

# Elecro G2 Heat Exchanger

30-kW (102K BTU) to 122-kW (416K BTU)

With Fully Equipped Kit Options

**ELECR0**

FLUID DYNAMICS

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 ENGINEERED IN GREAT BRITAIN



The Elecro G2 Heat Exchanger offers maximum heat transfer performance and, with a choice of upgrade kits you can achieve temperature accuracy and control.

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## Maximum efficiency – rigid thermal shell to insulate the primary circuit:

- Robust and durable
- Titanium tube bundle
- BS 316L stainless steel shell (EN 1.4432) with special polymer alloy fittings
- Wall mountable with supplied bracket
- Vast, unrivalled heat transfer surface area
- Low hold up volume

## Fully equipped analogue or digital kit options available:

- Easily added to control any G2 heat exchanger
- Grundfos booster pump
- Flow switch, ensuring your heating appliance is only switched on when the pool circulation pump is running
- Analogue control thermostat with 1.0°C differential or;
- Digital control thermostat with 'Priority Heating' feature, temperature display, visual no flow alarm and 0.5°C differential

The unique design and robust construction of the Elecro G2 Heat Exchanger offers an unrivalled heat transfer surface area, making it one of the most efficient products on the market.

Featuring a densely packed tubular bundle in a thermally insulated primary chamber. The relatively small volume of the chamber and large surface area of the internal tubing provides superb heat transfer efficiency and minimal energy loss, making the G2 the perfect choice for all applications including gas or oil fired boiler circuits, solar panels, heat pumps or chillers.

The G2 is manufactured to the highest specification, using the strongest and most durable materials. The shell is constructed from BS 316L stainless steel (EN 1.4432) and enclosed by a rigid thermal casing for enhanced insulation of the primary water flow, ensuring maximum efficiency.

It has been designed to allow the installation engineer to select which way to plumb the primary and secondary water to achieve maximum thermal gain. This is achieved by routing the primary flow in an opposing direction to the secondary (pool) water.

The standard G2 heat exchanger is supplied complete with:

- 2 x 1" male/male brass primary connections
- 1 x 1" non-return valve
- Titanium thermostat pocket

Fully equipped upgrade kits are available with the G2 model and offer either analogue or digital thermostat controls for temperature accuracy and display. These are easy to fit or retro-fit and are supplied complete with:

### Digital Kit

- Digital control thermostat 0~45°C (0.5°C differential)
- Grundfos booster pump
- Flow switch
- 1" female/female brass fitting
- NTC temperature sensor

### Analogue Kit

- Analogue control thermostat: 0~40°C (1°C differential)
- Grundfos booster pump
- Flow switch
- 1" female/female brass fitting

# Electro G2 Heat Exchanger

30-kW (102K BTU) to 122-kW (416K BTU)

With Fully Equipped Kit Options

## Product Codes

Digital Equipped Kit Product Code	Analogue Equipped Kit Product Code
G2-HE-DIG	G2-HE-ANA

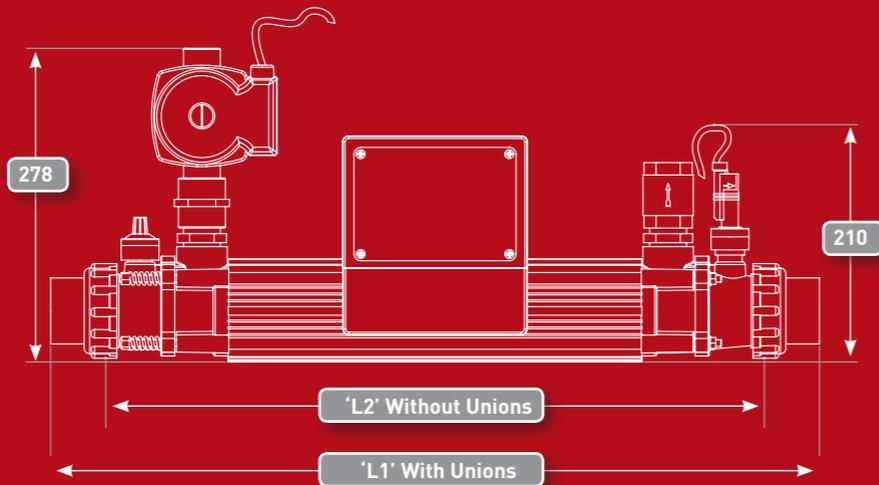
Also available without the Grundfos booster pump:

Digital Equipped Kit (Without Pump) Product Code	Analogue Equipped Kit (Without Pump) Product Code
G2-HE-DIG-NP	G2-HE-ANA-NP

## Dimensions:



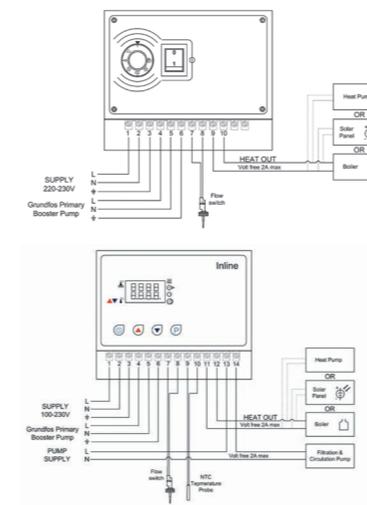
## Dimensions when fully equipped:



## Specification and Models

- Tube bundle:** Pure Titanium
- Water Connections: Primary** 1" BSP male (brass fittings supplied)
- Secondary (POOL)** 1.5" or 50-mm NB adapters for connection to PVC or ABS pipe
- Working pressure:** 4 bar maximum

## Wiring Diagrams



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Analogue

Digital

Titanium Tube Bundle Product Code	Standard Power Output	Dimension 'L1'	Dimension 'L2'
G2-HE-30T	30-kW (102K BTU)	540mm	426mm
G2-HE-49T	49-kW (167K BTU)	710mm	596mm
G2-HE-85T	85-kW (290K BTU)	840mm	726mm
G2-HE-122T	122-kW (416K BTU)	1000mm	886mm

## Transfer Values

Standard Output	Primary (HOT) Flow m <sup>3</sup> /h	Primary (HOT) Head Loss (kPa)	Secondary (POOL) Flow m <sup>3</sup> /h	Secondary (POOL) Head Loss (kPa)	ΔT 15°C (kW)	ΔT 20°C (kW)	ΔT 30°C (kW)	ΔT 40°C (kW)	ΔT 50°C (kW)	ΔT 60°C (kW)	ΔT 70°C (kW)
30-kW	1.1	6.1	10	5	9	11	16	20	26	30	33
30-kW	1.3	6.8	10	5	10	13	18	23	31	34	39
30-kW	1.3	6.8	14	7	11	15	20	26	34	41	46
49-kW	1.6	7.7	16	9.2	13	18	25	34	41	50	56
49-kW	1.8	8.3	16	9.2	14	20	28	38	45	55	62
49-kW	2.2	9.6	17	9.8	16	22	33	44	52	64	73
85-kW	2.4	11.3	17	10.6	22	28	40	53	64	75	81
85-kW	2.7	12.9	17	10.6	26	32	46	60	73	82	89
85-kW	3.2	14.7	17	10.6	28	34	49	64	77	90	102
122-kW	3.8	18.3	19	12.6	33	43	68	75	93	108	120
122-kW	4.2	20	19	12.6	36	48	70	89	108	126	143
122-kW	4.6	21.1	19	12.6	38	52	73	95	116	137	156

ΔT = Temperature difference between Primary (HOT) and Secondary (POOL)

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- Aquatic & Tropical Marine Heaters
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Electro is a family-owned and managed, British manufacturer of quality swimming pool equipment including electric heaters, heat exchangers and ultraviolet sanitising units.

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At Electro we also believe in redefining the idea of quality and engineer products that only utilise components sourced solely from Europe. We are leaders in innovative pool and spa applications and our mission is to deliver energy efficient, economic, robust and long-lasting solutions.

We are experts at what we do. Our experienced technical team are there to answer any queries and find the right products for you. Call us today.



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