

# ELC SERIES

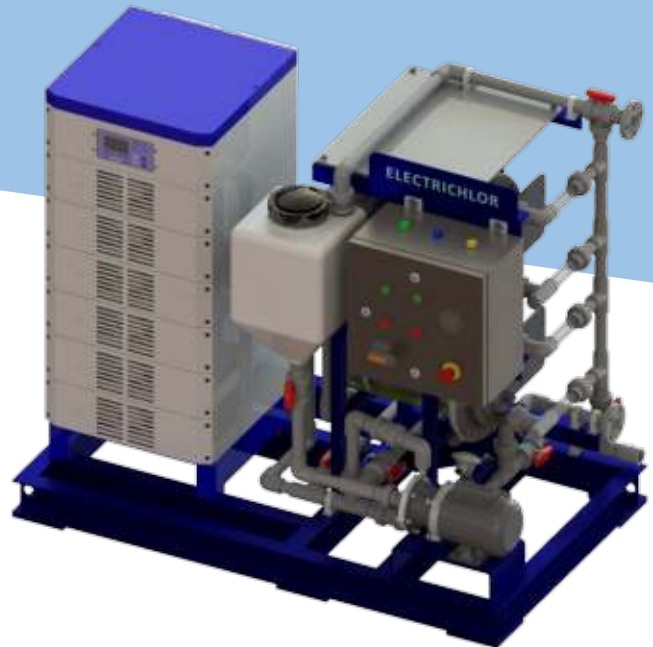
## COMPACT HYPOCHLORITE GENERATOR

### What is an ELC Series?

Electrichlor's ELC Series is a compact hypochlorite generator known to be a cost effective On-Site Hypochlorite Generator Solution (OSHG). The generators convert salt water (brine or seawater) into sodium hypochlorite (NaOCl) by applying a low voltage DC current to the salt water as it passes through our patented cell technology. The ELC product line uses a modular air-cooled rectifier that improves reliability and produces a more compact system for installations that require both a small foot print and short overall height, making industrial chlorination easy, efficient, and effective.

### How it works:

Production initiates with a salt water solution ( $\geq 20$  ppt either sea water or brine) flowing into the system. The ELC systems can handle a wide range of flow rates and is typically configured to automatically generate sodium hypochlorite upon application of the salt water feed without any need to electronically interface with an external control system. When feed water flow is detected, the system automatically engages and when the feed water flow is removed, the system automatically disables itself. The ELC system can also be equipped with an electronic interface for remote start/stop and an HMI to meet the end-user needs.



### Why choose an ELC System?

**Economical:** The ELC Series systems are design to accommodate economically challenged budgets, by typically requiring less CAPEX when compared to other systems in the market.

**Compact:** Being the smallest line that Electrichlor produces, the ELC Series enhances vessel convenience since it can be installed in a small footprint thereby maximizing space utilization.

**Reliability:** Our systems are engineered with high quality components and manufactured in the USA.

**Modular Design:** Allows for easy access to every system component for ease of maintenance, upgrades, and service.

## Standard Output

The sodium hypochlorite (NaOCl) production capacity for the ELC Series ranges from less than 0.1 kg/hr to 2.0 kg/hr; the production capacity of the generator can be easily set to meet your application.

Productive Capacity: 0.1 kg/hr to 2.0 kg/hr

Salt Water Flow Rate: 0.5 to 5.0 m<sup>3</sup>/hr

NaOCl Output Concentration @ 0.5 m<sup>3</sup>/hr: 200 to 2000 mg/L TRO

NaOCl Output Concentration @ 5.0 m<sup>3</sup>/hr: 20 to 200 mg/L TRO

## EC1K Cell Design Specifications

Typical Voltage: 3.0 to 8.5 VDC

Typical Current: 100 to 1000 Amps

Typical DC Power: 4.5 to 6.0 kW/(kg/hr)

## Power Requirements

The ELC Series systems require either a 480VAC/3 phase or 240VAC/3 phase power source and a 120VAC/1 phase power source to power the control panel.

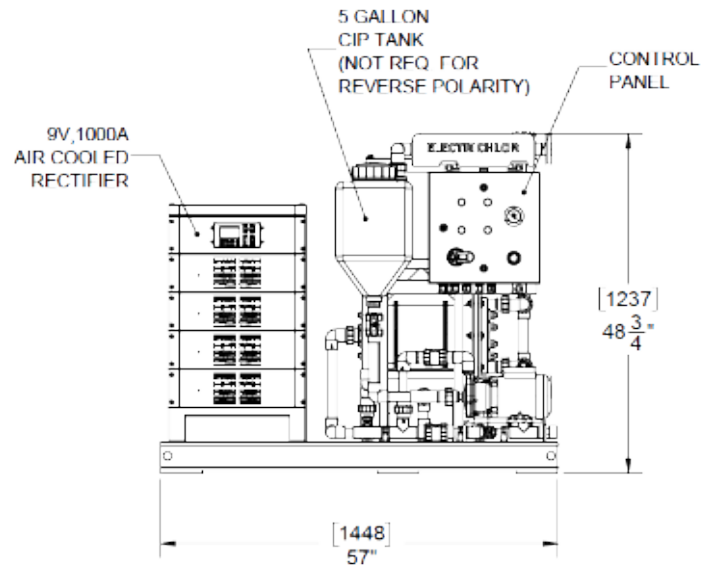
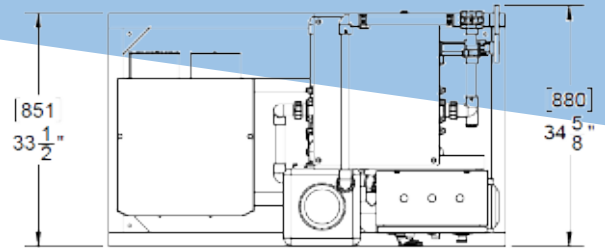
## System Dimensions

Footprint: 57" W x 33-1/2" D (1448 x 851 mm)

Envelope: 57" W x 33-1/2" D x 48-3/4" H (1448 x 851 x 1237 mm)

## Simple Maintenance

The ELC Series system can be configured with an integrated acid wash, clean in place (CIP), cleaning system that is recommended for use after every 200 to 400 hours of operation. Alternatively, a self-cleaning, reverse polarity electro-chemical cell is available.



## ELC Series Applications

**Water and Wastewater Treatment:** The ELA Series provides superior chemical water treatment by eliminating unwanted microorganisms in the water and conversion of ammonia to harmless nitrogen gas.

**Fishing Vessels/Sanitation Process:** ELA systems operate seamlessly in the sanitization of processing decks and facilities. The small footprint and easy integration with existing pipework and controls makes it an ideal solution for shipowners.

**Eliminating Biofouling:** ELA systems are a perfect choice for the mitigation of marine bio-growth in pipework and heat exchangers, especially within power plants and refineries.

**Industrial/Municipal/Commercial/Agricultural:** ELA Series systems are perfect for on-demand production of NaOCl for use in a variety of applications from sanitization to wastewater remediation.



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