

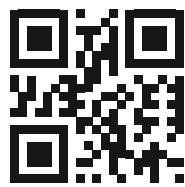
ABOUT US

We are an engineering consultancy specializing in Off-Highway Zero-Emission powertrain systems. Senior management combines decades of experience in both alternative drive and energy systems as well as rail engineering. Our dynamic team covers all relevant disciplines from vehicle engineering and the related mechanical and electrical subdomains including safety engineering for ESS and hydrogen systems as well as system simulation and controls.

Firmly embedded in a network of research and industrial partners, we deliver Zero Emission solutions tailored to the needs of the sector.

Acknowledgement

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FUEL CELL SYSTEM

H120R

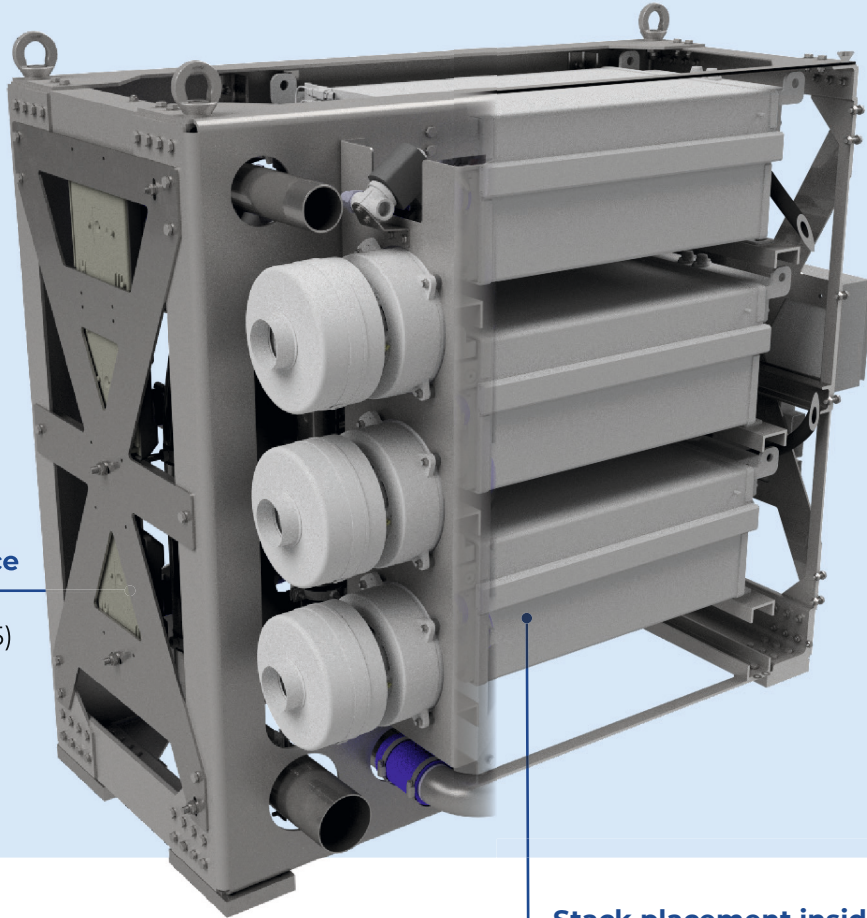
120 kW Clean H₂ Power

mZERO

Research driven. Context aware. Results focused.

THE H120R

COMPLETE FUEL CELL SYSTEM



Controls / Interface

CAN (ISO 11898-2/-5)

Stack placement inside the frame.

READY TO INSTALL

Given the relative scarcity of heavy duty and particularly rail suitable fuel cell systems we have designed an OEM-suitable solution based on Cummins (formerly Hydrogenics) stack systems.

It features clear interfaces, a pre-designed Balance of Plant package including radiators, coolant ventilators and controls in a frame suitable for rail applications (compliant with EN 12663-1).

KEY SPECIFICATIONS

Performance	Net power: 120 kW Output Voltage: 480...240 VDC (Idle to full load) Max. Current: 450 A
Efficiency	Peak: 60 % Operating: > 50 % between 10 and 105 kW Efficiency at max. power: 46 %
Weight	630 kg (with HV DC Coolant Pump)
Dimensions (WxHxD)	865 x 1180 x 1410 mm
H₂ Supply Requirements	Purity ISO 14687 Pressure 700...1100 kPa
Power supply requirements	Auxiliary power: 24 VDC, 90 A (incl. low-temp. pre-heating) HVDC for Blowers: 650...1000 VDC, max. 20 A

