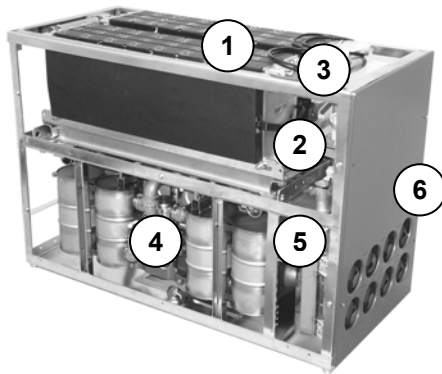


CASCADE - IP

6 KW FUEL CELL



“Cascade - IP” is a 6 kW Electrochemical Generator (ECG) powered by advanced Alkaline Fuel Cell (AFC) modules. The generator is a reliable, environmentally clean and low maintenance source of electrical power for stationary distributed power generation, commercial fleet vehicles, city buses and small marine vessels.

PRODUCT SPECIFICATION

Performance	Nominal power (P_N)	5.6 kW
	Maximum power	6.0 kW
	Nominal voltage	29.5 -33 V
	Nominal current	170-190 A
	Maximum current	200 A
	Fuel	Hydrogen
	H ₂ consumption	< 4.3 m ³ /h at P_N
	Air consumption	< 36 m ³ /h at P_N
	Pressure	Atmospheric
	Operating conditions	Ambient temperature
Relative humidity (max)		98% at 25 °C
General	Dimensions (l×w×h)	1,250 mm × 582 mm × 863 mm
	Gross weight	240 kg
	CO ₂ scrubber	built-in, regenerative
	Start-up	self-starting with built-in hydrogen burner < 15 min at 20 °C
	Electrolyte	6.6 M KOH (aqueous solution)
	Emissions	H ₂ O (vapor), heat

- 1 - Two stacks of AFC modules.
- 2 - Hydrogen supply and purging system.
- 3 - Air supply system equipped with an air mechanical filter.
- 4 - On-line regenerative scrubber is used for the removal of carbon dioxide from the incoming air. A commercially available, inexpensive sorbent is imbedded in two absorption compartments working in scrubbing and regeneration modes alternately.
- 5 - System for the maintenance of the water balance and temperature conditions, electrolyte circulation and electrolyte storage between periods of operation.
- 6 - Automated control system.