Code No. LIT-1921105
Issued September 15, 2026

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.

Refer to the *A-4400 Series Refrigerated Air Dryers for Pneumatic Control Systems Product Bulletin (LIT-718050P)* for important product application information.

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-4423-1	23 (10.9)	Yes	78
A-4423-2	23 (10.9)	No	72

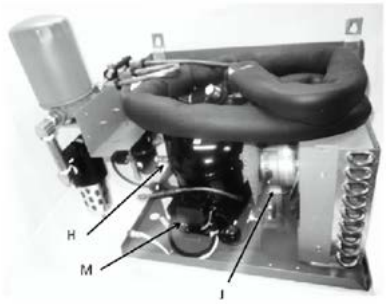
1. The rated condition is 20 psig (140 kPa) supply pressure, 100°F (38°C) saturated inlet air temperature, 100°F ambient temperature, and 80 psig inlet pressure.
2. lb x 0.454 = kg

Technical Specifications

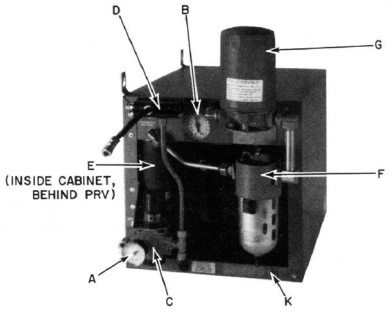
A-4400 Series Refrigerated Air Dryers	
Electrical Rating	115 Volt 60 Hz, Single-Phase Electrical Service
Current Draw	5.75 Amperes
Refrigerant	R-134a (HFC)
Compressor	Hermetically Sealed
Agency Listings	UL Listed, cUL Listed, Category Code SROT, File SA8490
Ambient Operating Temperature Limits	40 to 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 (117 kPa)
	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

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products. © 2026 Johnson Controls, Inc.

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



A-4400 Series Refrigerated Air Dryer with Cover Removed



A-4400 Series Refrigerated Air Dryer with Cover

Repair Information

Code Number			Item	Description
For Air Dryers with Date Codes through RY1 9923	**For Air Dryers with Date Codes after RY1 9923**	**For Air Dryers with Date Codes after RY1 1351**		
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	**Condensate Filter:**
A-4000-158[1]	**A-4000-156**			Complete Assembly
				Bowl O-Ring
A-4110-607	**A-4400-607**			Replacement Drain Valve
	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
				Universal O-Ring Kit for Filter Element Bowl
A-4000-6010[2]				Replacement Drain Valve[3]
				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
			H	Safety Relief Valve
A-4300-601			J	Condenser Fan Motor
			K	Power On/Fail Lamp
			L	Insulating Tape (Not Shown)
Purchase Locally Tecumseh P/N P82928		**Purchase Locally Tecumseh P/N 820-10052**	M	Start Relay
Purchase Locally Tecumseh P/N P83458		**Purchase Locally Tecumseh P/N 830-10041**		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.

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