

HLA & HL HEATLESS DESICCANT AIR DRYER

HLA 90 – HLA600

HL800 – HL5000

Compression Technologies and Services
Davidson, NC 28036

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Cancels: **All Previous**

GENERAL INFORMATION

Many compressed air applications can be served appropriately by desiccant dryers. Desiccant dryers are usually, but not always, chosen because of their low dewpoint capability (to -100°F).

Heatless desiccant dryers require two vessels filled with desiccant material. While one vessel is drying the air stream, the other is being regenerated. A timer switches tasks between the vessels.

Regeneration is accomplished by removing the water from the desiccant. In the operating mode, water vapor is adsorbed on the desiccant. In the regeneration mode, dried air is passed through the desiccant bed at atmospheric pressure. The dried air removes the moisture from the desiccant and discharges it to atmosphere as vapor.

Ingersoll Rand heatless air dryers are available in several types:

Modular Dryers
(3 - 176 scfm)

HLA (90 – 600 SCFM) & HL
(800 – 5000 SCFM) – Heatless
Dryers

HLR – Rental Heatless Dryers
(600-2700 scfm)

A heatless desiccant dryer is frequently the best selection for drying small quantities of air to a -40°F or -100°F dew point, or for drying intermittent flows. Also, due to the nature of the unit, heatless dryers can be very useful in hazardous areas.

Heatless dryers have the following advantages over heated types:

- 1) Lower original cost than heat reactivated units
- 2) Require no high voltage power (saves on electrical installation and service expenses)
- 3) Operates at low temperatures
- 4) Not a fire or safety hazard

Points to remember when choosing a heatless dryer:

- 1) Required purge air may be 15% or higher and may require use of a larger, more expensive compressor and involve higher operating costs.
- 2) Are more expensive than refrigerated dryers if dew points of 35°F are not adequate.

For the above reasons, heatless dryers are most appropriate for dew points below 32°F and for remote or hazardous installations.

HLA, HL, HLR, and modular air dryers are ideal for providing instrument-quality air in the powerhouse or laboratory. The modular dryer is specifically designed to satisfy small capacity applications. It combines simple design and construction with a broad range of models meeting various flow requirements. Modular dryers can be closely matched to end-user airflow requirements for the greatest economy in dryer sizing.

Larger heatless dryers find applications in general industry, mines, process industries, off-shore platforms and drilling rigs. These heatless dryers are best suited to large volume users of very dry air. Like the modular, the HLA, HL, and HLR dryers designed for simple operation and maintenance.