/FCgen[®]-LCS

BALLARD

Power to change the world®

FCgen°-LCS **Durable heavy duty fuel cell stack**

Ballard is continuously improving product durability and cost to make fuel cells the best alternative for zero emission heavy duty motive applications.

Introducing FCgen°-LCS

Ballard new heavy duty proton exchange membrane (PEM) fuel cell liquid cooled stack platform.

FCgen®-LCS incorporates our latest technology to enable:

- · Higher current density operation
- · Longer life
- · Wider operating pressure window
- Higher operating temperature
- · Robust freeze start capability

FCgen®-LCS stack uses Ballard proprietary heavy duty membrane electrode assembly (MEA) and low cost durable carbon plates to deliver performance and compelling total cost of ownership. Its end plates are designed with ports on both sides to increase packaging flexibility. The FCgen®-LCS stack provides stable electrical power over a wide range of operating and environmental conditions and is scalable from 5kW to 50kW.

Designed for heavy duty motive applications, the FCgen®-LCS features fast, dynamic response and robust and reliable operation.

The FCgen®-LCS establishes a new industry standard by optimizing cost, performance and product reliability and will be part of Ballard next generation of heavy duty power modules to be launched in 2019.

Please contact us for product availability and pricing.



PRODUCT SPECIFICATIONS

Rated Power Rated	50 kW
Current	360 A
Rated Voltage	139 V
Mass	28 kg
Length	498 mm
Width	425 mm
Height	133 mm
Fuel	Hydrogen
Oxidant	Air up to 2.5 bara
Coolant	DI water or Fuel Cell grade glycol
Max Coolant Temperature	80°C
Start up Temperature	Freeze Start to -25°C



Power density designed for Heavy Duty requirements



Freeze start capability



Extended durability



Low product total cost of ownership



Packaging flexibility for easier integration



Refurbishing process re-uses plates & recycles catalyst