



SINCE 1910

Reinders 500 series

Adsorption dehumidifier

Reinders Industrial

Reinders Industrial is the leading supplier of adsorption dehumidifiers since 1910. We offer you the most effective and technical solution for adsorption dehumidification currently available.



+ Reliable operation

Quality units developed by the world's leading experts in the field.

+ Robust & resilient

Designed to withstand constant use. Standard stainless-steel housing ensures robust and hygienic performance.

+ Full control

Wide range of controllers and sensors to control both humidity and dew point. The dehumidifier can be connected to all external controller types.

+ Easy to maintain

Designed for easy access, therefore simple and inexpensive to maintain.

+ Easy to operate

Through microprocessor-based control units and advanced sensors, with the right degree of automation you need.

+ Energy-efficient

Designed to consume as little energy as possible while at the same time achieving a maximum effect.

+ Low operational costs

Long service life and remarkably inexpensive to operate.

+ Very easy installation

Place it, connect it and plug it in.

The principle

The adsorption air dehumidifier is designed to remove water vapor from the air. The whole process is autonomous and cyclic, therefore continuously providing dry air. The rotor is equipped with separated air flows which guarantees great precision and optimal functioning.





Adsorption dehumidifier

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This dehumidifier comes standard equipped with a robust stainless-steel housing suitable for indoor installation, and is optionally equipped with high quality, energy-efficient EC fans.

The dehumidifier requires very little service, nevertheless, the dehumidifier is designed to be easily accessible so that the various components can be adequately checked and replaced quickly if necessary.

Due to its modular design, the dehumidifier can be expanded with heat recovery on the regeneration side or with air cooling that does not require refrigerants and

F gases, so that no regeneration air duct is required at all. This is ideal for situations where regeneration is not possible. There are also options to expand with cooling and hot water blocks for optimal temperature control of the process air.

The adsorption dehumidifier is a complete unit that includes a rotor, a transmission motor, fans, a heater, air filters and an integrated electrical system with all components necessary for safe operation. The autonomous control system automatically adjusts the output to the requirements.

Specifications

| | Reinders 500 series | Unit |
|--------------------------------|---------------------|-------------|
| Electrical connection capacity | 1.4 - 2.9 | kW |
| Connection voltage | 230 / 1 - 400 / 3 | V / Ph+N+PE |
| Dimensions D x W x H | 398 x 554 x 771 | mm |
| Weight | 52 - 53 | kg |

The 500 series is available with several dehumidification capacities and varying specifications. Contact our product specialists for advice and exact specifications.

industrial@reinderscorp.com | +31 (0)546 – 876500



Options

Heat recovery module

The dehumidifier can be equipped with a highly efficient aluminium cross-flow air heat exchanger. This allows you to recover heat from the regeneration air leaving the dehumidifier. This thermal energy can then be reused to preheat the incoming regeneration air. This provides immediate savings in dryer energy consumption, resulting in a short payback period.

Specifications

Dimensions D x W x H: 398 x 354 x 771 mm
Weight: 21 kg

Hygrostat

The hygrostat switches the dehumidifier to the desired relative humidity [%RV] in the air.

Air cooling

The dehumidifier can be equipped with an air-cooled regeneration module, to condense the water from the regeneration air. An ideal solution when a regeneration air duct is not a good idea or cannot be mounted. Including cable for connection to the dehumidifier.

Specifications

Afmetingen D x W x H: 398 x 554 x 771 mm
Gewicht: 35 kg

Dew point controller

The dew point controller is equipped with a capacitive humidity sensor and digital readout. The combination of relative humidity [%RV] and dew point temperature [°Cdp], with the possibility of setting e.g. both a set point of 60%RV and a dew point of 10°C, makes the controller suitable for many process applications.



Monitoring and execution control

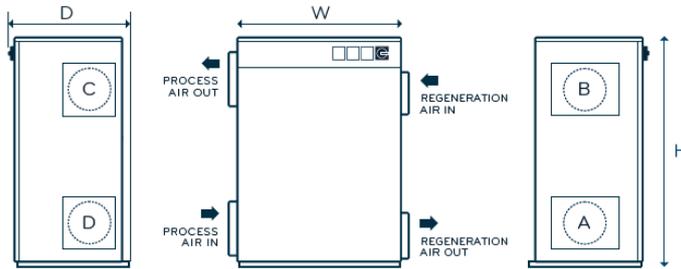
The adsorption dehumidifier is available in three versions to determine the optimal monitoring and control requirements.

The plus configuration features customized, efficient, and adjustable EC-fans for the process and regeneration airflows. It contains a sensor for the regeneration filter, the fan, and the heating element. The plus configuration also has rotor and process filter monitoring and external error and operation reporting.

| | Basic | Sensor | Plus |
|---|-------|--------|------|
| Connector for connecting external humidity sensor | ✓ | ✓ | ✓ |
| Hour meter to monitor running time | ✓ | ✓ | ✓ |
| External start/stop - hygrostat connection | ✓ | ✓ | ✓ |
| Sensor regeneration, filter, fan, heater | | ✓ | ✓ |
| Error contact for external use | | ✓ | ✓ |
| Company contact for external use | | ✓ | ✓ |
| Process filter and rotor service alarm | | | ✓ |
| Adjustable and efficient process EC fan | | | ✓ |
| Adjustable and efficient regeneration EC fan | | | ✓ |

Sketch

The total dimension of the adsorption dehumidifier with air cooling is: 398 x 1,108 x 771 mm (D x W x 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!

Reinders Industrial

Plesmanweg 17
7602 PD Almelo
The Netherlands
Tel: +31 (0)546 – 876500
Email: industrial@reinderscorp.com
www.reinderscorp.com



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