

Formula E – Drayson Racing

Location:

Kidlington, England

Segment:

Automotive

Problem:

Safe and effective protection of the electrical systems such as battery module and cables within an EV

Solution:

High speed DC fuse links

Results:

Bussmann fuses are suited for even the most demanding applications such as electric vehicle technology, they prevent components from major damage and protect the driver against fire in the event of a crash

Contact Information

Samuel J Mudge Associate Product Manager samueljmudge@eaton.com

Maryline Armanet Marketing Coordinator marylinearmanet@eaton.com

Background

Fuse links supplied by Eaton's Bussmann business – the industry leader in critical circuit protection fuses, power management and electrical safety – are currently installed in the world's fastest electric vehicle (EV). Drayson Racing's Le Mans Prototype recently smashed its own speed record by running at 204.2 mph (328.6km/h) at a racetrack at RAF Elvington in Yorkshire, England.

Challenges

Eaton's Bussmann business provided high speed DC fuse links that were fitted throughout the car to protect the battery modules and cables and prevent major damage to the more expensive components plus protecting the driver against fire in the event of a crash.

The Lola-Drayson B12/69EV race car, developed by the Lola Group and Drayson Racing Technologies, is the world's first 100 per cent electric power Le Mans Prototype (LMP). Developing over 850 horsepower without producing any emissions, the car aims to be a major contender in the forthcoming FIA Formula E race series in 2014.

Solution

It utilizes several breakthrough technologies such as wireless charging, recyclable body panels, composite battery power, moveable aerodynamics and electrical regenerative damping to make it one of the world's most innovative 'cleantech' motorsport projects.





Results

Commenting on the company's involvement in the project, Senior Application Engineer, Tony Garlinge-Warren, said: "This is an exciting opportunity for Bussmann to be involved in such cutting edge electric vehicle technology. As the global leader in circuit protection this project

has helped prove that we have

the expertise to find solutions no matter what the application may be. By working closely with Drayson Racing we have been able to work at solving the unique problems encountered in demanding automotive applications and delivering the circuit protection needs of electric vehicles."

Eaton's Bussmann Business

With the acquisition of Cooper Industries in November 2012, Eaton has strengthened its global geographic footprint, expanded its market segment reach, and now provides one of the broadest portfolios of products, services and solutions in the electrical marketplace. Eaton's Bussmann division develops and manufactures critical circuit protection, power management and electrical safety products designed to provide innovative circuit and power electronics protection. The Bussmann business serves customers in the industrial, commercial, alternative energy and high reliability markets, amongst others. Bringing together Eaton's strong heritage in circuit breaker development, with Bussmann's long-standing reputation as a top innovator in fuse technology, means Eaton now has a complete circuit protection offering.



Eaton Industries Manufacturing GmbH Eaton Electrical Sector EMEA Route de la Longeraie 7 1110 Morges, Switzerland www.eaton.eu

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