AR PREMIUM SERIES

Energy Saving Cyclic Refrigeration Air Dryer

3.40 – 208.41 m^3/min

CONSERVING ENERGY WITH A RELIABLE PRESSURE DEW POINT

When compressed air cools down following a compression process, water vapour precipitates as condensate. This condensate must be removed from the compressed air system to prevent damage to downstream equipment.

ELGi's Energy Saving Cyclic Refrigeration Air Dryer eliminates the moisture and hence is an ideal accessory that can be used for a wide range of applications. It comes with an industry-leading warranty.

FEATURES AND BENEFITS

High Energy Efficiency

The hermetically sealed refrigeration compressor in the dryer is highly energy efficient. Its strong structure contributes to lower vibration levels and low noise levels.

Automatic Condensate Drain

The Condensate Drain provides an efficient solution for condensate removal. This mechanical level-sensing drain removes condensate from the system with no air loss and minimal maintenance.

Smart Controller

The controller displays the pressure dew point temperature (°C or °F) and indicates if the dryer is running in energy saving mode (ECO). The display also shows the total operation hours, fan operation, inlet air temperature, ambient temperature, and the periodic maintenance interval.

Integrated Filters*

The integrated filters improves performance with less pressure drop and help reduce additional piping before and after the dryer for external filters. The coalescing type inlet pre-filter will filter dust particles up to 1 micron and oil down to 0.1 ppm. The coalescing type outlet fine filter will filter dust particles down to 0.1 micron and oil down to 0.01 ppm.

(* for sizes up to AR 3440P)

Heat Exchanger

The aluminium plate type heat exchanger maximises thermal exchange efficiency due to its high heat transfer surface area and fins. Cross flow between hot glycol and cold refrigerant is ensured by a stainless steel plate, copper brazing type heat exchanger, which maximises thermal exchange efficiency and has a longer life.

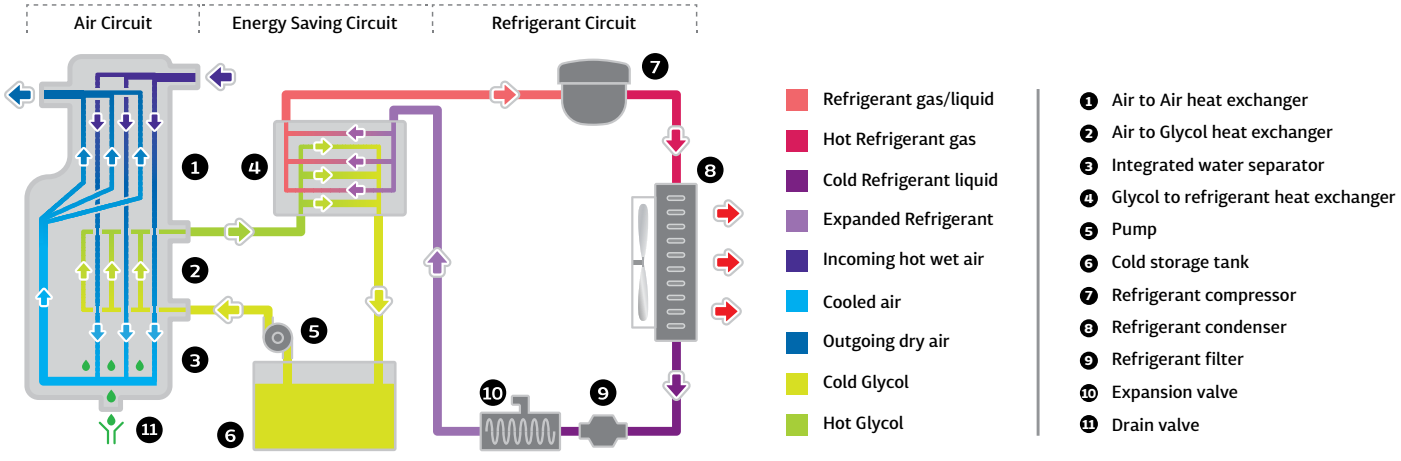
TECHNICAL SPECIFICATIONS

Model	Inlet Flow Capacity	Air Pressure Drop	Max. Inlet Pressure	Inlet/ Outlet Size	Compressor	Electrical Standard	Nominal Power Consumption	Dimensions L x B x H	Gross Weight	Integrated filters	Air Cooled	Water Cooled
	m^3/min	bar	barg	BSP	Type	Ph/V/Freq.	kW	mm	kg			
AR 0120P	3.40	0.20	16	1 1/2"	Reciprocating	1/230/50	0.75	647 x 677 x 1378	101	Yes	Yes	No
AR 0180P	5.10	0.29	16	1 1/2"	Reciprocating	1/230/50	0.88	647 x 677 x 1378	112	Yes	Yes	No
AR 0220P	6.23	0.18	16	1 1/2"	Reciprocating	1/230/50	1.02	647 x 677 x 1378	122	Yes	Yes	No
AR 0290P	8.21	0.28	16	2"	Reciprocating	1/230/50	1.10	827 x 857 x 1505	178	Yes	Yes	No
AR 0370P	10.48	0.22	16	2"	Reciprocating	1/230/50	1.17	827 x 857 x 1505	184	Yes	Yes	No
AR 0550P	15.57	0.14	16	2"	Reciprocating	1/230/50	1.76	728 x 828 x 1763	242	Yes	Yes	No
AR 0710P	20.10	0.17	16	2"	Scroll	3/400/50	1.62	728 x 828 x 1763	253	Yes	Yes	Yes
AR 0790P	22.37	0.31	16	3"	Scroll	3/400/50	2.33	798 x 1148 x 1739	295	Yes	Yes	Yes
AR 1060P	30.02	0.26	16	3"	Scroll	3/400/50	2.68	798 x 1148 x 1739	310	Yes	Yes	Yes
AR 1470P	41.63	0.17	16	3"	Scroll	3/400/50	3.55	878 x 1313 x 1787	411	Yes	Yes	Yes
AR 1630P	46.16	0.31	16	3"	Scroll	3/400/50	4.09	878 x 1313 x 1787	443	Yes	Yes	Yes
AR 1960P	55.50	0.27	16	DN 100 FL	Scroll	3/400/50	4.93	993 x 1577 x 1976	537	Yes	Yes	Yes
AR 2300P	65.13	0.38	16	DN 100 FL	Scroll	3/400/50	5.57	993 x 1577 x 1976	557	Yes	Yes	Yes
AR 2990P	84.67	0.32	16	DN 100 FL	Scroll	3/400/50	7.04	1077 x 1797 x 2075	737	Yes	Yes	Yes
AR 3440P	97.41	0.35	16	DN 100 FL	Scroll	3/400/50	8.14	1077 x 1797 x 2075	760	Yes	Yes	No
AR 4110P	116.38	0.32	16	DN 150 FL	Scroll	3/400/50	10.16	1062 x 2298 x 2023	941	No	Yes	No
AR 4640P	131.39	0.35	16	DN 150 FL	Scroll	3/400/50	10.86	1062 x 2298 x 2023	963	No	Yes	No
AR 5300P	150.08	0.35	16	DN 150 FL	Scroll	3/400/50	13.13	1547 x 2247 x 2113	1025	No	Yes	No
AR 6180P	175.00	0.35	16	DN 200 FL	Scroll	3/400/50	13.26	1547 x 2247 x 2113	1162	No	Yes	No
AR 7360P	208.41	0.35	16	DN 200 FL	Scroll	3/400/50	17.62	1547 x 2547 x 2171	1480	No	Yes	No

Note

- All models are standard with R-134a refrigerant, option for R513a.
- Reference Condition for Inlet flow capacity: Ambient Temperature: 25°C, Inlet compressed air temperature: 35°C, Inlet Pressure: 7 barg.
- All data mentioned above is measured for air cooled versions according to ISO 7183, with standard voltages, at 3°C pressure dew point.
- Standard scope of supply includes mechanical level sensing drains.
- Variants also available for these Ph/V/Freq: 1/230/60 and 3/460/60.
- Integrated filters are standard for capacity of 3.40 to 97.41 m^3/min, delivered air quality at the outlet 1-4-1 as per ISO8573.
- The above indicated pressure drop is including the integrated filters for applicable models.
- Due to continuous engineering improvements, the specifications are subject to change without prior notice.

SCHEMATIC DIAGRAM



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Always Better.