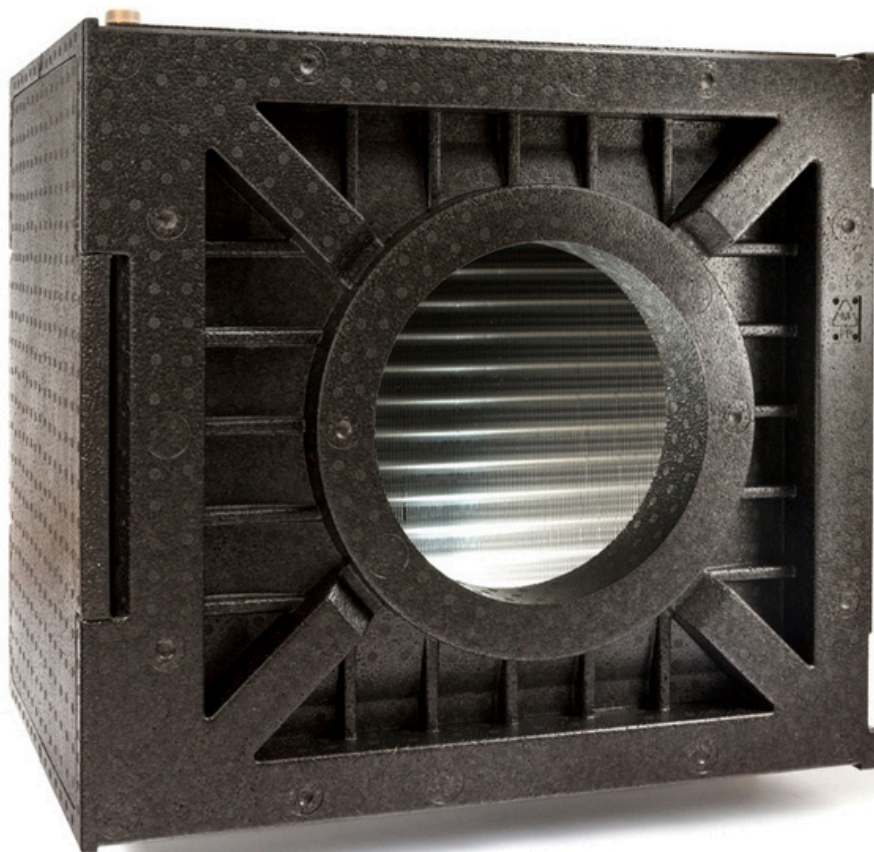


Installation manual

AirHC1000 - warm water post heater/ cooler



INTERNATIONAL 2025

Valid from 1st of September 2025

- Please read this instruction manual completely before installing the product.
- Installation work must be performed by authorized personnel only.
- Please retain this installation manual for future reference after reading it thoroughly.

Safety Precautions

Thank you for purchasing AirHC1000 - warm water post heater/cooler.

*READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING AND USING THE EQUIPMENT!
THIS INSTRUCTION HAS BEEN MADE WITH THE GREATEST CARE.*

HOWEVER, THIS INSTRUCTION CONFERS NO RIGHTS. WE RESERVE THE RIGHT TO CHANGE ALL OR PART OF THE CONTENTS OF THIS INSTRUCTION WITHOUT PRIOR NOTICE.

This instruction contains all information necessary for an optimal installation and startup by skilled personnel. It can also be used as a manual for maintenance and service work.

It is absolutely important to follow the instructions in this manual very thoroughly in order to guarantee the correct function of the unit. Not following the instructions in this manual and/or using non-original parts lead to a lapse of any warranty and liability claims.

Please contact your dealer for further assistance if there are any questions left which are not covered in this manual.

0 Brief product description

The AirHC1000 is a highly efficient and compact EPP insulated duct air post-heater/cooler designed for air handling systems with an airflow of up to 1000 m³/h (588 CFM). The unit is suitable for use both with ventilation recovery units and standalone ventilation systems. Thanks to its advanced insulation and high performance, the AirHC1000 ensures reliable operation even under extreme weather conditions (down to -30°C / -22°F) and high efficient cooling from +35°C/95°F. Two compartments for filters provides high quality air filtration possibilities.

1 Warranty and Liability

1.1 General

Our general terms and conditions in its current version apply to the AirHC1000. The warranty period begins with the initial startup, but at the latest one month after delivery. This warranty only covers materials, not service. It is only valid if maintenance has been performed according to our specifications by an authorized plumber.

1.1.1 Warranty Terms

The warranty period of our units is 2 years beginning on the date of delivery. The warranty only covers defects in material or construction faults that occurred during the warranty period. The unit may not be dismantled without prior written permit of the manufacturer in case of a warranty claim. Spare parts are only covered by warranty if installed by an authorized plumber.

The warranty expires if:

- after the warranty period has elapsed;
- the unit is used without genuine filters;
- parts are used, that have not been delivered by the manufacturer;
- the unit is used improperly;
- defects occur due to improper connection or use and decontamination of the system;
- non-authorized modifications are made.

Liability

The AirHC 1000 has been developed and produced for use in so called comfort ventilation systems also for Controlled environment agriculture (CEA). Any other use is considered an improper use and can lead to damages to equipment and persons; the manufacturer is not liable in such cases. The manufacturer is not liable for any damages caused by:

- non-compliance of safety, operation and maintenance notes;
- improper installation;
- use of non-authorized parts;
- defects that occur due to improper connection or use and decontamination of the system;
- after the warranty period has elapsed;
- normal wear and tear.

2 Safety Instructions



Please obey the safety instructions in this manual. Disregarding of safety instructions, warnings and notes may result in damages to persons or the unit.

- Only an authorized plumber is allowed to install, connect, start up and maintain the unit, unless otherwise stated in this manual.
- The installation of the unit has to be carried out in accordance to local building, safety and installation regulations of the municipality or the waterworks / electric utility.
- Please obey the warnings and safety instructions, notes and instructions in this manual.
- Please keep this manual next to the unit.
- Any modification to the AirHC 1000 or its manual is not permitted.
- The brine/water in the hydraulic circuit is under pressure. If maintenance should be necessary the pressure has to be released first. For that purpose, use the existing valves / filling valves.
- Please assure to disconnect mains supply before carrying out any maintenance operations by cutting the power supply of the linked control module (of the ventilation unit or the self-sufficient control unit).

2.1 Symbols used

The following symbols are used in this manual:



Attention, special note!



***Risk of: - physical injury of user or installer
- damaging the unit
- failures if the instructions are not followed thoroughly***

3 Installation Prerequisites

The following paragraphs help to assess if the installation of the unit in a specific room is possible:

The installation of the AirHC 1000 has to be carried out in accordance to local safety and installation regulations of the waterworks / electric utility and the regulations described in this manual. The place of installation has to provide enough space around the unit for air duct connections, collector pipe connections and maintenance.



The liquid inside the system must not freeze. Freezing of the liquid would damage the system irreparably.

The condensate has to be drained off unit. Use a siphon to drain off the condensate.

We recommend not to install the unit in rooms with high humidity (e.g. bathroom/toilet). Thereby, condensate formation on the outside of the unit is prevented.

An intake air isolation damper is required if the system is used in areas with temperatures below -15 °C. This isolation damper has to block the air in case of a power outage. A power outage can damage the system if the temperature is below -15 °C. This is why the isolation damper is needed.

4 Shipping, Unpacking, Package Contents

Please handle the unit with care.



Please do not remove the packaging until installation! Please dispose the packaging environmentally friendly.



Protect the open ends (spigots) against dust and humidity before and during mounting work breaks!

5 Installation

5.1 Mounting



Please assure a minimum clearance of 1 meter for maintenance purposes in front of the unit.

Mount the AirHC 1000 on a wall using wall mounting bracket, please assure that wall can hold the weight of the unit.

1. Anchor the wall mounting bracket horizontally on the wall.
2. Hang the unit into the wall mounting bracket.

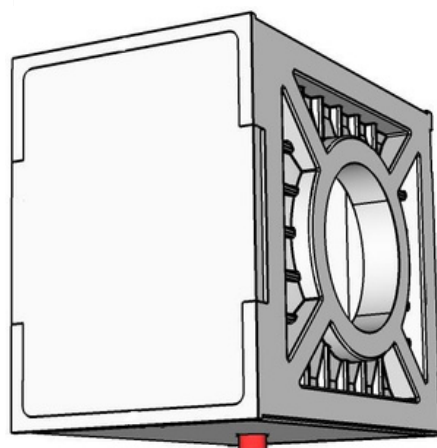
5.2 Air duct connection:

Connect the air ducts to the corresponding pipe connections DN 250. Seal all air duct connections of the unit ensuring air tightness.

5.3 Connection of Condensate Drain

Please pay attention to the following notes:

- The condensate has to be drained off frost-protected. Use a siphon to drain off the condensate.
- Connect the condensate drain air-tight to the siphon (with a surge tank of minimum 60 mm) using a pipe or hose. Connect the siphon the sewer.
- Place the upper edge of the siphon minimum 40 mm under the condensate drain of the unit.



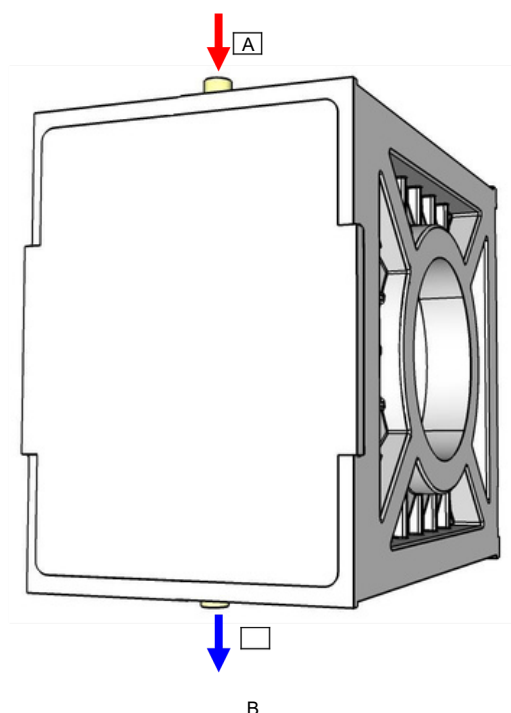
Siphon connection



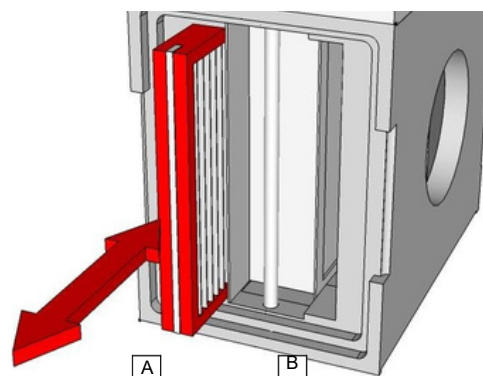
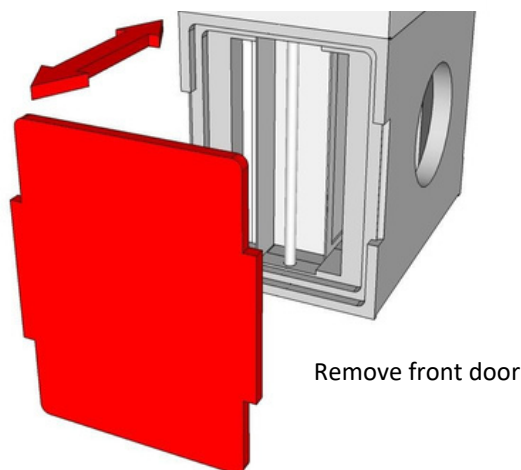
Check the water drain with connected intake air duct and MVHR unit switched on.

5.3.1 Connection of the media supply;

Connect one side of the PE-pipe with the help of an adapter to the inlet of the unit media (water/glycol) (A)
 Connect one side of the PE-pipe with the help of an adapter to the outlet of the unit media (water/glycol) connection (B). Both connections are $\frac{3}{4}$ inch tapered external thread.



Insulate all brine pipes of the brine circuit. All brine pipes inside the building and the wall bushing have to be sealed steam-tight and heat-insulated to avoid condensate.



Location of the filter:

- “A” if airflow direction is from left to right
- “B” if airflow direction is from right to left

5. Insert new filter.
6. Close front door



Only use genuine filters provided by the manufacturer.

5.3.2 Maintenance of the Heat Exchanger



Check the brine/water-to-air heat exchanger at least every 3 months.

1. Stop ventilation system.
2. Open front door
3. Remove filter
4. Check the lamellas of the brine-to-air heat exchanger for sediments and damages.
 - Use a lamella comb to align the lamellas.
 - Rinse the battery with tepid tap water.



Never use aggressive or solvent cleaners!

5. When all work is done insert filter
6. Close front door.



EC Declaration of Conformity

We, GHT Solutions Ltd., declare that the product:

Duct heater for cooling water / hot water / refrigerant

Models: AirHC 1000

For the evaluation of the compliance with this Directives, the following standards or standardized documents were applied:

EN 60355-1:2002 +A11+A1+A2+A13+A14;

TUV Report reference number: 140483404E/45018/TR/14

We hereby certify that the mentioned products comply with applicable requirements in following EU directives / UK-Regulations:

- PED Directive 2014/68/EU
- Pressure Equipment (Safety) Regulations 2016
- ROHS Directive 2011/65/EU

The following coils using air as secondary fluid complies with the Directive / Regulations conditions:

- Air heating / cooling coils using water / glycol as primary fluid.

We declare that the equipment in question complies with the provisions of the Directives above.
Products complies with art. 4 par. 3 and do not have CE-marking.

Type of unit: AirHC 1000 - Test Pressure (bar) – 35bar.

Person responsible for making this declaration

Name, Surname: Ivars Gredzens

Position/Title: Director

Declaration of Origin: By this we declares that these products are of European Origin.

Signature: _____

Valletta, Malta

1st november 2025

Contacts

"GHT SOLUTIONS" Ltd
18; Block 19 Vincenti Bld, Strait Street, VLT 1432, Valletta, MALTA
www.ghtsolution.com