

SST Heat Exchanger

Installation & Operating Manual



ELECRO
ENGINEERING

Important Notes!

Congratulations on purchasing your new Elecro Shell & Spiral Tube (SST) Heat Exchanger. Elecro heat exchangers are manufactured in the UK, to exacting standards, and use the highest quality materials. To ensure exceptional performance and reliability please take a moment to read these instructions. Your new heat exchanger must be installed and operated as specified.

This heat exchanger must be installed correctly by qualified personnel only, and in accordance with any national/ regional requirements / regulations.

The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure they do not play with the appliance.

Product Overview

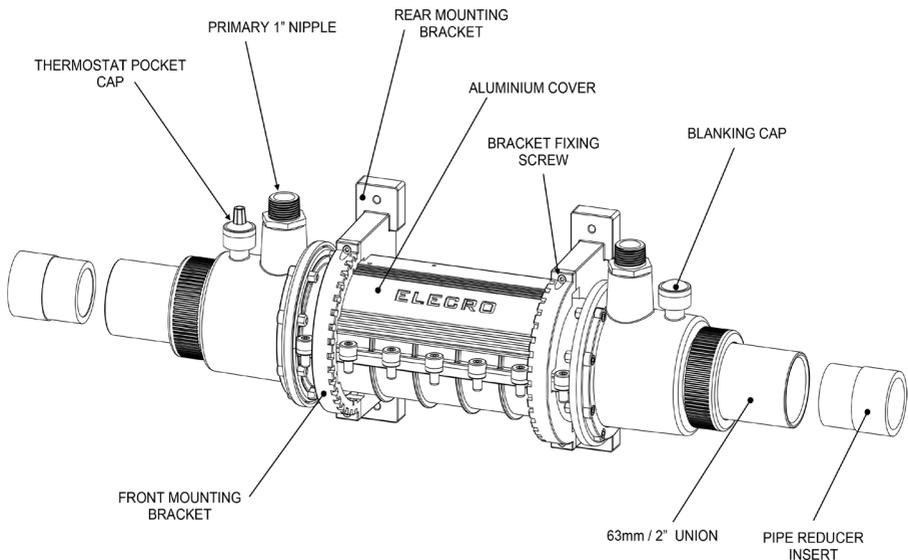


Fig 1.

**Thermostat Pocket Cap and Blanking Cap are interchangeable*

Transfer values

Standard Power Output	Primary Flow (m ³ /h)	Primary Head Loss (kpa)	Secondary (POOL) Flow (m ³ /h)	Secondary (POOL) Head Loss (kpa)	ΔT 50°C (kW)	ΔT 60°C (kW)	ΔT 70°C (kW)
36-kW	1.1	7.8	12	5.1	29	36	41
50-kW	2.5	26.0	15	8.8	42	50	57
75-kW	2.7	51.2	18	13.7	51	64	75
95-kW	3.2	77.4	18	16.6	67	81	95

ΔT = Temperature difference between Primary and Secondary (Pool)

To calculate BTU multiply kW x 3412 (kW x 3412 = BTU Output)

Note: Maximum primary operating temperature is 400°C

MAX Primary Pressure = 30 Bar

MAX Secondary Pressure = 4 Bar

Dimensions (mm)

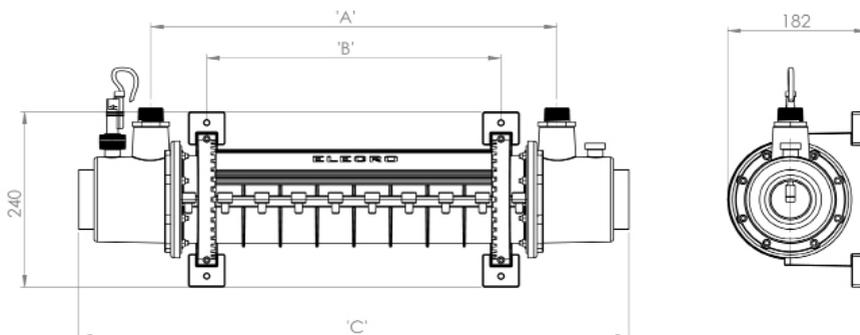


Fig 2.

	A	B	C
36-kW	290	143	478
50-kW	386	240	574
75-kW	530	384	718
95-kW	674	528	862

Installation

Your Elecro SST Heat Exchanger can be installed either horizontally or vertically (please see Fig. 3 and 4).

Vertical Installation

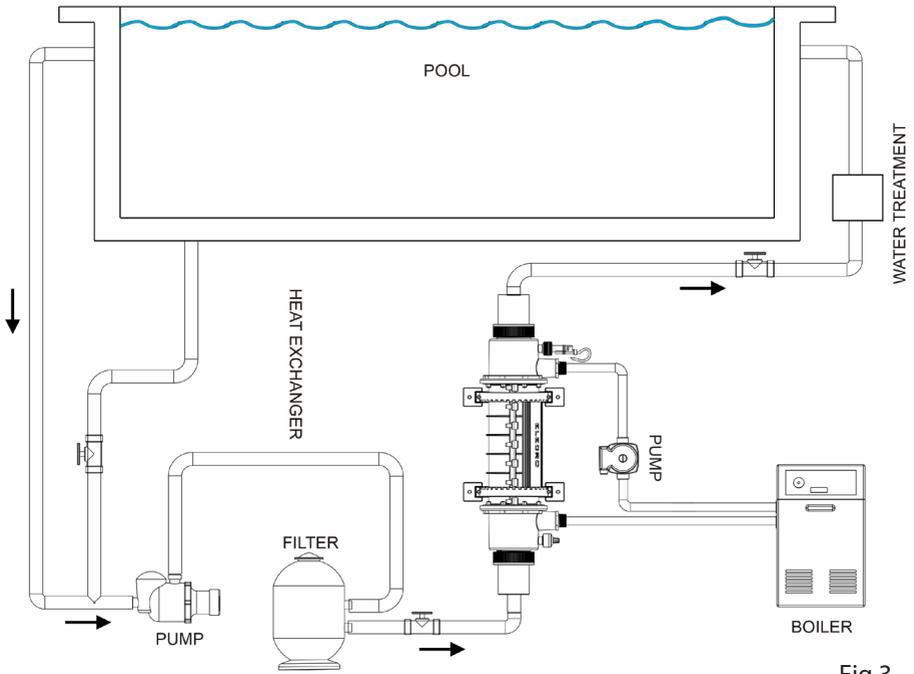


Fig 3.

Horizontal installation

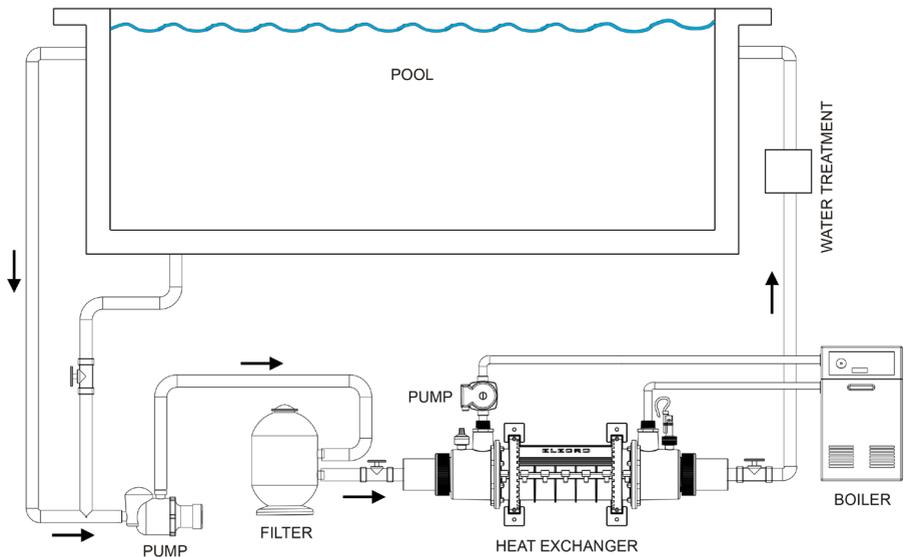
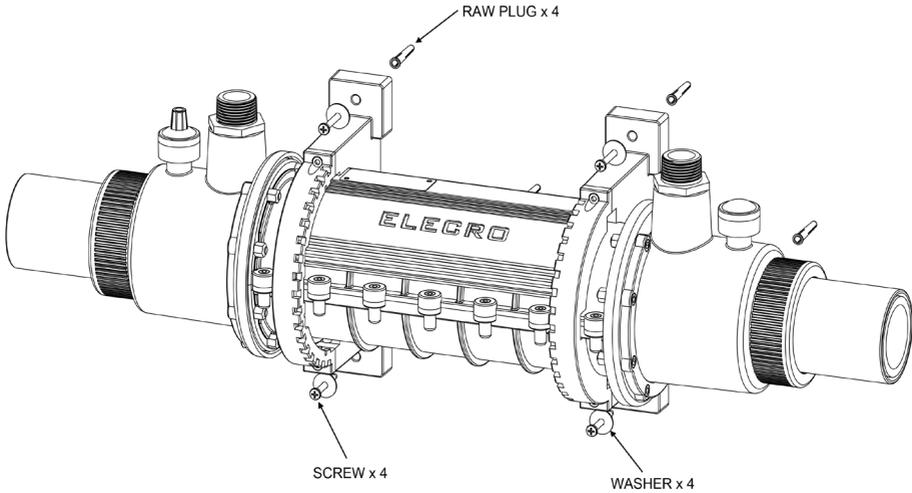


Fig 4.

Wall mounting:

Fig 5.



Note: wall fixings are not supplied

Your Elecro Heat Exchanger should be connected to the two independent water circuits as follows:

1. Connection to the secondary circuit (POOL Water)

The heat exchanger should be plumbed inline, after the filtration pump and filter and before any water treatment equipment. It should be fed with clean water. Debris must not be allowed to enter the heat exchanger. The heat exchanger should be installed as close as possible to the boiler to minimise heat loss.

To assist with correct air purging and to ensure that the heat exchanger remains full of water during operation, it should be installed at the lowest point in the filtration circuit.

If the heat exchanger is installed in a vertical plain, it is essential that the pool/pond water (secondary circuit) enters low and exits high.

2. Connection to Heating or Cooling Circuit (Primary)

The heat exchanger should be connected directly to the primary heating circuit i.e. boiler, via the 1" BSP male connectors, see diagram Fig. 6.

NOTE: The circulation pump of the primary circuit should be controlled by a thermostat, which should be connected via the

filtration pump to allow heating or cooling only when the filtration pump is running.

Air bleed valves should be installed at the high points of the primary circuit. To ensure correct temperature detection, it is essential that the thermostat / thermistor is positioned at the water inlet of the heat exchanger.

NOTE: The Thermostat Control is only included with the optional fully equipped kit. The standard unit is supplied only with a thermostat pocket and blanking cap.

Care should be taken not to over tighten any connections, as this could result in damage to the heat exchanger.

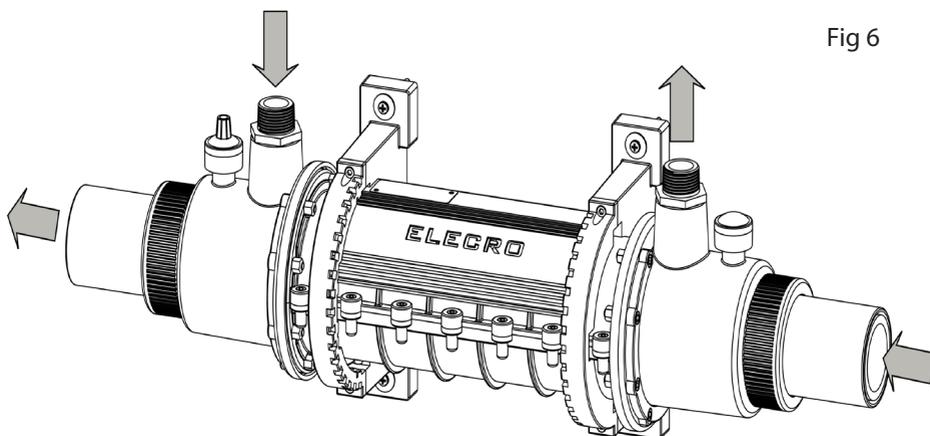


Fig 6

Circulation direction:

The primary and secondary circuits should be installed so water flows are counter current i.e. the hot water from the primary circuit should flow in the opposite direction to the water in the secondary circuit.

CAUTION

If the heat exchanger is not used during winter months it must be drained to prevent frost damage.

NOTE: For winterising / maintenance - it is recommended that the heat exchanger is installed with isolation valves on both water input and output sides of the primary and secondary circuits. This will allow the water to be shut off on both sides and aid removal from the system, when required.

Guarantee

Your Elecro heat exchanger is guaranteed for 3 years from the date of purchase against faulty workmanship and materials.

ELECRO ENGINEERING LTD will replace or repair, at it's discretion, any faulty units or components returned to the company for inspection. Proof of purchase may be required.

ELECRO ENGINEERING LTD will not be liable in cases of incorrect installation, inappropriate use or neglect.

CE Declaration Of Conformity

The manufacturer declares that the herewith products or ranges.

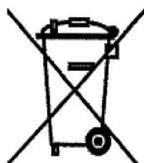
RoHS compliance statement

Elecro Engineering Limited certify that our Heater Exchanger range complies in accordance with RoHS Directive 2011/65/EU on the restriction of hazardous substances.

Waste of Electrical / Electronic Equipment

This product complies with EU directive 2012/19/EU

Do Not dispose of this product as unsorted municipal waste.



This symbol on the product or on its packaging indicates that this product should not be treated as household waste. Instead it should be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more information please contact your local Civic office, your household waste disposal service or the retailer where you purchased the product.



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