Mode of
assembly and installation for heat exchanger
of the "dual use" series E2WX / E3WX / E5WX / E3WX-400V

Failure to comply with these installation methods prevents the manufacturer from being liable for damage to the equipment, the environment, material assets or people.
It's about his safety!

These cross flow heat exchangers consist of a jacket and a stainless steel coil tube with integrated Incoloy resistance.

1. Description:

In this text the "dual use" exchanger will be referred to hereinafter as the "heat exchanger". These heat exchangers are basically only allowed to heat the water in swimming pools and whirlpools with the pump running. Modifications or transformations are not allowed without the consent of the manufacturer.

2. Safety warnings:

2.1. This appliance is not intended to be used by persons (including children) with limited physical, sensory or mental abilities or who lack experience and / or knowledge, unless supervised by a person responsible for their safety or receiving instructions from said person on how to use of the appliance.

2.2. Warning: never open the control panel without having turned off the mains circuit breaker and secured it against accidental activation.

3. Important:

3.1. All people who have to do with the assembly, commissioning, use and maintenance of the heat exchanger must be suitably qualified and carefully observe these installation methods.

4. The commissioning can only be carried out by an electrical expert (VDE 0105) in the correct way according to the safety regulations in force CEI 64-8 / DIN VDE 0100.

5. Danger of fire:

In case of inappropriate use or shutdown of all safety systems, the heat exchanger can reach temperatures above 100 ° C in extreme cases.

5.1. In the case of wall mounting, especially if the construction material is highly flammable, a heat-resistant panel must be mounted between the heat exchanger and the wall. This panel must be larger than the heater 10cm in length and 10cm in width.

5.2. The installation must not be carried out in the vicinity of flammable materials.

5.3. No covers or insulation can be used.
Danger of burns! The heat exchanger can be heated up to the temperature of the heating water if the pool water does not flow through the exchanger. On the heating water side, the connections can reach up to 90 ° C.
To exclude dangers such as burns and / or destruction of the heat exchanger by overheating,
the power supply to the heating pump must be automatically cut off if the filter pump stops.
It must not be able to be turned on if the filter pump is not running!

6. Security systems:

6.1. The heat exchanger should be protected by at least two safety shutdowns:
a) Safety thermostat 55 ° C
b) Flow switch.
The heat exchanger must not be controlled by the flow switch but by a contact of the filter pump contactor (remote control switch). See point 9.8. and the wiring diagram.

6.2. The safety systems switch off the heat exchanger when unauthorized values are reached.

7. Corrosion prevention:

7.1. Observe points 11.2,4 and 5 also as indications against corrosion.

7.2. Only water with the following values can be used, otherwise there is a danger of corrosion

Chloride max. 500 mg/l
Chloride max. 3
mg/lPH max 6,8 -
7,8

Warning: sterilizers are to be installed after the heat exchanger so that no chemicals or gases can enter the heat exchanger when the system is stopped.

8. Ice risk:

In case of frost, completely empty the heat exchanger. Remove the flow switch and store it in a frost-free place.

9. To take in consideration:

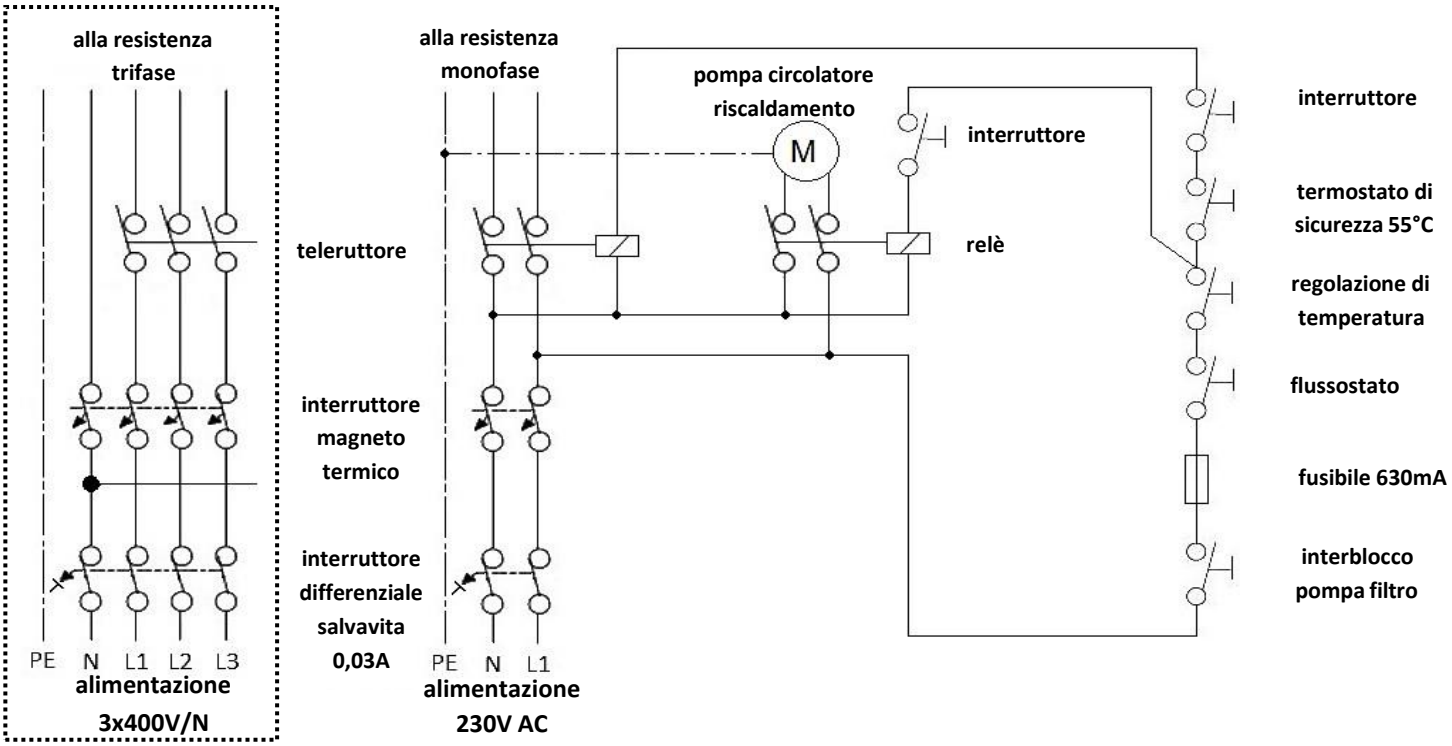
The specific resistance of water at 15 ° C must not fall below 550 Kilo OHM. This means that, respecting the established limit values (see above), it must move between 1.5 Mega OHM x cm and 550 Kilo OHM x cm.

10. Safety information:

10.1. Before putting the heat exchanger into operation, a circuit breaker and a residual-current device (0.03 A) must be installed on the power supply line.

10.2. The electrical installation must necessarily provide for grounding.
10.3. All metal parts of the system must be connected to the equipotential circuit.
10.4. The line for the electrical connection must be fixed.
10.5. For the electrical connection use a standard H07 RNF cable.
10.6. Observe CEI 64-8 / VDE 100 in the cable sections.
10.7. The control circuit can carry a maximum of 1 A of alternating current. The command box is to be agreed with this maximum power.
10.8. If the pump is switched off, the power supply to the heat exchanger must be automatically interrupted. The control panel must guarantee this safety, regardless of the flow switch.

11. Circuit diagram:

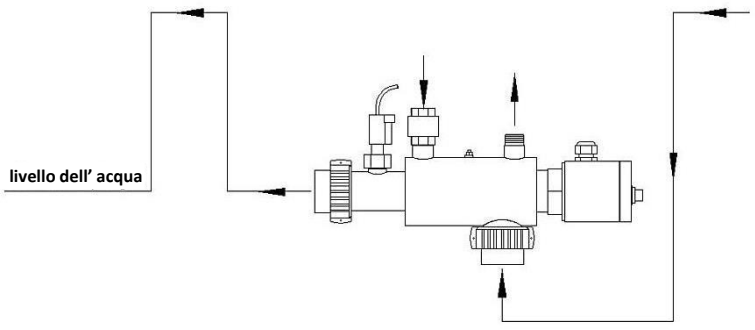


12. Mountage mode:

11.1 The heat exchanger must always be installed after the filter.
11.2 The flow direction in the coil tube must go in the opposite direction to that of the secondary flow (see point 12).
11.3 To avoid corrosion damage, care must be taken that iron-containing metals do not enter the heat exchanger (contact corrosion).
11.4 It is imperative to ensure that in the off-season period (system off) the heat exchanger is always full of water (above and below the water level). If there is a danger of freezing, the heat exchanger must be completely emptied.
11.5 Make sure that the heat exchanger is not half filled with swimming pool water during the off-season or out of season. This leads to corrosion of the appliance. Air in combination with residual chlorine or similar chemicals, even in minimal quantities, causes an aggressive atmosphere to form inside the heat exchanger, which destroys it.
11.6 If the heat exchanger is barely performing after commissioning, it must be ensured that the primary side is well vented. At the water inlet there is the check valve, which also serves as a protection against overheating.

13. Mountage scheme:

disposizione di montaggio sopra il livello dell' acqua



disposizione di montaggio sotto il livello dell' acqua