

Condair SH2

The simplest solution for adiabatic humidifying and cooling



Resistive Humidifiers

Electrode Humidifiers

Gas Humidifiers



Adiabatic Humidifiers

Life steam

For a better climate



Condair SH cost-effective humidification and cooling with revolutionary humidifier box

The Condair SH2 is an evaporation humidifier based on the adiabatic function principle that is utilised for air humidifying and also air cooling. The humidifier is specially designed for installation in monoblocks or ventilation ducts of air conditioning systems in office buildings, residential homes or industrial buildings. The Condair SH2 can be installed in practically every conventional ventilation system, thanks to its design with an extremely low installation height and the varying sizes of humidifier boxes available. All SH2 components are manufactured from non-corrosive materials.

Condair SH2 the most energy efficient way of air cooling in air conditioning systems.



In various applications cost-effective humidification is guaranteed by the SH2 technology.



Advantages of the Condair SH2 humidifier:

- Suitable for air humidifying and waste air cooling
- Free of glass fibres and no emission of particles which could be inhaled
- Operation with drinking water, softened and fully-demineralised water
- Simple and rapid maintenance
- Very short humidifying distance
- Single-phase electrical connection
- Optional UV water disinfection



V-profile humidifier box

The core element of the SH2 is the patented humidifier box located in the air duct. Dry air flows through the box, water flows over the hygroscopic mats and the extremely large wet surface releases humidity to the air. This method enables air humidifying or cooling with limited electrical energy.



The VP humidifier box consists of synthetic mats with an impressed V-profile (VP) which enables a more intensive exchange of air and water.



Model

The Condair SH2 is available in two basic versions. The "flow" model with direct water drainage and the "Reflow" model for water recirculation. The circulation pump conveys the water in the latter via EPDM plastic hoses to the spray beam located above the humidifier box. The water then trickles vertically through the boxes. The water not needed for humidifying flows back into the water tray where it is collected and recirculated.

The water is not collected in the water tray in the case of the "flow" model, but rather flows directly into the drain. Whether to use a "flow" or "REflow" system depends considerably on the annual humidifying capacity and the water quality. An UV discharge lamp can be optionally utilised for both models. The UV beams treat the humidifying water and sterilise water bacteria.



SH2 control

The SH2 control unit controls the humidity and governs the water management. The integrated processor with real-time clock controls the air humidity, water descaling, unit purging and water quality control, all fully automatically..



Installation

Installation of the SH2 is simple and uncomplicated. The non-corrosive water tray and lateral supports can be integrated in the ventilation duct in a matter of minutes. The humidifier boxes can be mounted in the simplest of manners. Only three connections are needed, the water supply, waste water drainage and electrical connection. Naturally enough, a circulation pump powered by single-phase current is utilised.

Technical Data

VP humidifier boxes	200/300 mm deep max. eta=85%/95%
Pressure loss box 200 mm	typ 70 Pa at 3m/s
Pressure loss box 300 mm	typ 100 Pa at 3m/s
Air speed via box	max. 3,5 m/s
With droplet eliminator	max. 5.5 m/s
Electrical connection voltage	230 VAC 50...60 Hz
Water quality	drinking water, softened or fully-demineralised water
Fire protection class humidifier box	DIN EN 53438 Class F1
Permissible supply air temperature	5...50°
Permissible ambient temperature (control)	1...40°
Permissible ambient humidity (control)	75% r.h.
Norm conformity	CE

Consulting, Sales and Service



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