

EUROPEAN FEDERATION OF RADIO OPERATED MODEL AUTOMOBILES

Izegem, 19th June 2024

2024 1/12 th Spec. European Championship – Motor Irregularity.

One of the three "Spec." motors from the 2024 1/12 Spec European Championship was found not to comply current EFRA rules for Brushless Spec. Motors, or the sample submitted for EFRA homologation. All motors were listed on the EFRA Homologation lists. All motors were inspected at the meeting then sent to the EFRA Homologation Officer, Mr Paul Worsley, who reported his finding to the EFRA Electric Track Vice Chairman, Mr Krist Bultynck.

The following rule regarding the end laminates of the stator applies:

App.4 rule 4.9

Stator: The stator must be continuous laminations having the same overall shape, being one after the other without anything in between. The laminations must be of one homogeneous material without cut-outs, holes or hollow sections other than for the three slots of copper coil wires and (if needed) the three grooves for the screws used to hold the entire assembly together. Stator minimum length 19.30mm, maximum 21.00mm measured across the metal surfaces of the laminates and not including any coatings. The faces of the end laminates of the stator must be free of any coatings or mouldings for minimum 1mm from the outer circumference to allow direct measurement across the metal faces of the stator ends (to be applied to any new motor range submitted from 01.03.18). The outer circumference edges of the end laminates must be complete with no material removed, to allow accurate measurement. The thickness of the stator laminations is 0.35 +/- 0.05mm. All laminations must be of the same material. NOTE : Whilst all laminates in the stator must have the 'same overall shape/design', removal of sharp edges is allowed in the winding area on the end laminates (only) to offset damage to wire coatings. This is clarified as follows:- The top and bottom laminate in the stator stack of Brushless Motors covered by these rules may be deburred or chamfered only on the wire winding web/leg, so long as the overall thickness of these end laminates is the same as other laminates in the stator and so long as the overall measured width of the wire winding web/leg of these end laminates is the same as other laminates in the stator. This requirement effectively restricts any deburring or chamfering to only the top and bottom laminates in the stator.

The XFactor motor # 34 has chamfering on the laminates on both ends of the stator, that goes as far as to encroach on the 4th. laminate.

The original width of the winding-leg on these motors is 2.70 mm.

On this particular motor the end (1st.) laminate is 1.44 mm wide, the 2nd. is 1.96/2.00 mm, the 3rd. is 2.57/2.59 mm. Whilst the 4th. laminate has some metal removed, it maintains the original 2.70 mm width.

MOTOR # 34 FAILS, due to excessive chamfering of the laminates at each end of the stator.

This decision considered rules App 4 – 4.6.1, and the Parc Ferme, General Rule 8.7.9, principles that any item that remains in this status is always subject the rules without a time limit. As we do take the motors for further examination in Spec racing this applies until the motor(s) are validated by the correct authority.

This means that the final scores, belonging to, must be discounted. This promotes, the third-place finalist, Jan Ratheisky to the position of being second at the European Championship 1/12th Spec 2024. The positions of third has to remain vacant as the motor from fourth was not inspected after the final and was released from "parc ferme" meaning that no further inspection is possible.

EFRA does not seek to find fault with entrants' equipment but when an irregularity is found then EFRA cannot allow the possibility of an equipment advantage to contribute to the outcome of a race.

Vice Chairman Electric Track

Krist Bultynck