



Fuel Efficiency



Reliability



Proven Performance

## Nuvera® E-Series Fuel Cell Engine

### Product Specification

E-45

E-60

#### PERFORMANCE\*

Net output power**	47 kW	59 kW
Operating voltage	150-255 VDC	175-290 VDC
Maximum operating current	375 A	
Peak efficiency	58%	

#### PHYSICAL

Dimensions (L x W x H)	1000 x 600 x 500 mm	
Mass	188 kg	190 kg

#### OPERATION

Ambient operating / starting temperature	-30°C to 45°C	
Coolant	De-ionized water: fuel cell glycol mix	
Oxidant	Air	
Fuel quality	SAE J2719, ISO 14687-2	
Air supply pressure	0.70-1.05 bara	
Fuel supply pressure	12.5-15.0 bara	
Input power for balance-of-plant	1.2 kW at 27 VDC 4.0 kW at 375 VDC	1.2 kW at 27 VDC 8.0 kW at 375 VDC
Input power -30°C freeze start module†	3.5 kW	
Vehicle communication	CAN 2.0B	

#### STANDARDS

Nuvera certifications	ISO-9001, ISO-14001, ISO-45001	
Regulatory conformance	2006/42/EC, 2011/65/EU, 2014/30/EU IEC 62282-2, GB/T 29838, GB/T 33978, CE- Declaration of Incorporation	
Functional safety	ISO 13849-1:2015	



On-Road

Off-Road

Port Vehicles and Equipment

Stationary and Portable

Maritime

## E-Series Engine Components

- Fuel cell stack
- Air compressor
- Air sensors
- Coolant pump
- Cooling thermostat
- Hydrogen valve
- Engine control unit
- Stack control / water balance software



Nuvera® E-Series Fuel Cell Engines are **Buy America Act 49 CFR § 661.11 Compliant**.

## Nuvera® E-60 Fuel Cell Engine

