

# Dehumidifiers

## Horizontal dehumidifier units

Dehumidifiers with heat pump  
and Free Cooling recovery stage

**GC DH**  
series



GC DH series

## Dehumidifiers are units with a heat pump and exterior air heat recovery stage via Free Cooling GC DH series

The water vapour generated due to natural evaporation in any application where there is a high level of humidity causes damage to the construction materials and furniture in the environment and adverse effects for those occupying the area.



The quality of DECACLIMA's GC units is guaranteed by the **Eurovent certification**



### Main characteristics

- Flow rates from 3,000 m<sup>3</sup>/h to 17,000 m<sup>3</sup>/h
- EC Plug Fan fans
- Extruded aluminium profile with thermal bridge break
- Rubber seal for water-tightness with the panels
- 50 mm thick sandwich-type panels, with a lacquered outer panel
- Evaporator with direct expansion heat exchanger with copper pipes and aluminium fins with special anti-corrosive finish
- Condenser with heat exchanger and cooling circuit using hermetic scroll compressors
- High-efficiency cross-flow heat recovery units
- Filtration stages for particle retention
- Built-in electrical panel
- Support frame adapted to the needs of the installation

### Standard finishes

- Galvanised steel interior
- Lacquered sheet exterior
- Modular aluminium structure

### Options

- UVc germicidal chamber
- Different filtration stages and characteristics
- Hatches module with heat recovery unit
- Different communication protocols

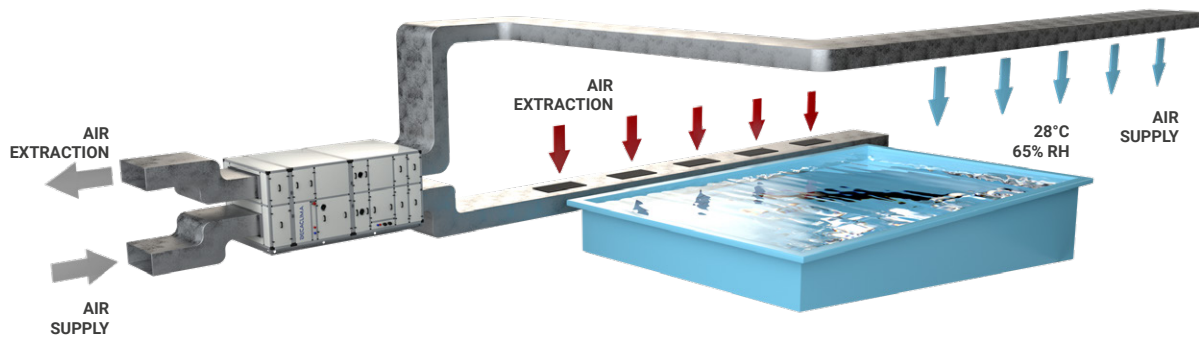
## Operation

The DH dehumidifiers have been designed to manage the heating and dehumidification of the area, ensuring the necessary air renewal processes and ideal air quality for the comfort of people and the durability of construction materials and furniture.

The design of these units makes it a completely autonomous machine that includes all of the necessary characteristics to achieve and maintain

the preset comfort conditions. The DH dehumidifiers are capable of maintaining the desired temperature and humidity values in any installation, such as an indoor pool or sports centre, including a hot water coil to raise the air temperature and a cooling circuit that is used to dehumidify and heat the air.

The units include a cross-flow heat recovery unit to improve the machine's efficiency.



## Constructive details

### EXTERNAL PANELS

Sandwich-type panels with a steel surface finish with thicknesses from 25 mm to 50 mm, depending on the size. Designed to achieve optimum thermal insulation with thermal conductivity values of 0.024 w/m°C and also ensuring excellent acoustic insulation with high mechanical resistance.

### HEATING STAGE

Coils with heat exchangers through the energy provided by the hot water generated by a boiler.

### EXTERNAL STRUCTURE

Extruded aluminium profiles with nylon corners to ensure a perfect enclosure.



### COOLING COILS

Coils with heat exchangers through the energy provided by the hot water generated by a boiler.

### COOLING CIRCUIT

Cooling circuit made up of a hermetic or semi-hermetic compressor with internal protection and an evaporator and condenser coil in copper pipes and aluminium fins with anti-corrosive epoxy finish.

### FILTERS

To improve indoor air conditions, filtration stages are required to capture particles and thus improve the quality of the air that people breathe in this environment.

### CONTROL

Different controllers and communication protocols can be used depending on the needs of each installation.