



Assembly and Installation Instructions

water heat exchanger of the series X-KWT 62 and X-KWT 161

If you do not pay proper attention to these installation instructions the manufacturer cannot accept liability for any resulting damage to the device itself, the environment, property, or personal injury.

Your safety is our concern!

This cross-flow water heat exchanger consists of a plastic casing PA66 30% FG-FR and a corrugated tube coil.

1. Purpose:

These heat exchangers are made to heat up bathing water using warm water from heating, solar systems, heat pumps or low temperature heating systems.

2. Safety Instructions:

This device has not been designed for being used neither by individuals (including children) with physical, mental or sensory disabilities nor by people who lack the necessary experience and/or knowledge, unless they are under the supervision of someone entrusted with their safety or they are instructed by that person in how the device should be used.

3. Hazards:

3.1 Do not exceed the maximum allowable pressure loads. Bathing water circuit 3 bar – heating circuit 6 bar.

3.2 Attention! Danger of getting burned! Without bathing water flowing through it, the heat exchanger might heat up to the primary temperature of the heating water.

The hot water connections can reach temperatures up to 100 °C.

To prevent burns and/or the destruction of the heat exchanger as a result of overheating, **it is essential that the flow-switch stops the heating pump.** It should not be possible to switch on the heating pump if the filter pump is not in operation. The installation of a switch-off delay for the filter pump is recommended. Disconnect the heating pump from the circuit approximately 10 minutes before the filter pump.

3.3 To prevent damage to the heat exchanger and its surroundings, check the heat exchanger regularly (at least once a week) during the bathing season for external signs of damage and for leaks.

4. Installation:

4.1 **Always install the heat exchanger after the filter.**

4.2 The heat exchanger needs to be protected against frost.

4.3 During assembly, carefully follow the directions in the diagram below (see 4.9). This way, damage and performance decrease can be avoided. Keep the loops of the pipes in mind to prevent idling!

4.4 **Make sure that the heat exchanger is always full of water.**

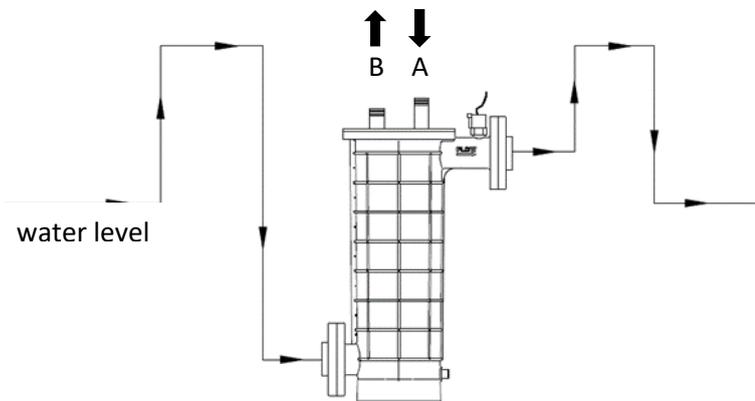
4.5 To prevent corrosion, be careful that no metals containing iron get washed into the heat exchanger (contact corrosion).

4.6 Keep the heat exchanger always full of water (above and below water level) if the bathing facility gets shot down over the winter months. If there is risk of frost the heat exchanger needs to be completely empty. Under these circumstances, vertical positioning of the heat exchanger is an advantage.

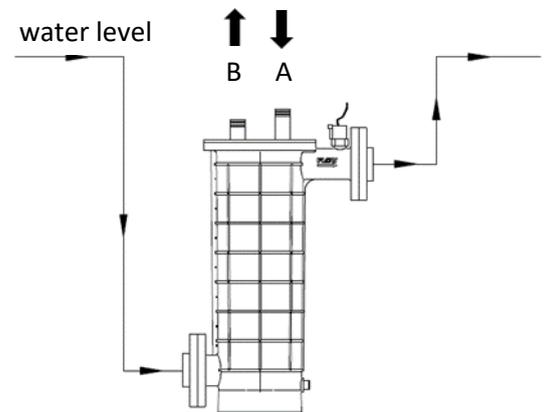
4.7 If after initial start-up the heat exchanger fails to perform properly, all air must be completely removed from the primary side (A/B). The water inlet and outlet (see diagram A-B) should be checked to ensure that they have been properly installed.

4.8 Install a backflow preventer on the primary input (A) as overheat protection.

4.9 Installation layout / above water



Installation layout / below water level



5. Draining:

If the heat exchanger cannot be kept full of water because of risk of frost or any other reasons, it must be completely emptied. Please pay close attention to the following instructions:

- 5.1 Open the ½" drain plug and let the water run out.
- 5.2 Disconnect the heat exchanger from the primary and secondary water circuit.
- 5.3 Empty the remaining water from the plastic shell and store the heat exchanger in a dry place, heating connections facing downwards.

6. Cleaning:

Thanks to their unique design, cleaning these heat exchangers is simple and easy:

- 6.1 Disconnect the heat exchanger from the primary and secondary water circuit.
- 6.2 Loosen the eight M8x35 screws on the top.
- 6.3 Pull the top with the heating coil out of the plastic-shell. Proceed with cleaning the heating coil and the shell using a high-pressure cleaner.
- 6.4 Bring the heating coil back to its original form and slide it into the shell.
- 6.5 Screw the top on and connect the heat exchanger to the primary and secondary water circuit.

7. Important information regarding water quality:

Do not exceed the following parameters:

<u>Stainless steel AISI:</u>	Chloride content: max. 500 mg/l
	Free chlorine: max. 1 mg/l
	PH: max. 6,8 – 7,8

- 7.1 If these limits are being ignored, the heat exchanger might be damaged through corrosion.
- 7.2 Always install the disinfection devices after the heat exchanger and in a way that chemicals or other gases cannot get into the heat exchanger.
- 7.3 Please consider 4.3 and 4.6 also as prevention against corrosion. If the heat exchanger is halfway filled with pool water during standstill or during winterizing, corrosion will happen. Air in combination with chlorine residue or similar chemicals, even in the smallest amounts, build an aggressive atmosphere in the heat exchanger and will destroy it.



8. Important general note:

The heat exchanger needs to be installed in an area with sufficiently dimensioned drainage. If heat exchangers, filters and similar devices are damaged, water may leak uncontrollably. Basements and nearby rooms may quickly get flooded and suffer material damage.

9. Please keep these assembly and installation instructions on file for further reference. Thank you.

15.12.2022 max daprà KG-daprà andreas&Co Via Graf 2, I-39050 Fiè allo Sciliar

technical changes reserved

TECHNICAL INFORMATION FOR ALL WATER/WATER COILED TUBE HEAT EXCHANGERS

type	capacity	temperature difference	heating area	pump capacity primary	pump capacity secondary	loss primary	loss secondary
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X-KWT AISI 161	90°C	70 °C = 0,23 kW/°C	1,11 m ²	3,2 m ³ /h	20 m ³ /h	0,48 bar	0,3 bar
	161 kW						

X-KWT AISI 62	50°C	30 °C = 2,06 kW/°C	1,11 m ²	2,8 m ³ /h	12 m ³ /h	0,38 bar	0,16 bar
	62 kW						