codes after RY1 9923			
G-2010-5		A	System Pressure Gauge	
A-4300-603		В	Evaporator Pressure Gauge	
R-130-14		С	Pressure Reducing Valve	
A-4300-600		D	Service Bypass Valve	
		Е	Condensate Filter:	
A-4000-158 ¹	A-4000-156		Complete Assembly	
A-4110-610	A-4400-610		Bowl O-Ring	
A-4110-607	A-4400-607		Replacement Drain Valve	
A-4110-608	A-4400-608		Particle Filter Element	
	•	F	Coalescing Filter:	
			Complete Assembly for Air Dryer Model	
A-4000-1048			A-4412	
A-4000-1049			A-4417 and A-4423	
			Filter Element with O-Rings:	
			Air Dryer Model	
A-4110-604			A-4412	
A-4000-604			A-4417 and A-4423	
A-4000-620			Universal O-Ring Kit for Filter Element Bowl	
A-4000-6010 ²			Replacement Drain Valve ³	
A-4000-1054			Manual Override for Drain Valve ⁴	
		G	Carbon Filter Element Only:	
			Air Dryer Model	
A-4000-632			A-4412	
A-4000-633			A-4417 and A-4423	
A-4000-144		Н	Safety Relief Valve	
A-4300-601		J	Condenser Fan Motor	
A-4300-602		K	Power On/Fail Lamp	
A-4210-603		L	Insulating Tape (Not Shown) Order in Multiples of 30 Feet	
Purchase Locally Tecumseh P/N P82928		М	Start Relay	
Purchase Locally Tecumseh P/N P83458			Overload Relay	

- 1. Includes A-4000-156 filter, new mounting bracket, mounting hardware, tubing, and drain pipe adapter.
- 2. The A-4000-6010 replacement drain valve does not include a bowl-to-bowl O-ring. If this O-ring is needed, order the A-4000-620 Kit separately.
- 3. This unit is only compatible with A-4000-1054 manual override. It does not work with A-4000-154 manual override.
- 4. This unit is only compatible with A-4000-6010 auto drain. It does not work with A-4000-610 auto drain.