



Escalade

Pool Heat Exchanger — Escalade WHE Installation, Operating & Maintenance Manual

Series codes: 203.11.68 – 203.11.70



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1. Safety Warnings

Read and follow these instructions for proper installation, use and maintenance. **Failure to install the unit correctly may void the warranty.** Retain this manual for future reference.

HEATING ONLY WHILE THE FILTRATION PUMP RUNS

The circulation pump of the **primary circuit** must be controlled by a thermostat, which must be **connected via the filtration pump** to allow heating **only when the filtration pump is running**. The thermostat/thermistor must be positioned at the **water inlet** of the heat exchanger for correct temperature detection.

MAXIMUM PRIMARY TEMPERATURE 95 °C

The primary (hot) circuit temperature **must not exceed 95 °C**. Do not over-tighten any connection — this **could damage the heat exchanger**.

FROST — DRAINING IS MANDATORY

If the heat exchanger is not used during the winter months it must be **drained** to prevent frost damage. It is recommended to fit **isolation valves on both sides** of both circuits so the water can be shut off and the unit removed from the system.

2. Description & Performance

The **Escalade** is an Elecro **welded heat exchanger** for swimming pools, manufactured in England. It transfers heat from a **primary (hot) circuit** — boiler, heat pump or solar — to the **secondary pool circuit**, without the two waters mixing. Three sizes are available: **WHE-30, WHE-40 and WHE-75**.

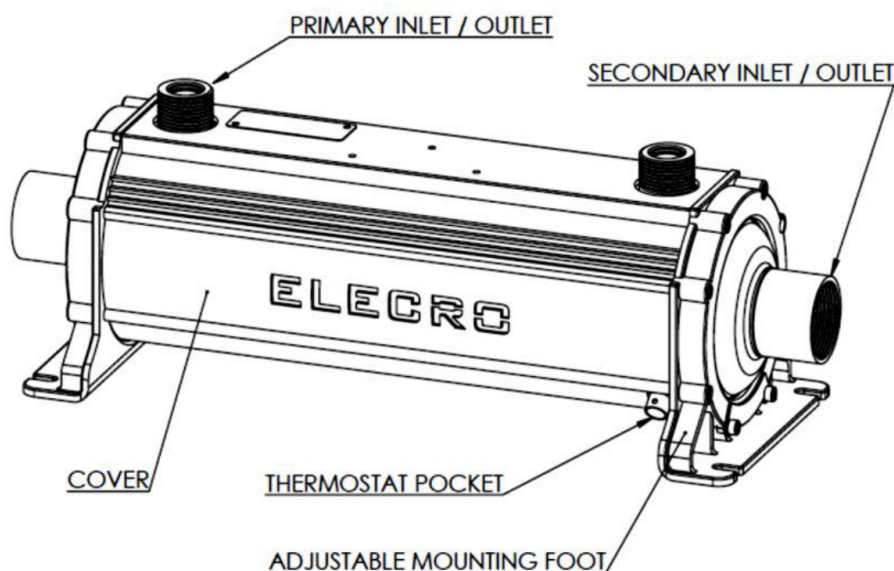


Fig 1.

Heat exchanger components

Key: primary inlet / outlet (hot circuit) · secondary inlet / outlet (pool) · cover · thermostat pocket · adjustable mounting foot.

3. Technical Data & Product Codes

Output depends on the **temperature difference ΔT** between the primary (hot) and secondary (pool) circuits. The hotter the primary, the higher the output.

Oxygen code	Model	ΔT 50 °C	ΔT 60 °C	ΔT 70 °C
203.11.68	WHE-30	26 kW	30 kW	34 kW
203.11.69	WHE-40	34 kW	37 kW	40 kW
203.11.70	WHE-75	54 kW	64 kW	75 kW

To calculate BTU: multiply kW by **3,412**. For example 30 kW = 102,360 BTU.

Model	Primary flow	Primary head loss	Secondary flow	Secondary head loss
WHE-30	1.1 m ³ /h	9.7 kPa	15 m ³ /h	11.7 kPa
WHE-40	2.4 m ³ /h	23 kPa	19 m ³ /h	16.1 kPa
WHE-75	3.0 m ³ /h	52 kPa	21 m ³ /h	17.8 kPa

4. Dimensions

Model	A	B	C
WHE-30	382 mm	467 mm	262 mm
WHE-40	430 mm	515 mm	310 mm
WHE-75	674 mm	759 mm	554 mm

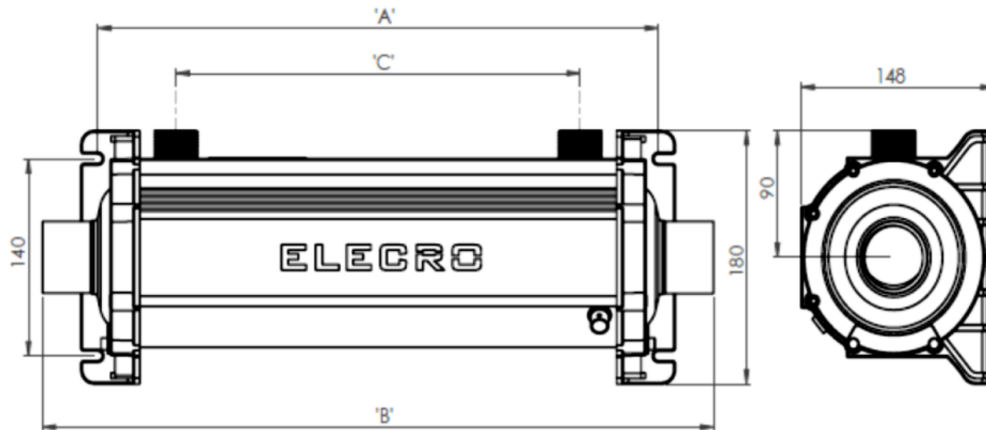
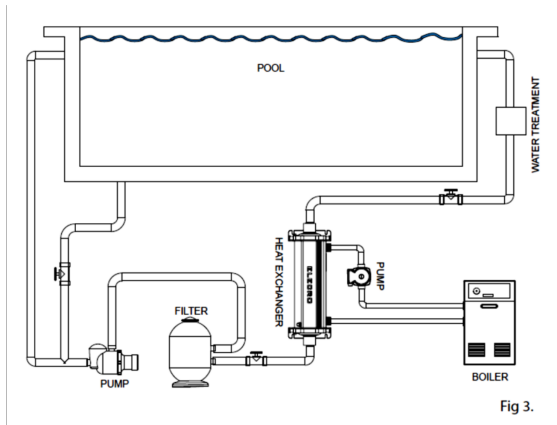


Fig 2.

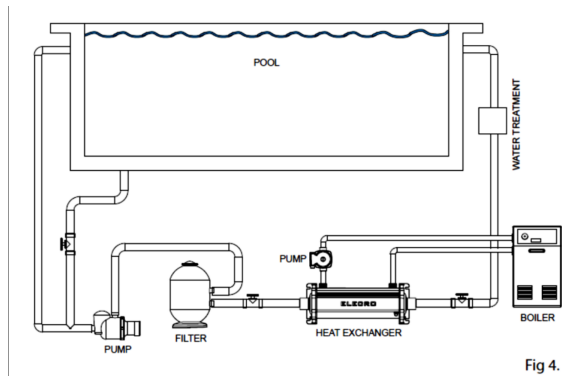
Dimensions

5. Installation

- The heat exchanger can be installed **horizontally or vertically**.
- It is plumbed in-line **after the filtration pump and filter** and **before** any water-treatment equipment.
- It must be fed with **clean water** — weed and debris must not be allowed to enter.
- Install it **as close as possible to the boiler** to minimise heat loss.
- Install it at the **lowest point** of the filtration circuit, to assist air purging and keep it full of water.
- If installed **vertically**, the pool water (secondary) must **enter low and exit high**.
- The manifold can be **rotated** so the connections face the correct way.

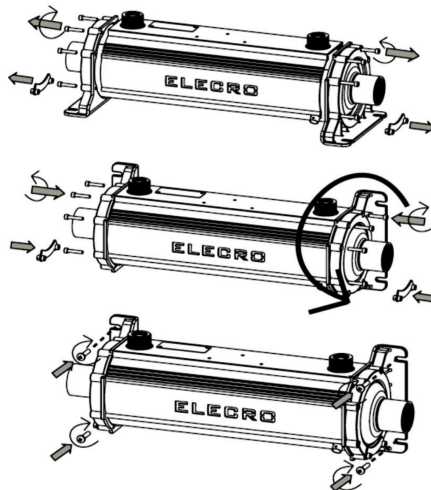


Installation layout



Alternative layout

Fig 5.



Rotating the manifold to orientate the connections

6. Connecting the Two Circuits

- **Secondary (pool):** in-line in the filtration circuit, after the pump and filter.
- **Primary (heating):** directly to the boiler circuit, using the **1" BSP male connectors** provided.
- Fit **air bleed valves** at the high points of the primary circuit.
- The two circuits must run **counter-current**: the primary water must flow in the **opposite direction** to the secondary.
- The **thermostat control is included only with the fully equipped optional kit**; the standard unit is supplied with a **thermostat pocket** only.

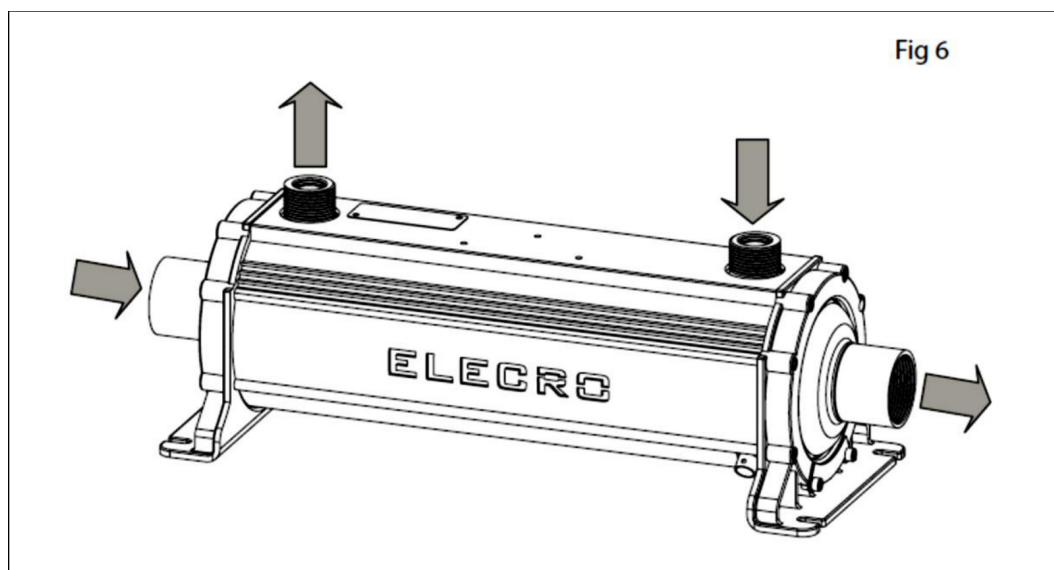


Fig 6

Counter-current — the primary flows opposite to the secondary

7. Water Quality

Parameter	Limit
Chlorine content	max 3 mg/l (ppm)
Chloride content	max 150 mg/l
pH	6.8 – 8.0
Calcium hardness	200 – 1,000 mg/l (ppm)

8. Winterising

- If the heat exchanger is not used during the winter it must be **completely drained**.
- **Isolation valves** are recommended on the inlet and outlet of **both** circuits, so the water can be shut off and the unit removed from the system.

9. Warranty & Contact

- Guaranteed for **two years** from the date of purchase against faulty workmanship and materials.
- The manufacturer will, at its discretion, replace or repair faulty units returned for inspection. Proof of purchase may be required.
- Not covered: **incorrect installation**, inappropriate use or neglect, frost damage, water outside the quality limits, over-tightened connections.

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ISO Certifications

ISO 9001:2015 Quality Management <i>EUROCERT</i>	ISO 14001:2015 Environmental Management <i>BQV</i>	ISO 45001:2018 Occupational Health & Safety <i>BQV</i>
ISO 22301:2019 Business Continuity <i>EUROCERT</i>	ISO 46001:2019 Water Efficiency <i>BQV</i>	

Recycling of materials must be carried out in accordance with applicable regulations.