



Nedstack

PEM FUEL CELLS

PemGen[®] MT-FCPI-600



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Maritime Power Systems
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MT-FCPI-600



The MT-FCPI-600 is a Maritime Fuel Cell Power Installation intended as a zero-emission shipping enabler. It offers a compact and robust LT-PEM power supply option for a large variety of maritime applications, both on inland waterways or in short-sea domain. The PemGen Fuel Cell Power System portfolio is available on a configure-to-order basis. Get in touch to tune this system to your application.



GENERAL	Fuel Cell Type	Low Temperature Proton Exchange Membrane (LT-PEM)
	Fuel Cell Model	60 x Nedstack FCS 13-XXL
ELECTRICAL	Nominal Power	600 kW _e
	Peak Power (BoL)	740 kW _e
	Voltage range	500 - 1000 VDC
	Current range	0 - 1200 A
ENCLOSURE	Weight	15.000 kg
	Built Level	20 ft ISO Container (High Cube)
	Length	6.06 m
	Width	2.44 m
	Height	2.90 m
	IP-rating	IP 54
HYDROGEN FEED	Quality	Grade ≥ 2.5 (CO < 0.2 ppm)
	Supply pressure	0.3 – 6 barg
	Nominal consumption (BoL)	59 kg/ MWh _e
	Max consumption	40 kg/h
COOLANT	Medium	DI water or BASF FC G20
	Outlet Temperature	Max 65 °C
	Required Cooling Capacity	900 kW _{th}
	Recoverable heat	>400 kW _{th}
AMBIENT CONDITIONS	Operating Temperature	-10 - 40 °C
	Storage Temperature	5 - 60 °C (optional -20 °C – 60 °C)
APPLICATION	Intended use	Main Propulsion Power for smaller vessel APU Source for Larger vessel
	Placement	Containerized when on open deck Skid based integration below deck
	Balance of Plant	20 years
COMPLIANCY	Stack Refurbishment	24k - 30k running hours
	Standards	Class Approval on Request IEC-60092 IEC-60529 IEC-60533 IEC-62282-3

** Due to continuous development, some data may change*