

# Titan Optima & Titan Optima *plus*

Swimming Pool Heater with Ultra  
Efficient Titanium Heating Elements

18-kW to 120-kW (380~440V – 3 phase)

18-kW to 90-kW (220~240V – 3 phase)



11 Gunnels Wood Park,  
Stevenage, Hertfordshire,  
SG1 2BH, United Kingdom

t: +44(0) 1438 749 474

f: +44(0) 1438 361 329

e: sales@elecro.co.uk.

[www.elecro.co.uk](http://www.elecro.co.uk)



**TITAN** *optima plus*

# Titan Optima & Titan Optima *plus*

Swimming Pool Heater with Ultra  
Efficient Titanium Heating Elements







The Elecro Titan Optima range of heaters is the ideal choice for larger volume residential or commercial pools and is also particularly suitable for applications such as occasional use holiday villa pools.

**TITAN** *optima plus*

# Titan Optima & Titan Optima *plus*

Swimming Pool Heater with Ultra Efficient Titanium Heating Elements

## Product Overview

- Easy to install
- Safe and reliable
- Robust and durable
- Easy touch screen programming
- Floor or wall mountable (bracket supplied)
- Digital water flow signal – no pump interlock required
- Titanium heating elements – zero corrosion guaranteed
- Dual cascade wired *Schneider* Electric contactors on each element bank
- Digital timers for staged energisation
- Optional Titan Optima *plus* with titanium flow tubes for sea water applications
- 100% operational efficiency throughout product life

Robust, reliable, accurate and efficient, the Elecro Titan Optima is the ideal choice for a long-lasting swimming pool heater, which is easy to install even in limited spaces.

The heater can be vertically wall-mounted using the bracket provided or stand on the floor on its two feet and offers an easy-to-program touch screen with clear blue digital characters that are legible even in bright sunlight. Whether used as a stand-alone device or back up for a heat pump the Titan Optima will provide many years of reliable maintenance free service and like all Elecro electric heaters will operate at 100% efficiency throughout its life.

All Elecro electric heaters feature our unique and proven coiled heating element technology whereby a turbulent vortex is created in the water flow. This delivers outstanding efficiency and extended life expectancy by preventing the build up of mineral deposits on the heating element.

Three of these signature heating element and flow tube assemblies are situated in parallel inside the Titan Optima casing and achieve outputs ranging from 18 to 120-KW. Each element bank is energised via two separate contactors with integral digital timers that minimise the potential of any voltage drops and at the same time allowing for simple, no fuss installation.

The heater's outlet manifold accommodates a flow switch that provides a digital signal to the control board, while the inlet manifold has been designed to minimise flow imbalance between the flow tubes, eliminating the risk of air locking. Safety and equipment protection is provided by a flow switch, with over-heating prevented by one auto-reset and one manual-reset thermal safety cut-out's.

Available with titanium flow tubes, the Titan Optima *plus* is the ideal solution for use in sea water environments. This delivers corrosion free performance and, as a result, an extended lifecycle.

# Titan Optima & Titan Optima *plus*

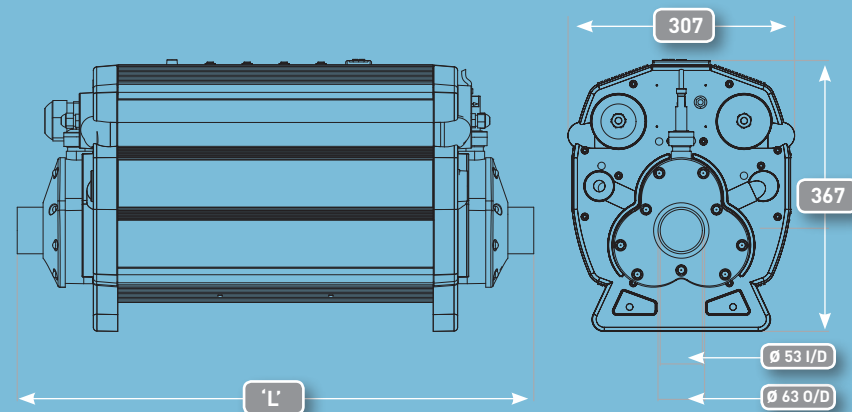
Swimming Pool Heater with Ultra Efficient Titanium Heating Elements

18-kW to 120-kW (380~440V – 3 phase) 18-kW to 90-kW (220~240V – 3 phase)

## Specification and Models

<b>Flow requirements:</b>	Minimum flow: 12m³/h Maximum flow: 45m³/h Recommended: 30m³/h
<b>Heating elements:</b>	Pure Titanium, high MgO compaction – 21.4 and 25.4 Watts/Cm2 at 230V 3ph and 400V 3ph resp
<b>Flow tubes:</b>	<b>Titan Optima</b> = BS 316L Stainless Steel EN 1.4432 <b>Titan Optima <i>plus</i></b> = Pure Titanium
<b>Cladding panels:</b>	Moulded Aluminium, epoxy powder coated
<b>Contactors:</b>	Cascade wired dual <i>Schneider Electric</i> contactors for each element bank
<b>Control Thermostat:</b>	0 ~ 45°C (0.5°C differential)
<b>Thermostats:</b>	1 x 60°C safety thermal cut out (auto reset) against enclosure over-temperature 1 x 55°C safety thermal cut out (manual reset)
<b>Flow switch:</b>	Gold tipped reed switch with titanium fulcrum pin
<b>Wiring:</b>	High temperature, silicone sheathed, multi-strand copper conductors
<b>Seals:</b>	High temperature special formula EPDM
<b>Water connections:</b>	63mm spigot with adaptor for 2" or 63mm NB
<b>Working pressure:</b>	4 bar maximum
<b>Mounting:</b>	Floor or wall mounting (wall bracket supplied)
<b>Standards compliance:</b>	European Electromagnetic Compatibility directive 89/336/EEC and 93/068/EEC
<b>Harmonised Standards:</b>	EN 55014 - EN55104, EN5501, EN5502, CEI 801-4, CEI 801-2, CEI 801-3. The European Low Voltage Directive 72/23/EEC The Harmonised Standard EN 60335-2-35

## Dimensions

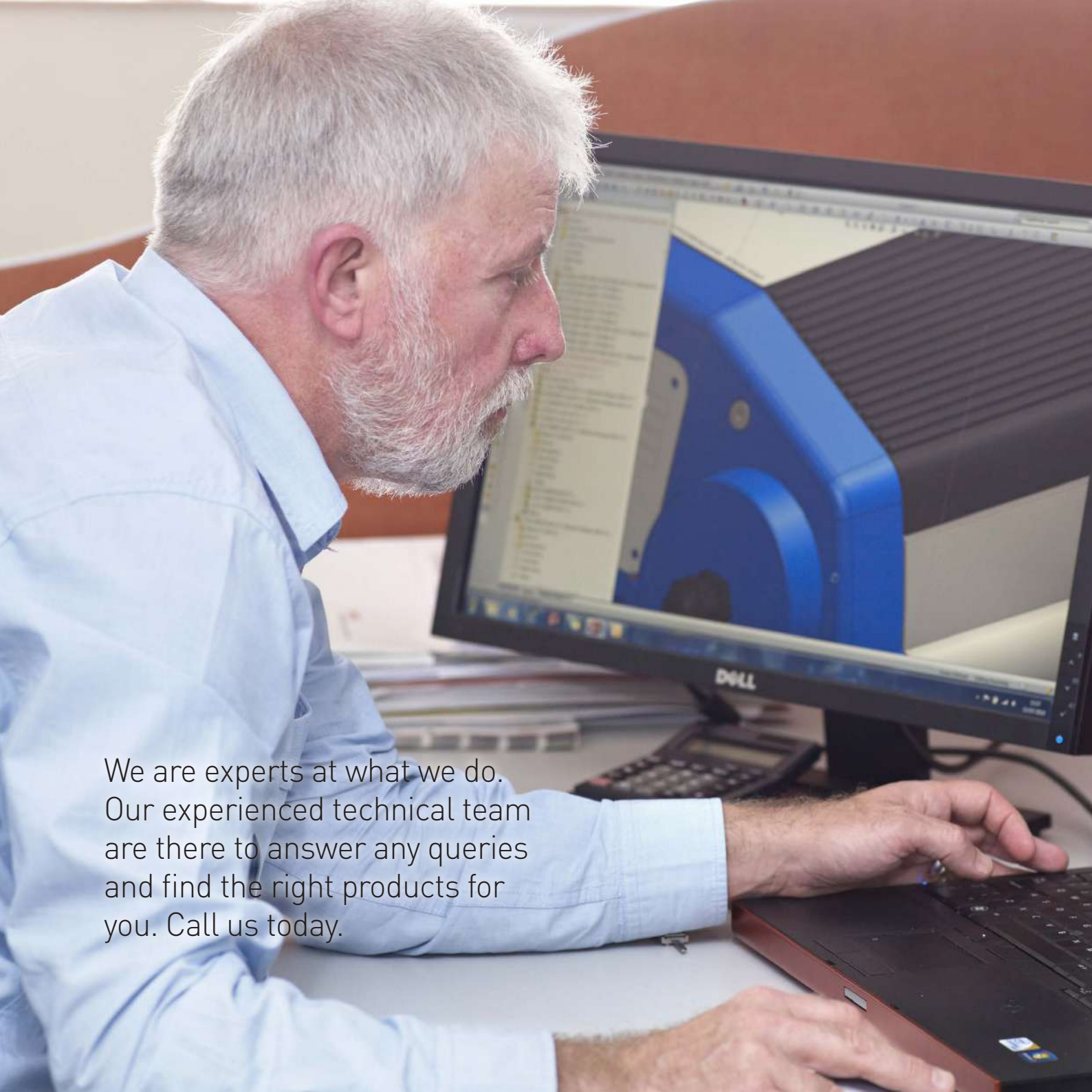


**ELECRO**  
FLUID DYNAMICS  
[www.elecro.co.uk](http://www.elecro.co.uk)

380V ~ 440V 3 Phase Power Output	Load	Dimension 'L'	Titan Optima Product Code	Titan Optima <i>plus</i> Product Code
18-kW	26-Amp	699-mm	C-18	CP-18
24-kW	35-Amp	699-mm	C-24	CP-24
30-kW	44-Amp	699-mm	C-30	CP-30
36-kW	52-Amp	699-mm	C-36	CP-36
45-kW	66-Amp	699-mm	C-45	CP-45
54-kW	78-Amp	699-mm	C-54	CP-54
60-kW	87-Amp	877-mm	C-60	CP-60
72-kW	104-Amp	877-mm	C-72	CP-72
96-kW	139-Amp	1042-mm	C-96	CP-96
120-kW	174-Amp	1042-mm	C-120	CP-120

220V ~ 240V 3 Phase Power Output	Load	Dimension 'L'	Titan Optima Product Code	Titan Optima <i>plus</i> Product Code
18-kW	46-Amp	699-mm	C-18-DELTA	CP-18-DELTA
24-kW	61-Amp	699-mm	C-24-DELTA	CP-24-DELTA
30-kW	76-Amp	699-mm	C-30-DELTA	CP-30-DELTA
36-kW	91-Amp	699-mm	C-36-DELTA	CP-36-DELTA
45-kW	113-Amp	877-mm	C-45-DELTA	CP-45-DELTA
54-kW	136-Amp	877-mm	C-54-DELTA	CP-54-DELTA
60-kW	151-Amp	1042-mm	C-60-DELTA	CP-60-DELTA
72-kW	180-Amp	1042-mm	C-72-DELTA	CP-72-DELTA
90-kW	226-Amp	1042-mm	C-90-DELTA	CP-90-DELTA





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.

# Electro Engineering – fluid dynamics

- Electric Swimming Pool Heaters
- Solar Swimming Pool Heaters
- Electric Spa Heater
- Aquatic & Tropical Marine Heaters
- Custom-Made Heaters
- Heat Exchangers
- Heating Controls
- UV Sanitisers

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

Our products are exported worldwide through our close partnerships with distributors.

Because innovation is at the heart of what we do we continue to invest heavily in research and development. We also invest in our people and are proud of our dedicated and expert team of technicians, designers and engineers, who help to continually deliver our state-of-the-art solutions and superior customer service.



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.

 **ENGINEERED IN GREAT BRITAIN**

**ELECRO**  
FLUID DYNAMICS  
[www.elecro.co.uk](http://www.elecro.co.uk)