

FAMILY CRITERIA ELECTRIC ENERGY CONVERTER FOR OVC-HEV AND PEV

5.6. Interpolation family

5.6.2. Interpolation family for NOVC-HEVs and OVC-HEVs

In addition to the requirements of paragraph 5.6.1. of this UN GTR, only OVC-HEVs and NOVC-HEVs that are identical with respect to the following characteristics may be part of the same interpolation family:

- (a) Type and number of electric machines: construction type (asynchronous/ synchronous, etc.), type of coolant (air, liquid) and any other characteristics having a non-negligible influence on CO₂ mass emission and electric energy consumption under WLTP conditions;
- (b) Type of traction REESS (model, capacity, nominal voltage, nominal power, type of coolant (air, liquid));
- (c) Type of electric energy converter between the electric machine and traction REESS, between the traction REESS and low voltage power supply and between the recharge-plug-in and traction REESS, and any other characteristics having a non-negligible influence on CO₂ mass emission and electric energy consumption under WLTP conditions. **At the request of the manufacturer and with the approval of the approval authority, electric energy converters between recharge-plug-in and traction REESS with lower recharge losses may be included in the family.**

5.6.3. Interpolation family for PEVs

Only PEVs that are identical with respect to the following electric powertrain/transmission characteristics may be part of the same interpolation family:

- (a) Type and number of electric machines: construction type (asynchronous/ synchronous, etc.), type of coolant (air, liquid) and any other characteristics having a non-negligible influence on electric energy consumption and range under WLTP conditions;
- (b) Type of traction REESS (model, capacity, nominal voltage, nominal power, type of coolant (air, liquid));
- (c) Transmission type (e.g. manual, automatic, CVT) and transmission model (e.g. torque rating, number of gears, numbers of clutches, etc.);
- (d) Number of powered axles;
- (e) Type of electric energy converter between the electric machine and traction REESS, between the traction REESS and low voltage power supply and between the recharge-plug-in and traction REESS, and any other characteristics having a non-negligible influence on electric energy consumption and range under WLTP conditions. **At the request of the manufacturer and with the approval of the approval authority, electric energy converters between recharge-plug-in and traction REESS with lower recharge losses may be included in the family.**

Wording in Road load family as basis for the proposal

5.7. Road load family

Only vehicles that are identical with respect to the following characteristics may be part of the same road load family:

- (a) Transmission type (e.g. manual, automatic, CVT) and transmission model (e.g. torque rating, number of gears, number of clutches, etc.). At the request of the manufacturer and with approval of the approval authority, a transmission with lower power losses may be included in the family;