

A-4400 Series

# Refrigerated Air Dryers for Pneumatic Control Systems



**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**

## 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

## To Order

Specify the code number from the following selection chart.

## Selection Chart

Code Number	Flow Capacity at Rated Condition scfm (L/s) <sup>(a)</sup>	Air Purification System	Shipping Weight lb <sup>(b)</sup>
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

(a) 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.

(b) lb x 0.454 = kg

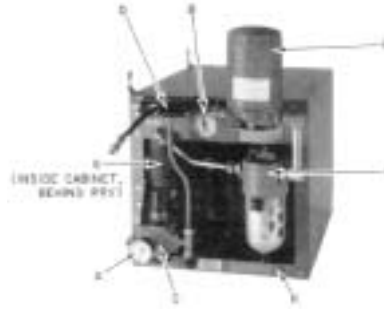
## Accessories

Code Number	Description
A-4000-154	Manual Override for Coalescing Oil Filters

## Specifications

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 80 psig (560 kPa) Supply and Rated Flow	A-4412-1: 10 psig (70 kPa);A-4412-2: 4 psig (28 kPa) A-4417-1: 17 psig (119 kPa);A-4417-2: 8 psig (56 kPa) A-4423-1: 33 psig (231 kPa);A-4423-2: 15 psig (105 kPa)
Maximum Input Pressure	125 psig (875 kPa)
Connections	3/8 in. Compression Fittings for Poly tubing or Copper Tubing
Finish	Gray Enamel

**A-4400 Series Refrigerated Air Dryers for Pneumatic Control Systems (Continued)**



**Repair Parts**

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		B	Evaporator Pressure Gauge
R-130-14		C	Pressure Reducing Valve
A-4300-600		D	Service Bypass Valve
		E	<b>Condensate Filter:</b>
A-4000-158 <sup>(a)</sup>	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	<b>Coalescing Filter:</b>
			<b>Complete Assembly for Air Dryer Model</b>
A-4000-148			A-4412
A-4000-149			A-4417 and A-4423
			<b>Filter Element with O-Rings:</b>
			<b>Air Dryer Model</b>
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-4000-610 <sup>(b)</sup>			Replacement Drain Valve
A-4000-154		Manual Override for Drain Valve	
		G	<b>Carbon Filter Element Only:</b>
			<b>Air Dryer Model</b>
A-4000-632			A-4412
A-4000-633		A-4417 and A-4423	
A-4000-144		H	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		M	Start Relay
Purchase Locally Tecumseh P/N P83458			Overload Relay

(a) Includes A-4000-156 filter, new mounting bracket, mounting hardware, tubing, and drain pipe adapter.

(b) The A-4000-610 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.

An F-400-20 Coupling (1/8 in. external NPT x 1/8 in. internal NPT) is included with the replacement drain valve.