

# INSTALLATION INSTRUCTION

---

**HW-600x350-2**  
**HW-600x350-2**  
**HW-700x400-2**  
**HW-1000x500-2**  
**HW-1200x600-2**

**CW-600x350-3**  
**CW-600x350-3**  
**CW-700x400-3**  
**CW-1000x500-3**  
**CW-1200x600-3**



Liquid heat exchanger

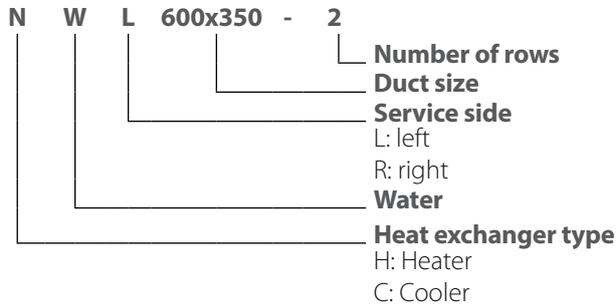
## CONTENTS

Designation key.....	2
Compatibility of heat exchangers and units.....	2
Overall and connecting dimensions.....	3
Mounting of the heat exchanger.....	3
Technical maintenance.....	5
Storage and transportation regulations.....	5
Manufacturer's warranty.....	6
Certificate of acceptance.....	7
Seller information.....	7
Installation certificate.....	7
Warranty card.....	7

Liquid heat exchanger is a component part and is not designed for independent operation.

The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

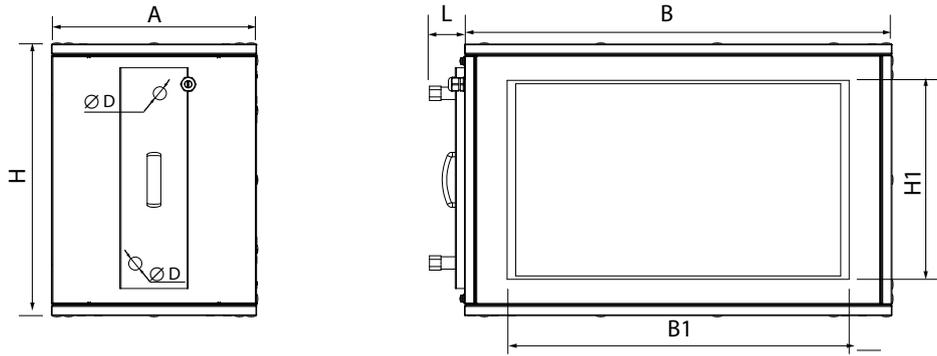
## DESIGNATION KEY



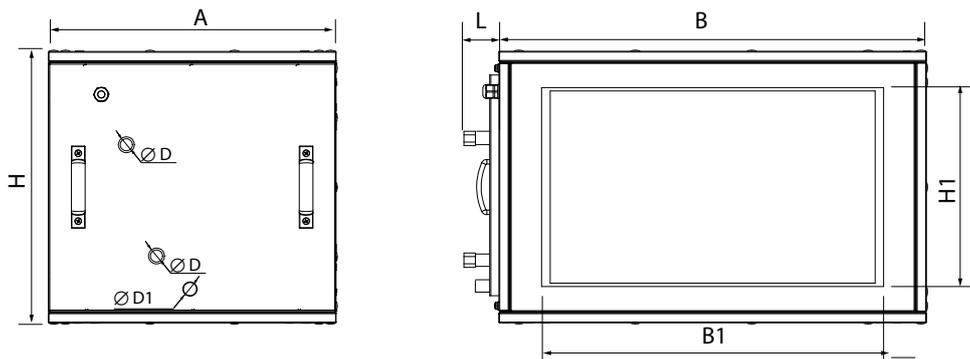
## COMPATIBILITY OF HEAT EXCHANGERS AND UNITS

AV02 RH 1500	HW-600x350-2	CW-600x350-3
AV02 RH 2500		
AV02 CFH 1500		
AV02 CFH 2500		
AV02 CFP 1500		
AV02 CFP 2500		
AV03 CFP 3500		
AV02 CFV 1500		
AV02 CFV 2500		
AV03 CFV 3500		
AV02 RV 1500		
AV02 RV 2500		
AV03 RV 3500		
AV03 RH 3500		
AV03 CFH 3500	HW-1000x500-2	CW-1000x500-3
AV07 CFH 5000		
AV07 CFH 6000		
AV07 RH 5000		
AV07 RH 6000		
AV07 CFV 5000		
AV07 CFV 6000		
AV07 RV 5000		
AV07 RV 6000		
AV07 CFP 5000		
AV07 CFP 6000	HW-1200x600-2	CW-1200x600-3
AV12 RH 9000		
AV12 CFH 9000		

## OVERALL AND CONNECTING DIMENSIONS

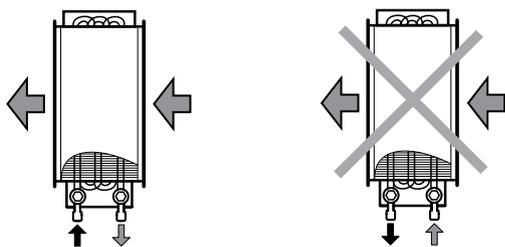


Water heater	A	B	B1	H	H1	L	D, "	Weight [kg]
	mm							
HW-600x350-2	360	750	600	480	350	115-150	1	28
HW-600x350-2		890	700	645	400			
HW-700x400-2		1280	1000	710	500			
HW-1000x500-2	350	1430	1200	907	600		2	115
HW-1200x600-2								



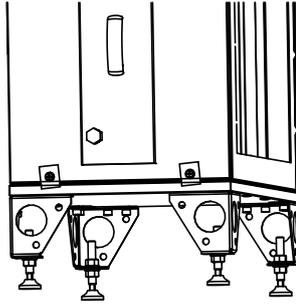
Water cooler	A	B	B1	H	H1	L	D, "	D1, mm	Weight [kg]
	mm								
CW-600x350-3	505	750	600	480	350	115-150	1	25	42
CW-600x350-3		890	700	645	400				
CW-700x400-3		1280	1000	710	500				
CW-1000x500-3		1430	1200	907	600				
CW-1200x600-3									

## MOUNTING OF THE HEAT EXCHANGER



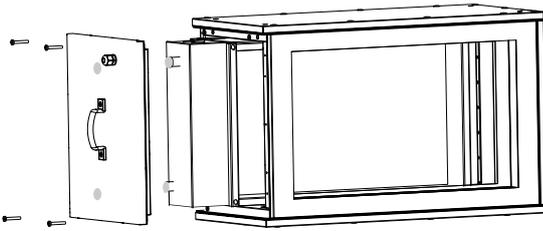
The flow and return connections to the heat exchanger must be made in such a way that the heat exchanger operates in counter-flow mode. Direct-flow connection reduces the temperature difference and reduces the heat output of the heat exchanger.

The heat medium supply pipe system must be planned in such a way that it does not interfere with other sections. The connection of the heat exchangers to the supply system must enable easy disassembly of the pipes and allow the heat exchanger to be removed from the installation space during maintenance operations.

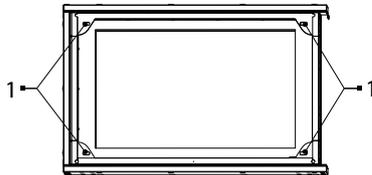


For floor mounting, the feet must be screwed to the heat exchanger.

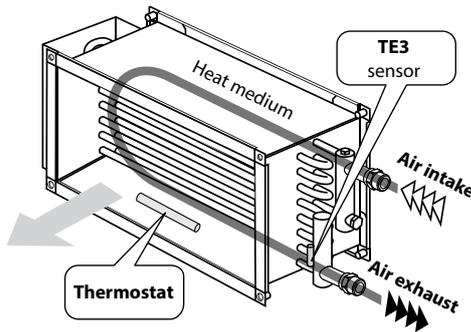
The feet are not included in the delivery set for 600x350 size heat exchangers and must be ordered separately.



To connect the heat exchanger to the unit, remove the front panel and remove the heating/cooling unit.



Fasten the heat exchanger casing to the unit with screws.  
1 - places for mounting screws.



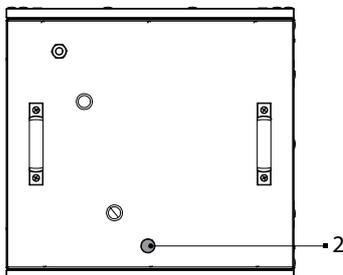
### Sensor placement

The **TE3** return water temperature sensor is used for frost protection of the water heater and is mounted in such a way that it is in sufficient contact with the pipe surface.

**The thermostat** is used for frost protection of the water heater. It is mounted directly on the surface of the water heater on the outlet side of the heated air and measures the air temperature downstream of the heater.

The supply air temperature control sensor **TE5** must always be placed downstream of the heater or cooler (in the direction of air flow), mounted in the air duct downstream of the heat exchanger at a distance of 3 m from it.

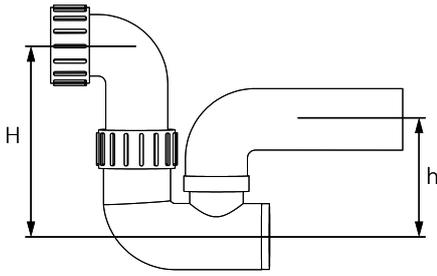
### Condensate drainage



**The water coolers** are equipped with a drain pan for condensate collection.

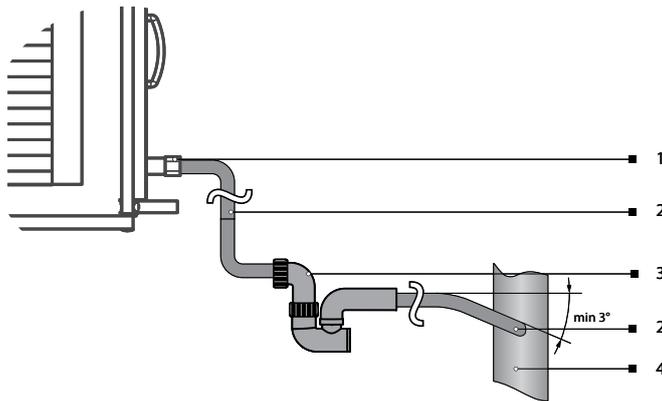
The condensate is drained off via the drain pipe (2)

**The water coolers** are equipped with drain pipes for condensate drainage outside the casing. U-traps must be connected to the drainage pipes. The dimensions of the U-trap are selected depending on the pressure in the section, shown in the table.



Fan full pressure [Pa]	Dimension H, mm	Dimension h, mm
<600	100	50
600-1000	140	70
1000-1400	190	95
1400-1800	240	120
1800-2200	290	145
2200-2600	340	170

Connect the spigot, U-trap and the sewage system with metal, plastic or rubber connecting pipes.



- 1 – drain pipe
- 2 – connecting pipe
- 3 – U-trap
- 4 – sewage system

Make sure that the water flows into the sewage system before starting operation. Fill up the U-trap with water before using it.

## TECHNICAL MAINTENANCE

Water heat exchangers must be fitted with frost protection systems. A non-freezing liquid (e.g. a water-glycol mixture) can be optionally used in winter. If the heating system is switched off or the unit is switched off, or the air temperature may drop below +5 °C, the water must be drained from the heat exchanger.

Regularly check the level of soiling of the heat exchanger. The deposition of dust on the surface of the heat exchanger leads to a deterioration in its heat output and an increase in air resistance. Even if the unit is equipped with filters, the dust contained in the supply air settles on the heat exchanger plates. If the heat exchanger plates are dirty, they must be cleaned in one of the following ways:

Using a vacuum cleaner with a soft suction nozzle.

Blowing with a jet of compressed air directed parallel to the heat exchanger lamellas.

Rinsing with warm water and a cleaning agent that will not corrode the aluminium or copper elements.

When the unit is switched off, the temperature of the circulating heat medium must be kept to a minimum so that the temperature inside the unit does not exceed +60 °C. Exceeding this value can cause damage to certain components or units installed in neighbouring sections.

## STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

## MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.

The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

### The warranty repair does not include:

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

### The manufacturer's warranty does not apply to the following cases:

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismantled by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



**FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.**



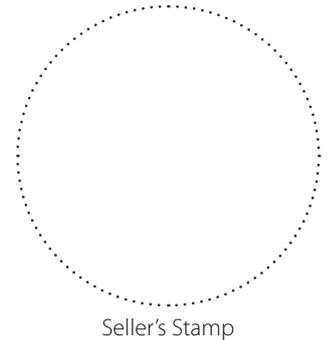
**USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.**

### CERTIFICATE OF ACCEPTANCE

<b>Unit Type</b>	Liquid heat exchanger
<b>Model</b>	
<b>Serial Number</b>	
<b>Manufacture Date</b>	
<b>Quality Inspector's Stamp</b>	

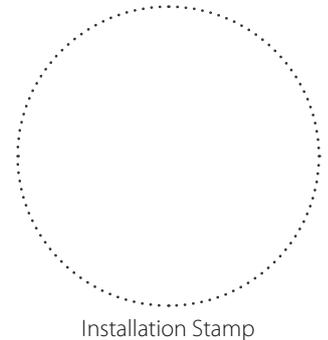
### SELLER INFORMATION

<b>Seller</b>	
<b>Address</b>	
<b>Phone Number</b>	
<b>E-mail</b>	
<b>Purchase Date</b>	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
<b>Customer's Signature</b>	



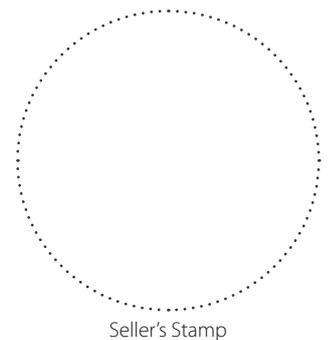
### INSTALLATION CERTIFICATE

The _____ unit is installed pursuant to the requirements stated in the present user's manual.	
<b>Company name</b>	
<b>Address</b>	
<b>Phone Number</b>	
<b>Installation Technician's Full Name</b>	
<b>Installation Date:</b>	<b>Signature:</b>
The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.	
<b>Signature:</b>	



### WARRANTY CARD

<b>Unit Type</b>	Liquid heat exchanger
<b>Model</b>	
<b>Serial Number</b>	
<b>Manufacture Date</b>	
<b>Purchase Date</b>	
<b>Warranty Period</b>	
<b>Seller</b>	





**VENTS**

