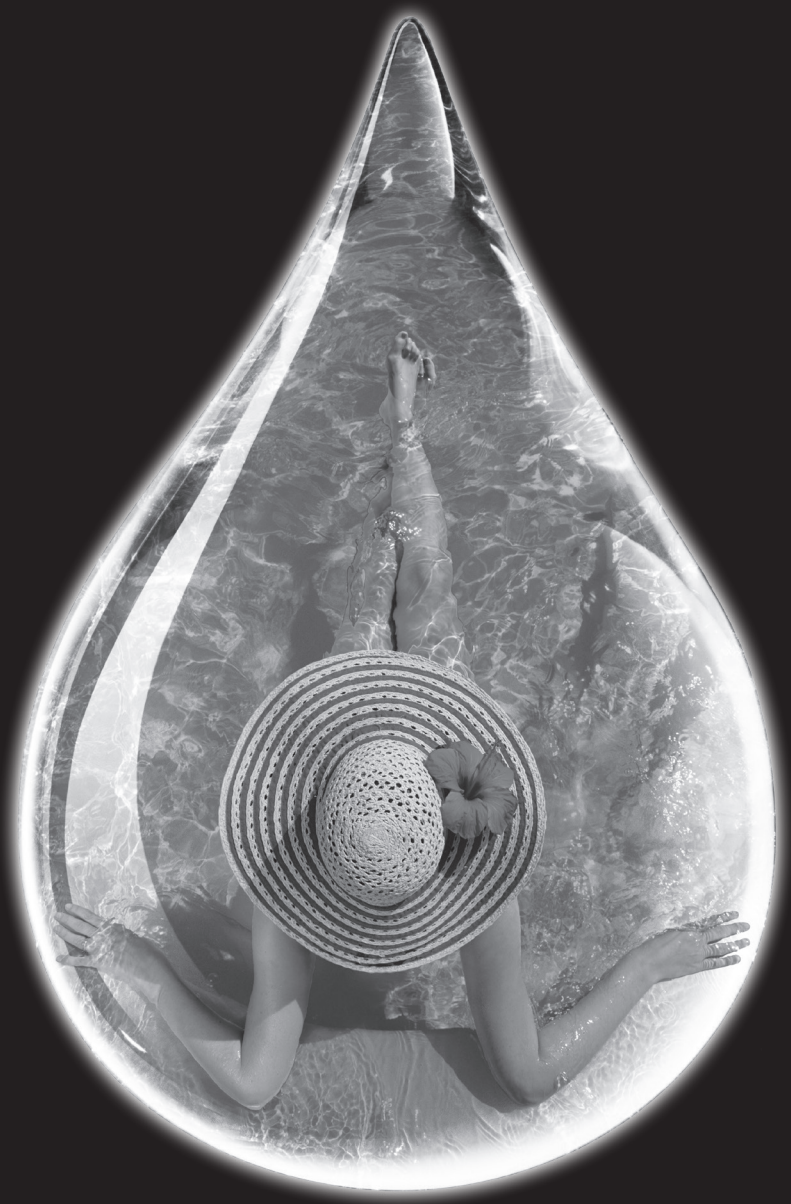
Escalade Welded Heat Exchanger

Installation & Operating Manual



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Important Notes!

Congratulations on purchasing your new Elecro Escalade Welded Heat Exchanger. Manufactured in the UK to exacting standards, using 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.

Product Overview

Standard Escalade Welded Heat Exchanger

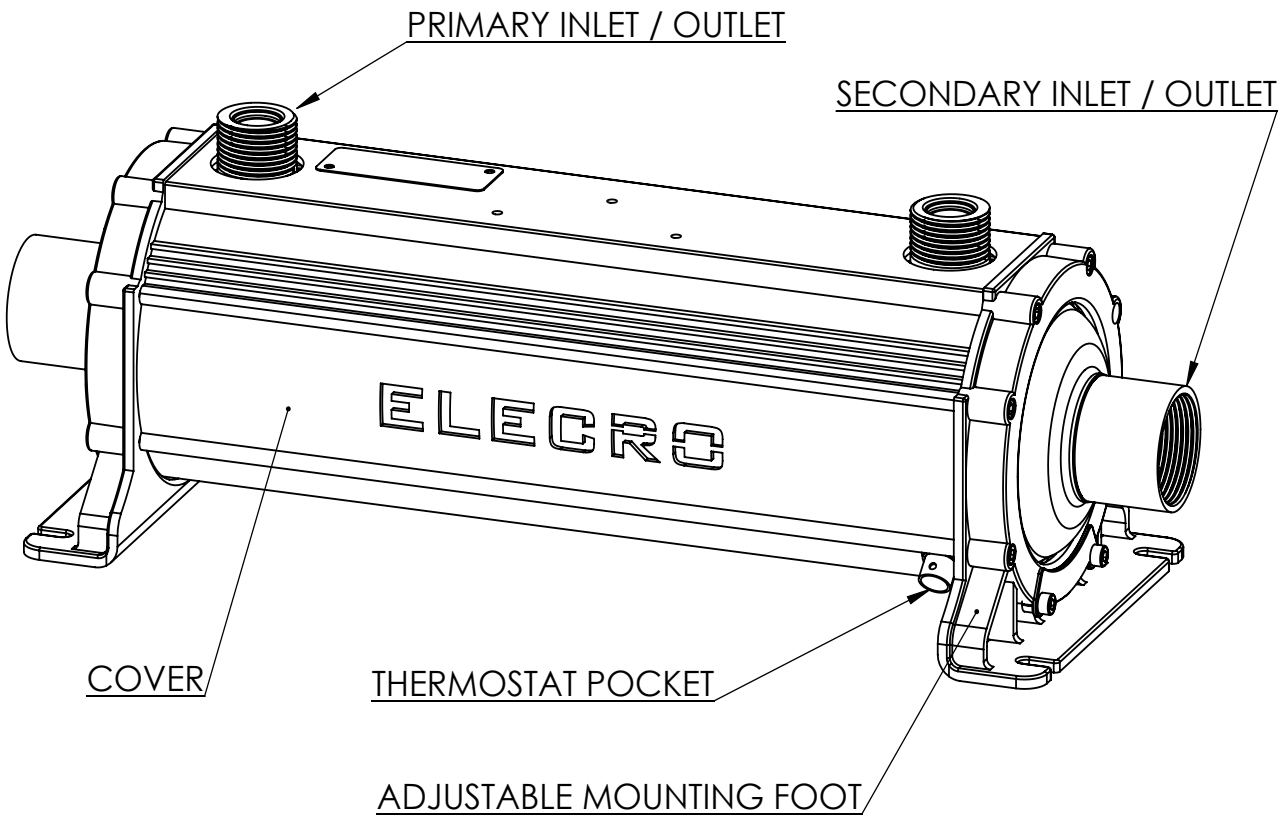


Fig 1.

Specification

Transfer values

Standard Power Output	Primary (HOT) Flow (m^3/h)	Primary (HOT) 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)
30-kW	1.1	9.7	15	11.7	26	30	34
40-kW	2.4	23	19	16.1	34	37	40
75-kW	3.0	52	21	17.8	54	64	75

ΔT = Temperature difference between Primary (Hot) and Secondary (Pool)
To calculate BTU multiply kW x 3412
kW x 3412 = BTU Output
Note: Maximum primary operating temperature is 400°C

Dimensions (mm) - Standard Escalade Heat Exchanger

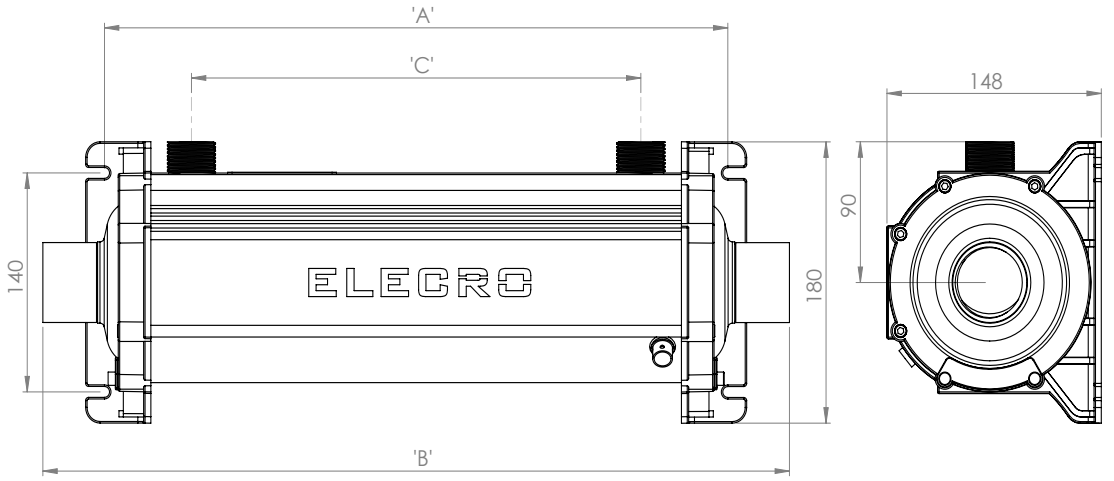


Fig 2.

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

Installation

Your heat exchanger can be installed either horizontally or vertically (please see Fig. 3 and 4).

Vertical Installation

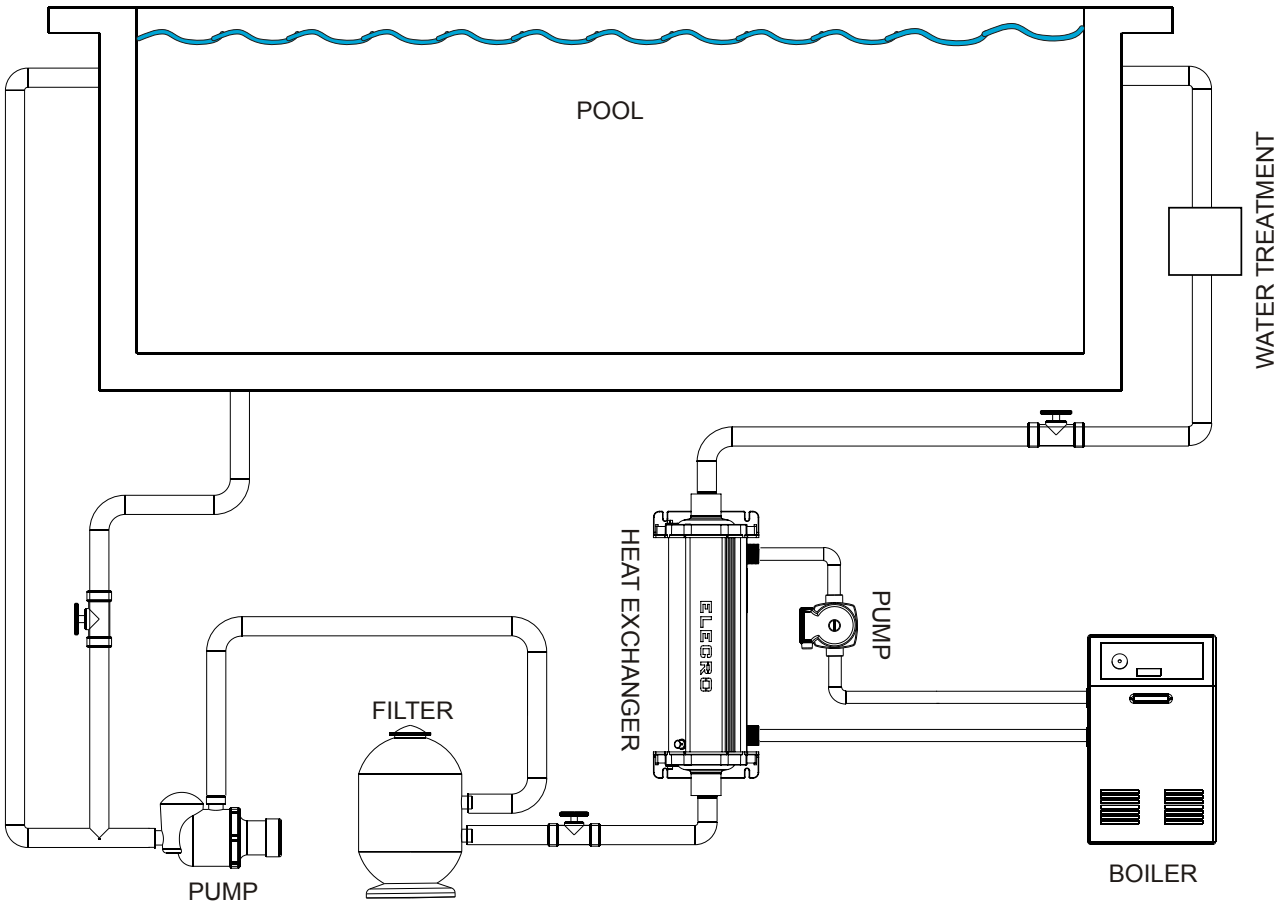


Fig 3.

Horizontal installation

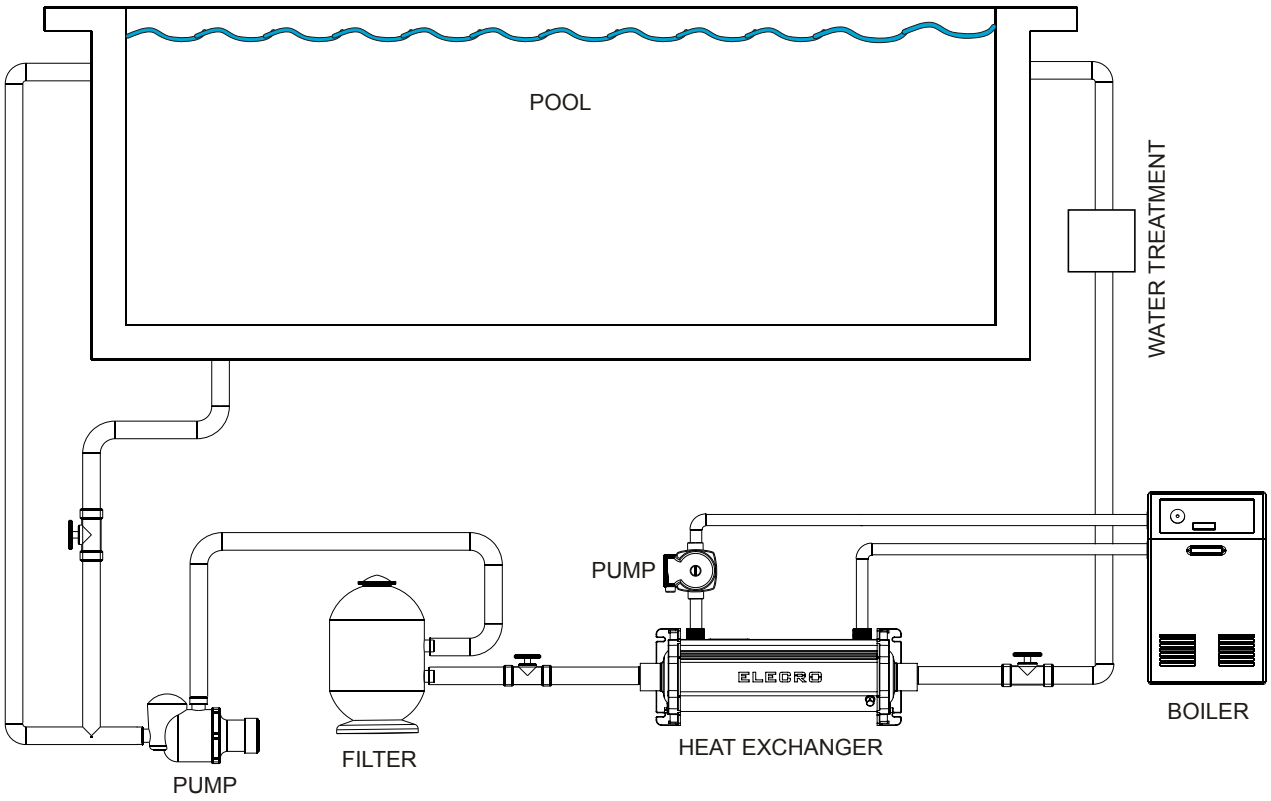
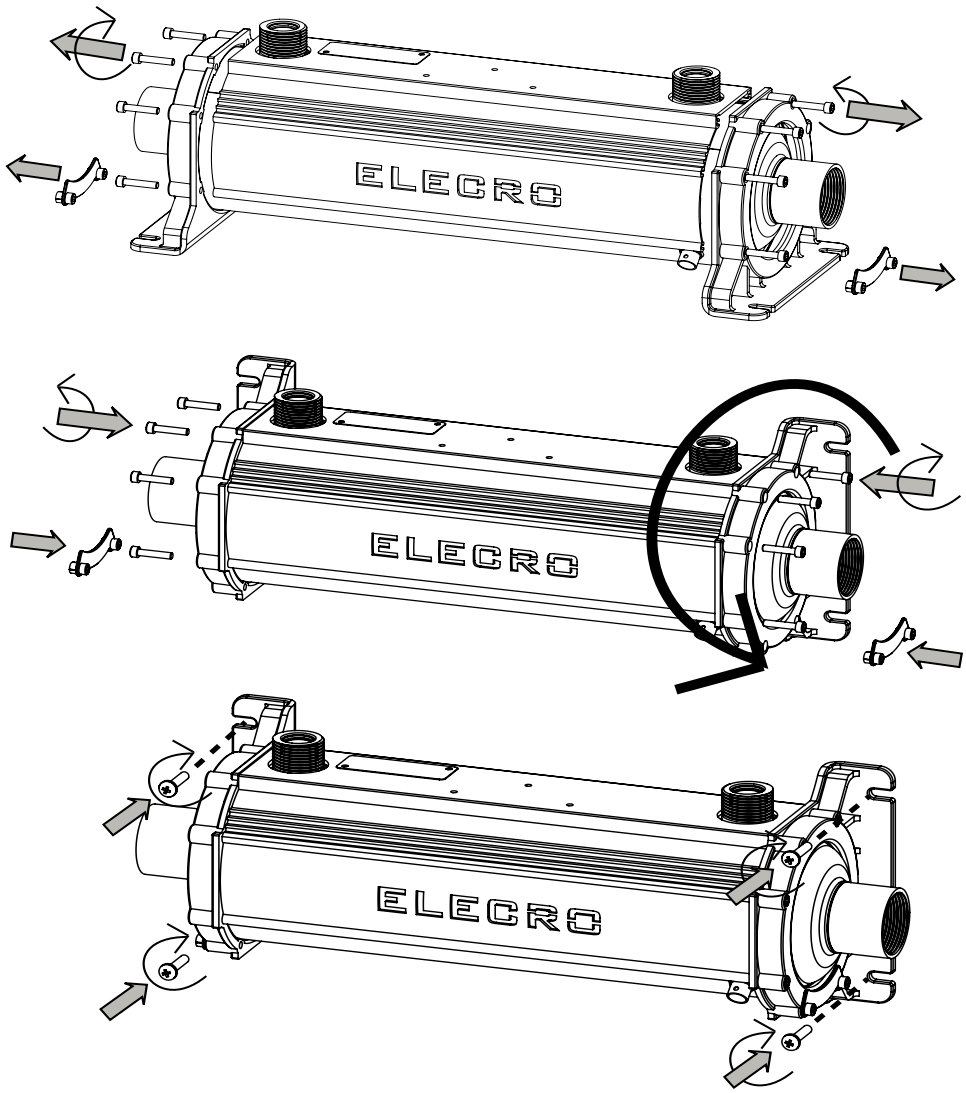


Fig 4.

Wall mounting:

Fig 5.



Your heat exchanger should be connected to the two independent water circuits as follows:

1. Connection to Water Filtration Circuit (Secondary)
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. Weed / debris should not be allowed to enter the heat exchanger. The heat exchanger should be installed as close as possible to the boiler/heat source 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.

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 below.

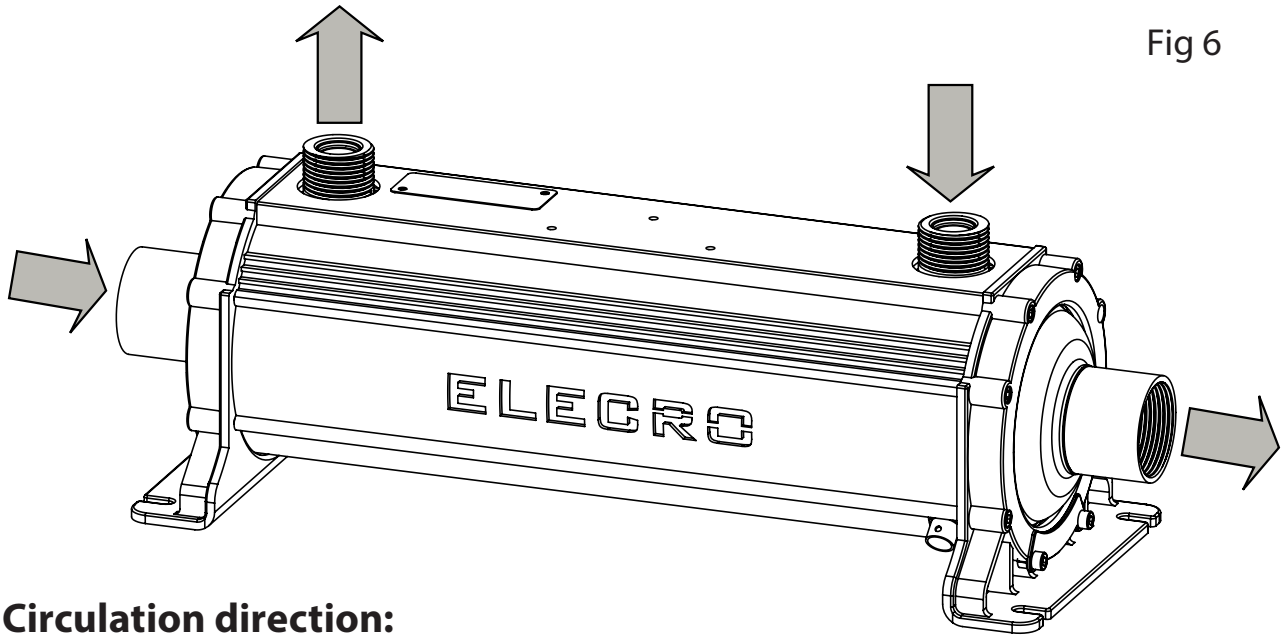
NOTE: The circulation pump of the primary circuit should be controlled by a thermostat, which should be connected via the filtration pump to allow heating only when the filtration pump is running.

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.

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 Escalade welded heat exchanger is guaranteed for two 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.

HEAT EXCHANGERS

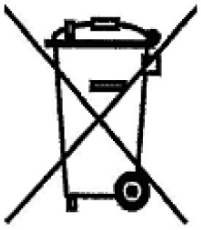
Are in conformity with the provisions:
of the ELECTROMAGNETIC COMPATIBILITY directive 89/336/EEC, as amended 93/068/EEC. Controlled by AEMC Measures laboratory—technical report no P96045T
The harmonised standards have been applied: EN 55014—EN 55104
EN 55011
EN 55022
CEI 801-4
CEI 801-2
CEI 801-3
of the LOW VOLTAGE directive 73/23/EEC.
The harmonised standards have been applied
EN 60335-2-35

RoHS compliance statement

Elecro Engineering Limited certify that our Heater Exchanger range complies in accordance with RoHS Directive 2002/95/EC on the restriction of hazardous substances.

Waste of Electrical / Electronic Equipment

This product complies with EU directive 2002/96/EC
Do Not dispose of this product as unsorted municipal waste.



This symbol on the product or on it's 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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