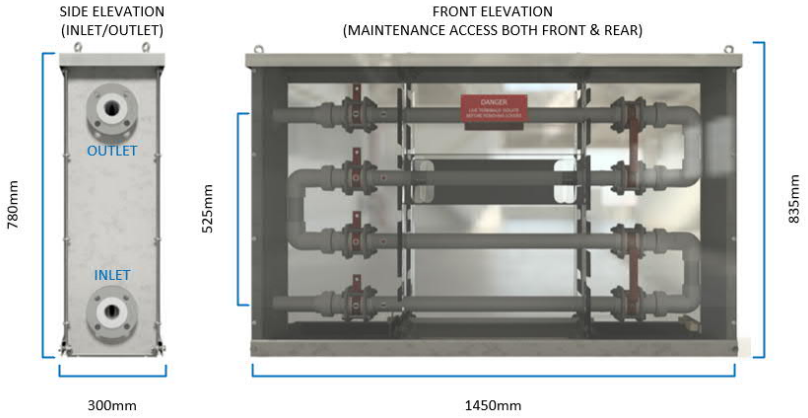
CHLOROPAC® MGPS MK4M ELECTROLYSER

Specification – Electrolyser Design Conditions



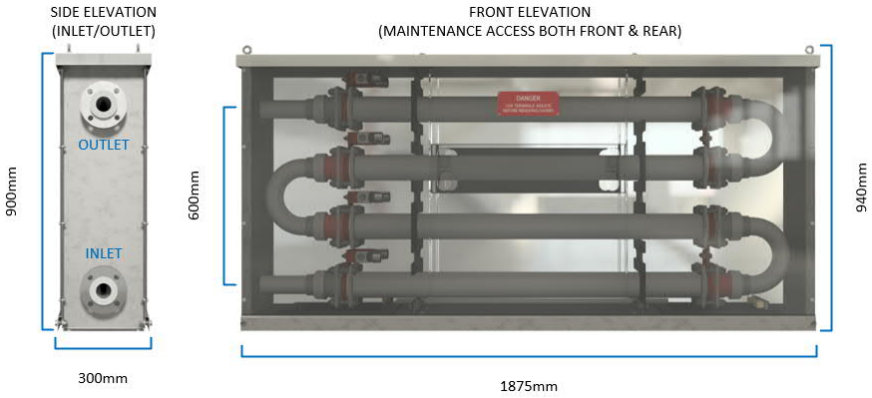
Process Parameter	Details		
Operating Process:	Chlorination Treatment		
Application:	Seawater		
Inlet Particles (Microns):	<800		
Fluid Temperature (°C):	5 - 35		
Ambient Operating Temp (°C):	0 - 50		
Operating Pressure (Barg):	10 Max		
Flowrate (m^3/hr):	6m^3/hr - Minimum	7m^3/hr - Normal	
NaOCl Concentration (PPM):	1500 Max		
Single Electrolyser per Stream:			
Type of Electrolyser:	MK4M-SB		
Part Number:	W3T472121		
Max NaOCl Output (Kg/hr):	1*	2*	
Operating DC Current (A DC):	230	460	
Operating DC Voltage (V DC):	30	30	
Max Operating Power (KVA):	9.0	17.9	
Pressure Drop @ 26m^3/hr	1.2 Barg	1.2 Barg	
Cell Electrode Type:	Self-Cleaning Concentric Tubular Electrode		
Cells Material:	Titanium		
Anode Coating:	MMO		
Seal Material:	Gaskets: Neoprene	O-Rings: FKM	
Pressure Test:	15 BarG for 30minutes		
Dimensions:	Width: 1450 mm	Depth: 300 mm	Height: 835 mm
Enclosure Material:	316SS / PETG		
Termination:	2” ANSI 150 Flange		
Enclosure Rating:	IP 44		
Protection:	Flow Transmitter (External)	Liquid Leak Detector	
Weight (Kg):	Dry: 90	Operating: 100	

Notes:

1. Specifications above are proprietary to Evoqua Water Technologies.
2. NaOCl output is self-regulating on a seawater salinity of 19g/l & a temperature range of 10-35°c, for continued operation in lower seawater salinity & temperatures please refer to the Evoqua Applications Team.
3. The DC output from the power supply to each module of the generator shall be adjustable from 10% to 100% of the rated capacity.
4. The minimum guaranteed life of cells shall be 3 years with self-cleaning arrangement.

CHLOROPAC® MGPS MKIV-3L ELECTROLYSER

Specification –Electrolyser design conditions



Process Parameter	Details			
Operating Process:	Chlorination Treatment			
Application:	Seawater			
Inlet Particles (Microns):	<800			
Fluid Temperature (°C):	5 - 35			
Ambient Operating Temp (°C):	0 - 50			
Operating Pressure (Barg):	10 Max			
Flowrate (m^3/hr):	12m^3/hr - Min	13m^3/hr - Normal	14m^3/hr - Max	
NaOCl Concentration (PPM):	1500 Max			
Single Electrolyser per Stream:				
Type of Electrolyser:	MKIV-3L-SB			
Part Number:	W3T472122			
Max NaOCl Output (Kg/hr):	3*	4*	5*	6*
Operating DC Current (A DC):	685	910	1154	1375
Operating DC Voltage (V DC):	30	30	30	30
Max Operating Power (KVA):	24.1	33.5	41.9	50.2
Pressure Drop @ 13m^3/hr	1.4 Barg	1.4 Barg	1.4 Barg	1.4 Barg
Cell Electrode Type:	Self-Cleaning Concentric Tubular Electrode			
Cells Material:	Titanium			
Anode Coating:	MMO			
Seal Material:	Gaskets: Neoprene		O-Rings: FKM	
Pressure Test:	15 BarG for 30minutes			
Dimensions:	Width: 1875 mm	Depth: 300 mm	Height: 940 mm	
Enclosure Material:	316SS / PETG			
Termination:	2” ANSI 150 Flange			
Enclosure Rating:	IP 44			
Protection:	Flow Transmitter (External)		Liquid Leak Detectors	
Mass (Kg):	Dry: 155		Operating: 180	

Notes:

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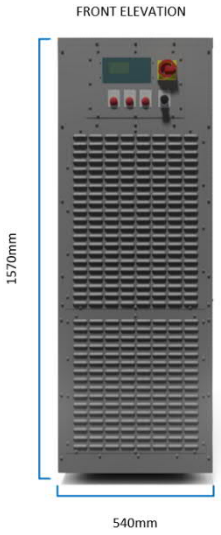
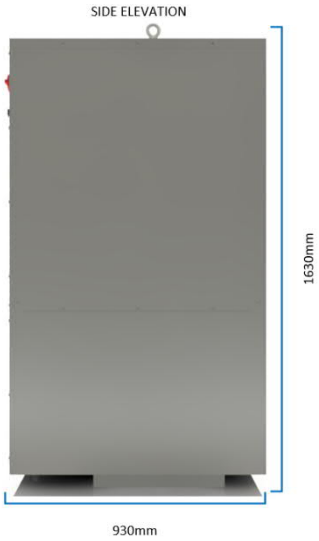
3. The DC output from the power supply to each module of the generator shall be adjustable from 10% to 100% of the rated capacity.
4. The minimum guaranteed life of cells shall be 3 years with self-cleaning arrangement.

CHLOROPAC® MGPS SMPSU

Specification – Process Data





Parameters	Details						
Service:	Switch Mode DC Power Supply Unit						
Hazardous Area Classification:	Safe Area						
Temperature (°C):	Ambient: 15 - 50				Failure: 55		
Supply Voltage:	380 - 480 VAC ± 10%, 50 - 60 Hz, 3 Phase						
Power factor & Efficiency:	≥ 0.93 @ rated load				Typical 0.9 @ rated output		
Humidity:	Max. 95% RH, non-condensing						
Control precision:	Voltage/current < ± 1%						
DC ripple:	<2% of rated output current at constant current mode in entire range of regulation						
Regulation range:	Stepless at constant voltage/current 0–100%						
Duty ratio:	Designed for continuous operation at rated load up to 1000m altitude						
Part Number:	W2T892033	W2T892034	W2T892036	W2T893130	W2T892036	W2T892037	W2T892038
No. Power Modules:	2	3	4	5	6	7	8
Max DC Voltage (V DC):	30	30	30	30	30	30	30
Max Current @ 45°c (A DC):	425	638	850	1063	1275	1488	1700
Max Current @ 50°c (A DC):	350	525	700	875	1050	1225	1400
Max Operating Power (KVA):	9.0	17.9	25.1	33.5	33.5	41.9	50.2
Mass (Kg):	157	187	217	247	277	307	337
Functions:	CONTROL DISPLAY: Current: Actual AMPs / Voltage: Actual Volts / On signal / Run signal / Actual Amp hours / Actual run time / Alarm (general alarm) / End of process Alarm status (cause of alarm) / Mode Selector (Auto/Manual/Preset Selector) PANEL: Door Isolator / Operation of Lamp Test						
Protection:	CONTROL DISPLAY: Over-current / Over-voltage / Overtemperature / Short circuit / Open circuit / Module failure PANEL: Over-AC Input Current / Electrolyser Low Flow / Electrolyser Leak Detection						
DC Power Cables:	240 mm² (Max)		Entry: Bottom		Entry Type: Gland		
Enclosure Design:	IP 44		Forced Air Cooling		Access All Round		
Enclosure Material & Finish:	1.5mm Zintec/Electric Zinc Coated Sheet / Satin - Light Gray (RAL-7035)						
Protective Coating:	Three-stage Iron Phosphate pre-treatment Electrostatically Powder Coated						

Notes:

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