



Condensation dehumidifiers



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Reinders Industrial is the leading supplier of condensation dehumidifiers. We offer you the most effective and technical solution for condensation dehumidification available today. For the benefit of your production process, we can configure a dehumidifier entirely to your requirements.

Customized according to your requirements:

- + Guaranteed product quality
- + High reliability
- + Achieves low humidity levels
- + All components are accessible through the housing
- + Optimized to minimize energy consumption
- + Particularly energetically efficient with very hot and humid air that condenses easily

Reinders Industrial condensation driers are built with **high-quality materials**:

- + Robust steel frame
- + Aluminium cabinet profiles
- + Double-walled and insulated panels made of galvanized and powder-coated plate
- + Cabinet panels are smooth on the inside for hygiene reasons

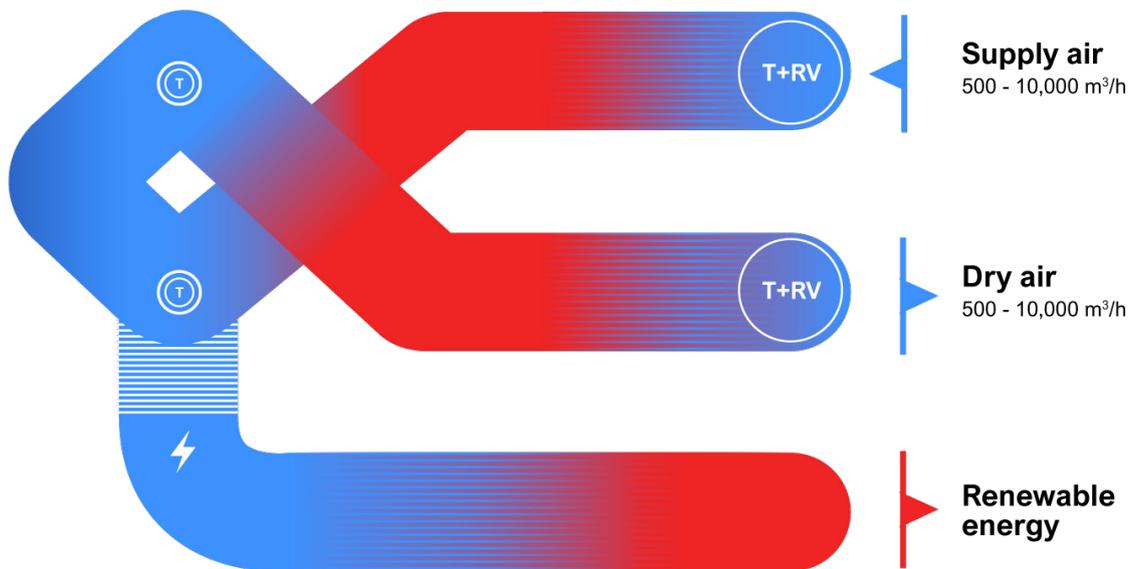
Configuration condensation dehumidifier

Condensation dehumidification with intermediate heat exchanger

Condensation drying involves cooling air by means of a chiller. The warm and humid air touches the cold surface of the baffles in the chiller which will cause moisture to condense on the baffles. This moisture is then removed through the drip tray.

The air flowing along the baffles will obtain a relative humidity of 100% and approach the baffle temperature. The “bypass air” flowing between the baffles will not be dried.

Upon leaving the cooler, the cold, saturated air will mix with the untreated air. The cold, dried air will contain fewer grams of moisture per kilogram of air in absolute terms and will be heated after the drying process, so the relative humidity will be lower than at entry.



Specifications

The Reinders Industrial dehumidification systems include:

- + PLC control including stepless capacity control cooling system 40-100%
- + Touchscreen for process visualization, parameter setting and status readout
- + Integrated control cabinet with electrical components
- + Temperature sensors
- + Industrial T+RV sensor outside air
- + Semi-hermetic suction gas-cooled R513a compressor, frequency controlled
- + High and low pressure safety according to PED
- + Industrial high-pressure liquid tank
- + Cross flow heat exchanger
- + Adsorption motor in 50/50 configuration (82% bonded silica gel)
- + Cu/Al internal evaporator
- + Cu/Al condenser for waste heat removal
- + Cu/Al condenser for waste heat recovery
- + EC-radial fan for waste heat removal
- + Expansion valve
- + G4 filter section
- + Three-way valve with modular control in pressure pipe
- + Process air fan with IEC3 motor

The following system specifications can be determined based on your requirements:

- | | |
|---|------------------------------------|
| + Dehumidification capacity (litres/hour) | + Electrical connection (V/ph/A) |
| + Outside air maximum | + Outflow dehumidifier |
| Temperature (°C) | Flow rate (m3/h) |
| Absolute humidity (g.kg-1) | Available external pressure (Pa) |
| + Filterclass process air | Temperature (°C) |
| + Available external static pressure process air (Pa) | Absolute moisture content (g.kg-1) |
| + Housing dimensions (mm) | Blow off residual heat (m3/h) |





Maintenance

Annual maintenance is essential for the optimal functioning of your dehumidifier as well as to prevent malfunctions and premature aging. If a defect is detected, our technician can intervene immediately by checking the correct parameters and settings, by cleaning the parts and repairing or replacing them. It is also good to know that preventively maintained dehumidifier(s) last even longer and are also more economical to operate.

Reinders Industrial can provide you the following options:

Maintenance plan

If you opt for a maintenance contract, Reinders Industrial will provide a full maintenance service once a year, including replacement of the suggested parts.

Maintenance and breakdown plan

In addition to the annual maintenance service, you also benefit from our breakdown service. Our 24-hour technical service is available 365 days a year, including weekends and holidays. With our dedicated service team, we will try to solve your breakdown the same day.



Industrial

Reinders Corporation

Reinders Industrial is a proud member of Reinders Corporation. A private company in the 4th generation, operating in more than 100 countries across six continents. Since 1910, the name Reinders has come to be associated with a reputation for excellence in air and climate solutions worldwide.

Interested or questions?

Get in touch with us. The experts of Reinders Industrial are at your service!

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