ELECRO ENGINEERING

aquaLOGIC
Aquatic Design
Manufacturing & Integration

Master Distributor for USA, Canada and Mexico:

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TITAN OPTIMA
(ALL TITANIUM)

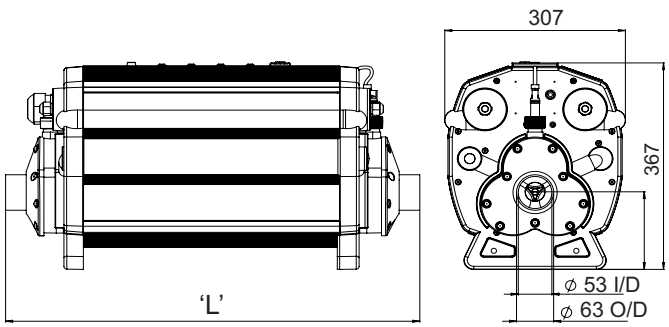
Reliable, accurate and efficient, the Titan Optima fully titanium heater is top of the range and comes with a touchscreen display. It is the ideal choice for a long-lasting heater for commercial pools. The design makes it highly robust and durable.

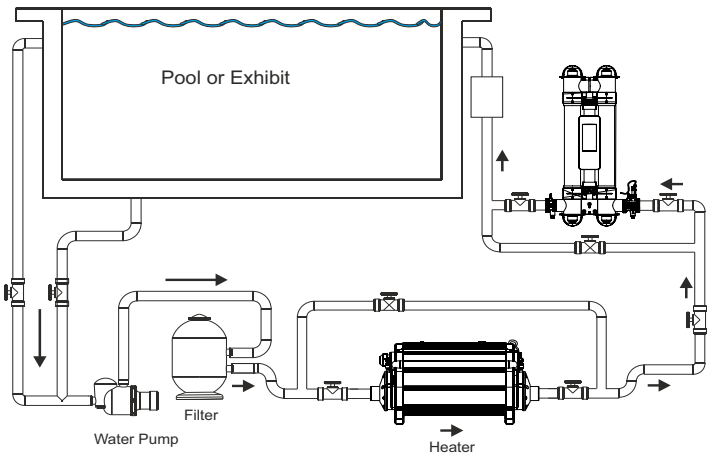


FEATURES

- Various power options ranging from 18-kW to 120-kW
- Easy installation, fully equipped and pre-wired
- Robust, durable construction
- Ultra-reliable flow switch allows safe operation
- Supplied with temperature thermostat and overheating sensor
- Compact, durable design
- Titanium flow tubes and titanium heating elements
- Can be floor or vertically wall mounted
- Vortex, long life, stay clean heating element technology
- 100% efficiency throughout the product life.
- Silent operation

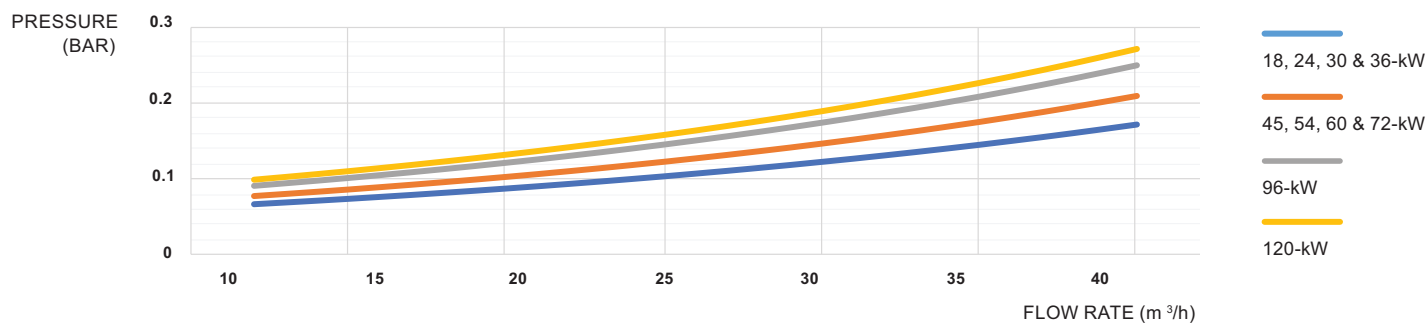
TECHNICAL DRAWINGS



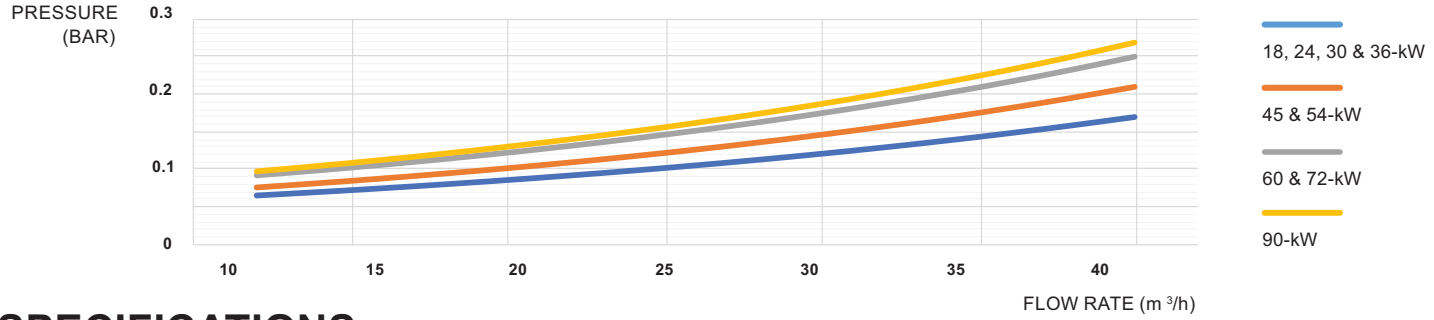


PRESSURE DROP

PRESSURE DROP 3-PHASE 460-480V



PRESSURE DROP 3-PHASE 220-240V



SPECIFICATIONS

POWER SUPPLY	Three Phase 50/60Hz
FLOW REQUIREMENTS	Minimum flow: 12m³/h (53 GPM) Recommended: 30m³/h (132 GPM) Maximum flow: 45m³/h (198 GPM)
HEATING ELEMENTS	Grade 1 titanium
FLOW TUBES	Grade 1 titanium
CONTROL THERMOSTAT	Digital 0 > 45°C (0.5°C differential)
SAFETY THERMAL CUT OUT	65°Csafetythermalcutout(autoreset)againstenclosureover-temperature 60°C safety thermal cut out (manual reset)
FLOW SWITCH	Gold tipped reed switch with titanium fulcrum pin
CONTACTORS	Cascade wired dual Siemens 3RT2023 or 3RT2027 for each element bank
SEALS	High temperature special formula EPDM ferrules
WATER CONNECTIONS	2” NPS / 63mm stepped ABS unions
INTERNATIONAL PROTECTION MARKING	IP44
COMFORMANCE RATINGS	These heaters are NOT CSA, cUL or UL Listed. See EU Declaration of Conformity
WORKING PRESSURE	4 bar maximum
MOUNTING	Floor or wall mounting

MODELS

460-480V 3-PHASE*	**LOAD**	**PRODUCT CODES**	**DIMENSION ‘L’**	**NET WEIGHT**	**GROSS WEIGHT**	**VOLUME**
Power Output	Amp	**Aqua Logic Model No.**	mm	kg	kg	m³
24-kW	35	HTIO-24-460-3	699	21.8	25.8	0.20
30-kW	44	HTIO-30-460-3	699	21.8	25.8	0.20
36-kW	53	HTIO-36-460-3	699	21.8	25.8	0.20
45-kW	66	HTIO-45-460-3	699	24.0	28.0	0.20
54-kW	79	HTIO-54-460-3	699	24.0	28.0	0.20
60-kW	87	HTIO-60-460-3	699	24.0	28.0	0.20
72-kW	105	HTIO-72-460-3	699	24.0	28.0	0.20
96-kW	139	HTIO-96-460-3	1042	39.1	43.8	0.28
120-kW	174	HTIO-120-460-3	1042	39.1	43.8	0.28
220-240V 3-PHASE						
24-kW	61	HTIO-24-220-3	699	23.3	27.3	0.20
30-kW	76	HTIO-30-220-3	699	23.3	27.3	0.20
36-kW	91	HTIO-36-220-3	699	23.3	27.3	0.20
45-kW	114	HTIO-45-220-3	699	23.3	27.3	0.20
54-kW	136	HTIO-54-220-3	699	23.3	27.3	0.20
60-kW	151	HTIO-60-220-3	1042	39.1	43.8	0.28
72-kW	181	HTIO-72-220-3	1042	39.1	43.8	0.28
90-kW	227	HTIO-90-220-3	1042	39.1	43.8	0.28

* For 480V please change the 460-3 at the end of a product code e.g: HTIO-24-480-3
For any other voltages or custom builds, please contact our sales team **Info@AquaLogicInc.com**

EU DECLARATION OF CONFORMITY

ELECRO ENGINEERING

Declaration No: 008-25-03-2020

The Manufacturer: Elecro Engineering Ltd

Unit 11 Gunnels Wood Park, Stevenage, Hertfordshire, SG1 2BH, UK

Declare that the product(s):

Titan Optima:	*CP-TS-18, CP-TS-24, CP-TS-30, CP-TS-36, CP-TS-45, CP-TS-54, CP-TS-60, CP-TS-72, CP-TS-96 CP-TS-120, CP-TS-18-380, CP-TS-24-380, CP-TS-30-380, CP-TS-36-380, CP-TS-45-380, CP-TS-54-380, CP-TS-60-380, CP-TS-72-380, CP-TS-96-380, CP-TS-120-380, CP-TS-18-415, CP-TS-24-415, CP-TS-30-415, CP-TS-36-415, CP-TS-45-415, CP-TS-54-415, CP-TS-60-415, CP-TS-72-415, CP-TS-96-415, CP-TS-120-415, CP-TS-18-D, CP-TS-24-D, CP-TS-30-D, CP-TS-36-D, CP-TS-45-D, CP-TS-54-D, CP-TS-60-D, CP-TS-72-D, CP-TS-90-D*
SFS:	*SFS-18, SFS-24, SFS-30, SFS-36, SFS-45, SFS-54, SFS-60, SFS-72, SFS-96, SFS-120, SFS-18-380, SFS-24-380, SFS-30-380, SFS-36-380, SFS-45-380, SFS-54-380, SFS-60-380, SFS-72-380, SFS-96-380, SFS-120-380, SFS-18-415, SFS-24-415, SFS-30-415, SFS-36-415, SFS-45-415, SFS-54-415, SFS-60-415, SFS-72-415, SFS-96-415, SFS-120-415, SFS-18-D, SFS-24-D, SFS-30-D, SFS-36-D, SFS-45-D, SFS-54-D, SFS-60-D, SFS-72-D, SFS-90-D SFSD-18, SFSD-24, SFSD-30, SFSD-36, SFSD-45, SFSD-54, SFSD-60 ,SFSD-72, SFSD-96 SFSD-120, SFSD-18-380, SFSD-24-380, SFSD-30-380, SFSD-36-380, SFSD-45-380 SFSD-54-380, SFSD-60-380, SFSD-72-380, SFSD-96-380, SFSD-120-380, SFSD-18-415 SFSD-24-415, SFSD-30-415, SFSD-36-415, SFSD-45-415, SFSD-54-415, SFSD-60-415 SFSD-72-415, SFSD-96-415, SFSD-120-415, SFSD-18-D, SFSD-24-D, SFSD-30-D, SFSD-36-D, SFSD-45-D, SFSD-54-D, SFSD-60-D, SFSD-72-D*
VULCAN V100:	*V100-24, V100-30, V100-36, V100-45, V100-54, V100-60, V100-72, V100-18-380, V100-24-380 V100-30-380, V100-36-380, V100-45-380, V100-54-380, V100-60-380, V100-72-380, V100-18-415 V100-24-415, V100-30-415. V100-36-415, V100-45-415, V100-54-415, V100-60-415, V100-72-415 V100-18-A, V100-24-A, V100-30-A, V100-36-A, V100-45-A, V100-54-A, V100-60-A, V100-72-A V100-18-A-380, V100-24-A-380, V100-30-A-380, V100-36-A-380, V100-45-A-380, V100-54-A-380 V100-60-A-380, V100-72-A-380, V100-18-A-415, V100-24-A-415, V100-30-A-415, V100-36-A-415 V100-45-A-415, V100-54-A-415, V100-60-A-415, V100-72-A-415*

Are in conformity with following directives and standards:

Electromagnetic Compatibility Directive: 2014/30/EU

- **EN55014-1:2006 (+A1/A2)** Limits and methods of measurement of radio disturbance characteristics of electrical motor-operated and thermal appliances for household and similar purposes, electrical tools and similar electric apparatus.
- **EN61000-3-2:2014** Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current <=16A per phase)
- **EN61000-3-11:2000** Electromagnetic compatibility (EMC) - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems Equipment with rated current <=75A and subject to conditional connection.
- **EN55014-2:1997 (+A1/A2)** Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard.

Low Voltage Directive: 2014/35/EU

- **EN60335-1:2012+A11:2014** Safety of Household and similar electrical appliances- General requirements.

Restriction of Hazardous Substances Directive: 2011/65/EU

- **EN50581-1:2012** Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

This declaration of conformity is issued under the sole responsibility of the manufacturer:

Stevenage, 10th August 2020

Victor Nehme
General Manager

