

ELGI

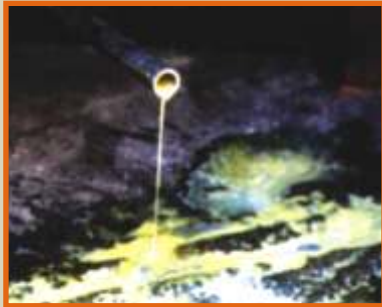
Think Long Run

ELGI
Total
Air Solutions
For Clean
And Dry Air



Think Long Run

Prevent real life problems with Elgi Airmate Refrigeration Air Dryers and Filters



Real life problem 1
Unwanted Abrasive
Sludge



Real life problem 2
Corrosion of
Piping



Real life problem 3
Damaged Pneumatic
Tools

Why do we need to dry air?
A compressor with a capacity of $3\text{m}^3/\text{min}$ at 7.5 bar, working under average conditions will 'produce' approximately 40 litres of water per day!

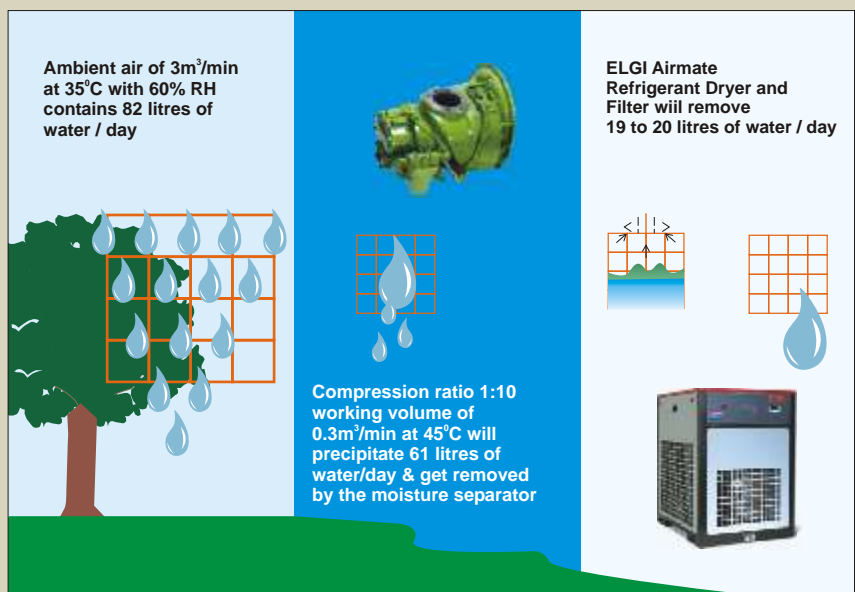
When atmospheric air cools, as is the case after compression in a compressor, then water vapour is precipitated. This water must be removed from the compressed air system to prevent production problems and damage. Drying the compressed air is an important part of the air treatment process.

Compressed air contains water, oil and dirt.
Compressed air is an essential power source that is widely used throughout the industry. However, your compressed air will contain water, dirt, wear particles, bacteria and even degraded lubricating oil, which all mix together to form an unwanted abrasive sludge.

This sludge, often acidic, accelerates wear & tear of tools and pneumatic machinery, blocks valves and orifices, resulting in costly air leaks and high maintenance. It also corrodes pipes and can bring your production process to a standstill.

Only compressed air that is totally clean and dry will ensure maximum savings.
Compressed air dryers are used to separate the condensate and contaminants. ELGI offers a reliable solution through ELGI Airmate Refrigerant Air Dryers.

What is Dew Point?
Atmospheric air contains water vapour, which condenses into water in compressed air, when the air cools to saturation point. The temperature at which this happens is Dew Point.



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Refrigeration Air Dryer



Standard Controller/Visual Performance Indicator

The standard controller includes a visual digital indicator which provides an instant indication of dryer performance.



Capillary Refrigerant Expander

Use of a capillary refrigerant expander prior to the heat exchanger ensures that only liquid refrigerant enters the evaporator, providing maximum heat transfer between compressed air and refrigerant and eliminates fluctuation dew point encountered with thermostatic or automatic expansion valves.



Heat Exchanger

High efficiency copper 'tube in tube' heat exchanger for less pressure drop and high heat transfer efficiency.



Cycle Controller

The pressure-operated, 100% modulating Cycle Controller provides a quicker response. This ensures optimum dew point control under all operating conditions. The function of the cycle controller prevents freezing of the evaporator.



Condensate Drain

Easy access to condensate drain and wiring simplifies installation and maintenance.



Model ELRD 105 illustrated



Compressors

All models utilize energy efficient compressors.

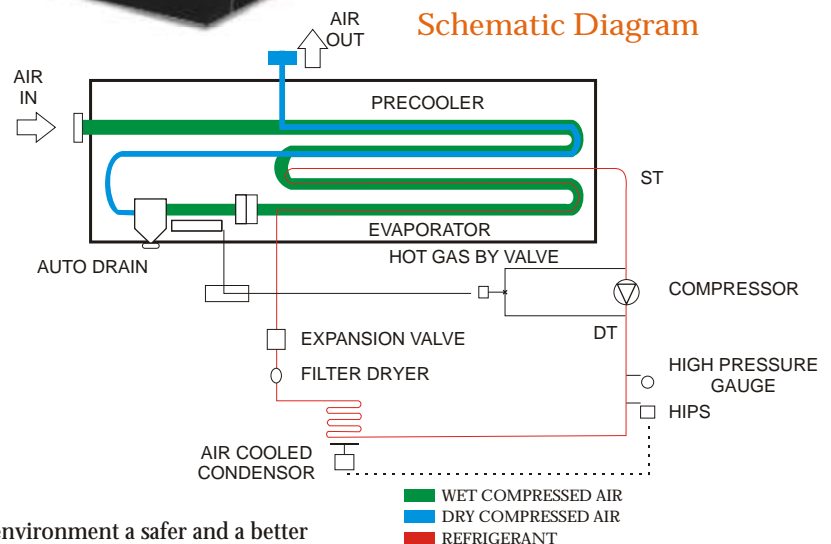
Unique Features:

- Low pressure drop
- Non-cyclic
- Compact
- Suitable for 180-260/415 Volts
- Environment-friendly - R 134A
- Tropicalised

Ozone-friendly refrigerant

ELGI thinks long run to make the earth and the environment a safer and a better place. As per international protocol, ELGI uses ozone-friendly R 134A gas as the refrigerant which has zero ozone-depletion potential.

Schematic Diagram



The ELGI Refrigeration Air Dryer Edge - In Black & White

Model	Flow		Max Pressure bar g	Electrical			Dimensions in mm			Weight in kg	Cooling media
	cfm	m ³ /min		Volts	Hz	Phase	Length	Breadth	Height		
ELRD010	10	0.28	16	230	50	Single	360	475	570	45	Air
ELRD020	20	0.57	16	230	50	Single	360	475	570	45	Air
ELRD030	30	0.85	16	230	50	Single	360	475	570	47	Air
ELRD040	40	1.13	16	230	50	Single	360	475	570	47	Air
ELRD050	50	1.42	16	230	50	Single	500	600	730	84	Air
ELRD064	64	1.81	16	230	50	Single	500	600	730	84	Air
ELRD085	85	2.41	16	230	50	Single	500	700	830	95	Air
ELRD105	105	2.97	16	230	50	Single	600	800	850	121	Air
ELRD126	126	3.57	16	230	50	Single	600	800	850	135	Air
ELRD191	191	5.41	16	230	50	Single	600	800	850	135	Air
ELRD227	227	6.43	16	230	50	Single	600	800	850	140	Air
ELRD267	267	7.56	16	230	50	Single	800	900	1150	200	Air
ELRD345	345	9.77	16	230	50	Single	800	900	1150	200	Air
ELRD450	450	12.74	16	415	50	Three	800	1000	1350	250	Air
ELRD500	500	14.16	16	415	50	Three	800	1000	1350	250	Air/Water
ELRD600	600	16.99	16	415	50	Three	900	1200	1350	275	Air/Water
ELRD750	750	21.24	16	415	50	Three	900	1200	1475	375	Air/Water
ELRD900	900	25.48	16	415	50	Three	900	1200	1725	425	Air/Water
ELRD1100	1100	31.15	16	415	50	Three	900	1200	1725	425	Air/Water
ELRD1254	1254	35.51	16	415	50	Three	1600	1100	1400	1000	Water
ELRD1552	1552	43.95	12.5	415	50	Three	1600	1100	1400	1200	Water
ELRD1750	1750	49.55	12.5	415	50	Three	1800	1100	1400	1500	Water

Performance data is measured at 7 bar, inlet temperature 45°C, ambient temperature 35°C, pressure dew point +3°C. Customised models also available on request. Dryers of higher capacities also available.