

Motorsport UK Electrified Vehicle Regulations Q and A

1. What is an electrified vehicle?

The term Electrified Vehicle covers the following vehicle types; Battery Electric Vehicle (BEV), Hybrid Electric Vehicle (HEV), Full Hybrid Electric Vehicle (FHEV), Plug-in Hybrid Electric Vehicle (PHEV) and mild Hybrid Electric Vehicle (mHEV).

2. Do the regulations apply to Low Voltage EVs?

Yes, a Low Voltage EV is defined as operating below 60v DC or 30V AC. These Technical Regulations cover all EVs, but not all regulations apply to all vehicles. For example, the HV safety related requirements do not apply to a LV mHEV, as these operate at a nominal DC voltage of 48V which is lower than the 60V DC limit. See Table 1: Regulation summary for details of which regulations apply to LV and HV vehicles.

3. In what sporting disciplines can EVs compete?

The discipline-specific Sporting Regulations will determine which category of EVs are allowed to compete in which discipline.

4. Can I Compete in my EV Road Car?

Yes, the regulations cater for unmodified standard road EVs to compete in disciplines where standards road cars are permitted, such as Autotests/Autosolos and Sprints and Hill Climbs.

5. Do I need an Electric Vehicle Passport?

Yes, All EVs (including Standard cars) must undergo and pass a Vehicle Passport inspection and be in possession of a valid Passport to compete irrespective of discipline or category. To obtain a Electric Vehicle Passport, please contact the Technical Team at Motorsport UK who will put you in touch with an Electrified Vehicle Specialist Scrutineer.

6. I am designing and building a bespoke EV, can I use Hub/Wheel motors?

No, for Bespoke EVs the motors output must drive the wheels through a mechanical gearbox and differential, and any system what achieves torque vectoring across or between axles is prohibited.

7. Why has the maximum total power output of the Rechargeable Energy Storage System (RESS) been limited to 250kW?

As with a number of these regulations we have been quite conservative with factors that limit potential vehicle performance. As the sport gets more experienced with Electrified Vehicles in the various disciplines, we anticipate that some of these restrictions can be relaxed over time.

8. Where can I view the list of approved Battery Management System (BMS) suppliers?

The List will be available from the Motorsport UK Technical Team. The list will evolve as competitors come forward with Battery Management Systems they wish to use, details of these systems will need to need supplied to the Technical Team for review and if deemed suitable will be added to the list.

9. What fire extinguisher needs to be fitted to a bespoke EV?

All Bespoke EVs must be equipped with a plumbed in extinguishing system with a nozzle discharging into each battery pack. Only ABC extinguisher types compatible with the battery chemistry and specified for the voltage level at the power bus are allowed.

10. What do events need to do to be able to accept entries for Electrified Vehicles?

Written permission is required from Motorsport UK to run EVs at an event. Prior to considering the acceptance of entries for EVs the event organisers must carry out a Risk Assessment to include the emergency arrangements for the safe handling and recovery of EVs. Consideration must also be given to the physical restraints of the venue and any resource required for dealing with incidents and recovery (see below).

11. What provisions must the venues have in place for hosting EVs?

A full list of venue requirement can be found in the Guidance – Electrified Vehicles document found on the Motorsport UK Website [LINK](#)

12. What fire fighting provisions does the venue need to have to host EVs?

Motorsport UK Recommends the use of F500 extinguishant for Lithium battery fires.

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