

INTERNATIONAL FEDERATION OF MODEL AUTO RACING

Whilst sample Motors submitted have been found to conform with IFMAR rules for 'Spec' Brushless Motors, it is the responsibility of ALL competitors to ensure that the versions they use also comply with all IFMAR rules and requirements.

DISCLAIMER: "IFMAR shall not be liable for special, indirect or consequential damages, loss of profits, production or commercial loss in any way connected with the approved products on this list. As IFMAR has no control over use, set-up, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, set-up or assembly the user accepts all resulting liability".

IFMAR PRODUCTS LIST -- BRUSHLESS 'Spec.' MOTORS: Issued: 20 August 2023.








NOTES: Motors approved by IFMAR must comply with all current IFMAR Motor Rules. The following to aid Tech. Officers:-













Rule 5 details the years when the continually changing requirement for stator access was implemented.



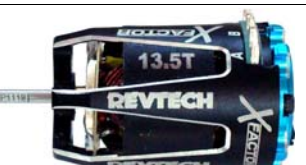
Rule 7.2 - Laminate chamfers/deburring allowed to the winding-leg of only the end laminates, which must retain original overall width.

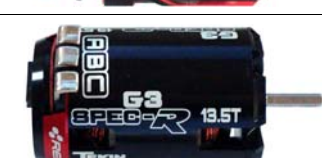
Rule 7.3 - No solid glue or filler can be added to the wires of the final winding assembly.


From 2015: Rule 7.4 (e). Rotors must be identified with manufacturers name/logo and Part Number and from 2021 all Rotors must have the 'listed' Part Number etched/stamped on the external area of the rotor shaft.






Motor Builder	Type/Range	Illustration only	Notes	Date checked
2023 IFMAR PRODUCTS LIST -- BRUSHLESS 13.5T 'Spec.' MOTORS: Issued: 20 Aug. 2023				
Muchmore	Fleta ZX V3 Type ER Part # MR- V3ZX135ERTM		Sensored system. Stator open, Caps remove. Adjustable timing 0/+50 deg. All screws magnetic, Al. retaining housing, steel shielded magnetic bearings. MUST have slots in both End-Caps for stator measuring Rotor with: Muchmore, Part # MR-FZR19XTM on shaft.	20.08.23
Surpass Hobby	Rocket RC V6M Lightweight Part # SUR 6513		End Caps remove but also two cut-outs for measuring. Adjustable timing 0/+60 deg. Wind & V6M Lightweight printed on stator. All screws magnetic. Al. retaining housing, steel shielded magnetic bearings. Rotor with Surpass, Part # C75125 on shaft.	20.08.23
Surpass Hobby	Rocket RC V6 Part # SUR 6613		End Caps remove but also two cut-outs for measuring. Adjustable timing 0/+60 deg. Wind & V6 printed on stator. All screws magnetic. Al. retaining housing, steel shielded magnetic bearings. Rotor with Surpass, Part # C78125 on shaft.	20.08.23
BRUSHLESS 13.5T 'Spec.' MOTORS: Known to comply with IFMAR Rules at 10 April 2023				
Hoomark	Team Zombie EVO II Part # M-TZ- EVO2135T		Sensored system. End-Caps remove. Adjustable timing 0/+60 deg. 4mm thick collector ring. Long body screws non-magnetic, timing plate screws magnetic, Al. sensor retaining housing, magnetic steel shielded bearings. Rotor with: Name & Part # on shaft M-TZ-725125. Option Rotor: M-TZ-725125T	20.03.23
Trinity	Slot Machine Part # TEP 2021E		Sensored. Purple end-plate has Trinity & Slot Machine etched. Wind and 'EFRA' on 'open' stator. Adjustable timing 0-60 deg. Has stator access. Wind stamped on lower collector ring. All screws magnetic, Al. retaining housing, steel shielded magnetic bearings. Rotor with name & Part # on shaft TEP1119. Option Rotor: TEP 1120	20.03.23
Team Powers	Actinium V5.0 Pt. # TPRBLM 135100 ACT-V5		Sensored system. Black Al. one piece Can. 4 full length slots. Team Powers on End-Cap. Wind on stator. Adjustable timing 0-60. All 6 c/sk screws magnetic, Al. sensor housing, steel shielded bearings. Rotor with name, Part # TP125G-R50 on shaft	10.03.23
Hobbywing	Xerun V10 G4 Pt # 30401140		Sensored system. Black all Alu. End-Caps. Rotor with one Alu. bal. ring. Adjustable timing +30/+ 60 deg. Stator and wind visible. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name & Part # on shaft 30820444. Option Rotor: 30820416.	02.05.22

Nosram	XTEC Nosram N22 Part # 920201		Sensored system. "Y" Wind. Black Al. End-Cap with XTEC. Adj. timing 0/60. Wind etched on stator, visible. Body screws non-magnetic, timing screws magnetic, steel shielded magnetic bearings. Rotor with Nosram & Part # 920522 on shaft. Option Rotor: 920521.	07.02.22
Hoomark	Team Zombie EVOT. Part # M-TZ- EVO135TT		Sensored system. Stator removes. Adjustable timing 0/+60 deg. 4mm thick collector ring. All screws magnetic, Al. sensor retaining housing, magnetic steel shielded bearings. Rotor with: Name & Part # on shaft M-TZ-725125. Option Rotor: M-TZ-725125T	01.11.21
Ruddog	Ruddog RP542 Part # RP-0447		Sensored system. 4 side screws retain End-Cap. Timing insert with Ruddog. Adjustable timing 0/+60. Wind & RP542 on stator visible. 3mm collector ring. All screws magnetic, Al. sensor housing, magnetic steel shielded bearings. Stator bonded. Rotor with name & Part #:- RP-0435 on shaft	05.04.21
Maclan	MRR V3 Part # MCL1050		Sensored system. 3 side screws retain End-Cap. Timing insert with Maclan. Adjustable timing +20/+ 50. All screws magnetic. Al. sensor housing & horseshoe, magnetic steel shielded bearings. Stator removes with wind etched. Rotor with name & Part # MCL4144 on shaft.	01.03.21
Team Powers	Actinium V4.0 Pt. # TPBLM 135100 ACT-V4		Sensored system. Black Al. one piece Can. 4 full length slots. Team Powers on End-Cap. Wind on stator. Adjustable timing 0-60. Body screws non-magnetic, timing screws magnetic, Al. sensor housing, steel shielded bearings. Rotor with name, Part # TP125G-R2 on shaft Option Rotor: TP123G-R2	01.03.21
Tekin	Redline G4 SPEC-R Part # TT2763		Sensored system. "Y" Wind. Adj. timing 0/60. Machined Alum. Can, wind printed. Stator visible. All screws magnetic, Plastic sensor housing, magnetic steel shielded bearings. Rotor Part # TT2776 on shaft.	07.12.20
Performa	p1 Radical Stock Part # PA9408		Sensored system. "Y" Wind. Stator removes. Adjustable timing 0/+40. Wind in screw slots. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name. Part # PA9356.	07.12.20
PRT Electronic	PRT AIR Part # PRTAIRX135		Sensored system. "Y" Wind. Alu. Caps remove, PRT on End-Plate. Adjustable timing +30/+75. Good stator access. All screws magnetic, plastic sensor ass., magnetic steel shielded bearings located with brown 'O' ring. Rotor with PRT & Part # 125LVHT on shaft. Option Rotor: 125SVHT	24.08.20
Konect	K1 Elite Stock Part # K11901008		Sensored system. "Y" Wind. Stator not bonded and removes for checking. Wind on stator visible. Adjustable timing 0/60. All screws magnetic, Al. retaining housing, magnetic steel shielded bearings. Rotor with name & Part #: K1/12.5C7.2 on shaft	06.07.20
Scorpion	SCORPION POWER RR-3420 Part # (ending) 7086984180		Sensored system. "Y" Wind. Stator not bonded but tight to remove. Wind on stator. Adjustable timing 0/60. All screws magnetic, Al. retaining housing, magnetic steel shielded bearings. Only later versions with no paint coatings on the stator ends are approved. Rotor with name & Part #: 4897086984234	06.07.20
Ruddog	Ruddog RP541 Part # RP-0359		Sensored system. "Y" Wind. 4 side screws retain End-Cap. Timing insert with Ruddog & RP541. Adjustable timing 0/+60. Wind on stator visible. 3mm collector ring. All screws magnetic, Al. retaining housing, magnetic steel shielded bearings. Rotor with name & Part #:- RP-0349.	11.05.20
Absima	CTM V.3 Part # 2130060		Sensored system. Stator removes, access holes. Absima logo End-Cap, wind on stator. Adj. timing 0/50. Single collector ring. Body & timing screws non-magnetic, Al. retaining housing, magnetic steel shielded bearings. Rotor with name & Part # CTM STK N42UH.	09.03.20

Reds Racing	VX3 Part # MTTE 0036 Also: MTTE 0036C See notes		Sensored system. "Y" Wind. Red Al. timing plate. Adjustable timing 0-50. Caps. remove, cut-outs for measuring stator. All screws magnetic, Al. sensor housing & retaining plate, magnetic steel shielded bearings. Rotor with name & Part # MSTE 0030. Motor with Part # ending with C has non-magnetic long body screws.	03.02.20
Reds Racing	VX3 High Torque Part # MTTE 0036T Also: MTTE0036TC MTTE0036P MTTE0036PC See notes		Sensored system. "Y" Wind. Red Al. timing plate. Adjustable timing 0-50. Caps. remove, cut-outs for measuring stator. All screws magnetic, Al. sensor housing & retaining plate, magnetic steel shielded bearings. Rotor with name & Part # MSTE 0031. Motor with Part # ending with:- 'C' has non-magnetic long body screws. 'P' has updated stator material.	22.01.20
Hoomark	Team Zombie EVO. Part # M-TZ-EVO135T		Sensored system. "Y" Wind. Stator removes. Adjustable timing 0/+60 deg. 4mm thick collector ring. Body screws magnetic, timing screws magnetic, Al. retaining housing, magnetic steel shielded bearings. Rotor with: Zombie, Part # M-TZ-725125 on shaft. Option Rotor: M-TZ-725123	13.01.20
Corally	Vulcan Stock Part # C-61111		Sensored system. "Y" Wind. Can with Vulcan Stock & wind on stator. Adj. timing 0-60 deg. Stator removes. All screws magnetic, Al. sensor housing. Steel shielded bearings. Rotor with name & Part #: 61130	07.10.19
Fantom	Fantom ICON Torque Part # FAN19213T		Stator glued in one piece can. Wind on stator. Can has wind & ICON etched. Adjustable timing +20/+60 deg. No full length internal pins, one magnetic pin 1 dia. x 8 long. All screws magnetic. Bearings magnetic with steel shields. Rotor with name, Part # - FAN19585.	30.09.19
Surpass	Rocket-RC V5R Part # SUR 51135		Stator removes. Adjustable timing 0/+60 deg. Wind etched on stator. 3mm collector ring. Body screws non-magnetic, timing screws magnetic, Al. retaining housing, steel shielded bearings. Steel body screws supplied with kit, allowed. Rotor with Surpass, Part # C75125 on shaft. Option Rotor: C77123 on shaft.	30.09.19
Speedzone	Speedzone Part # SZBLS135		One piece Can, stator removes. Adjustable timing 0/+60 deg. Wind etched on stator (hidden). All screws magnetic. Al. retaining housing, steel shielded bearings. Rotor with name, Part # SZR125S, diameters on shaft. Option Rotor: SZR125S-T, diameters on shaft.	19.08.19
United Sino Enterprises	ORCA Blitreme2 Part # MO18BT54135		Sensored system. Stator bonded, has access holes. ORCA, Blitreme2 & wind etched on End-Cap. Wind on stator. Adj. timing +10/60. Single 3mm collector ring. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name & Part #: RT18M125258.	17.06.19
RC Concept	RC Concept CR10 Part # 20410135		Sensored system. "Y" Wind. Stator bonded. Adjustable timing 0/+60. Wind etched on stator. All screws magnetic, Al. retaining plate, steel shielded bearings. Rotor with name. Part # 50126.	17.06.19
Hobbywing	Xerun V10 G3R Pt # 30401130		Sensored system. "Y" Wind. Black Alu. End-Caps, plastic timing insert. Rotor with one Alu. bal. ring. Adjustable timing +30/+ 60 deg. Stator and wind visible. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name & Part # 30820411. Option rotor: 30820416. Later versions can have mounting end-cap chamfer plain aluminium with no black paint.	15.05.19
Revtech	XFactor Part # REV1101		Sensored system. Blue end-plate has Revtech & XFactor etched. Wind on stator. Adjustable timing 0-60 deg. Has stator access. Wind stamped on lower collector ring. All screws magnetic, plastic retaining housing, steel shielded magnetic bearings. Rotor with name & Part # TEP1119. Option rotor: TEP 1120.	07.05.19

RC Streamline	WS Line Part # E19135		Sensored system. "Y" Wind. Sleeve with WS Line & wind on stator. Adj. timing 0-60 deg. Has stator access. Body screws non-magnetic, timing screws magnetic. Al. sensor housing. Steel shielded bearings. Rotor with name & Part #: WSL540S	22.04.19
Motiv	MC3 Part # MOV31013		Sensored system. Alu. timing plate with logo. End-Cap ass. removes. Adjustable sensor plate timing 0/+40 deg. Has stator access. Twin collector rings. All screws magnetic, full Al. sensor housing, steel shielded bearings. Rotor with name & part # MOV1330. Option Rotor MOV1318.	14.01.19
LRP	XTEC X22 Part # 520201		Sensored system. "Y" Wind. Black Al. End-Bell with XTEC. Adj. timing 0/60. Wind etched on stator. Body screws non-magnetic, timing screws magnetic, steel shielded bearings. Rotor with LRP & Part # 520522, 12.5S on shaft. Option rotor: 520521, 12.3S on shaft. Later motors have two full length slots, and are allowed.	14.01.19
SMC	Lowrider Part # SMCLR40135		Sensored system. "Y" Wind. No centre sleeve, End-Caps remove. Adjustable timing +10/+54 deg. Wind etched on stator. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name & part #: LR712542	24.12.18
Sky RC	ARES Pro. V2.1 Part # SK-400003-58		Sensored system. "Y" Wind. Stator removes. Adjustable timing +5/+55 deg. Wind etched on stator. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name & part #: SK-400003-20	03.12.18
Fantom	Fantom ICON Pt. # FAN193131CON		Stator glued in one piece can, no hysol on outer edge. Wind on stator. Can has wind & ICON etched. Adjustable timing +20/+60 deg. Three internal steel pins 2.48 dia. All screws magnetic. Bearings magnetic with steel shields. Rotor with name, Part # - FAN19597.	26.11.18
Surpass	Rocket V4S Stock Spec. Part # SUR7135		Sensored system. "Y" Wind. Stator removes. Adjustable timing 0/+60 deg. Wind etched on stator. Body screws non-magnetic, timing screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with Surpass, Part # C75125 on shaft. Option Rotor: C77123 on shaft.	17.09.18
Tekin	Redline G3 SPEC-R Part # TT2698		Sensored system. "Y" Wind. Adj. timing 0/60. Machined Alum. Can, wind printed. Stator visable. All screws magnetic, Al. retaining housing, steel shielded bearings. Min. length 50.00mm. Rotor with name & Part # 2722. Option Rotor: 2721	23.04.18
Hobbywing	Xerun V10 G3 Pt # 30401103		Sensored system. "Y" Wind. Black Alu. End-Caps, plastic timing insert. Rotor with one Alu. bal. ring. Adjustable timing +30/+ 60 deg. Stator and wind visible. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor Part # 30820018. Later motors 30820406. Both rotors allowed.	27.02.18
Reedy	Reedy S+Plus Part # 27403		Sensored system. "Y" Wind. Alu. timing insert with 'R' logo, timing 0/+ 50 deg. Stator can be removed, wind etched on stator. All screws magnetic, Al. sensor housing & retaining plate, steel shielded bearings. Rotor with name & Part # 27414 of shaft flat.	15.01.18
Tianco	ORCA Blitreme Part # OMB135BL		Sensored system. "Y" Wind. Stator bonded, has access holes. ORCA Blitreme & wind etched on End-Cap. Adjustable timing 0/60. Twin collector ring. All screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name & Part # ORR425SO.	15.01.18

Arrowmax	Dash R-Tune Part # DA740135		Sensored system. "Y" Wind. Stator removes. Adjustable timing 0/+60 deg. Wind on stator. All screws magnetic, Al. retaining plate, steel shielded bearings. (Non-magnetic body screws included with kit). Rotor with DASH:- Part # - DA-730003. Shaft RSS125.	01.01.18
NOTE: ALL MOTORS SUBMITTED BEFORE 01.11.17, WERE SUPPLIED WITH MAGNETIC SCREWS AND STEEL SHIELDED BEARINGS FITTED. Changing these items invalidates the Motor Part # stated and contravenes Rule 7.7.				
Maclan	MRR V2 Part # MCL1033		Sensored system. "Y" Wind. Black Can & End-Cap with logo. Nickel rotor with one Black Alu. bal. ring. Adjustable timing +20/+50 deg. Has stator access. Rotor Part # MCL4143. Option Rotor : MCL 4144	16.10.17
Trinity	Monster Max Horsepower Part # TEP 1505		Sensored system. 'Y' Wind. Green end-plate has Trinity & Monster Max etched. Stator sleeve with Trinity, M Max & Wind etched. Adjustable sensor plate timing 0-60 deg. Has stator access. Wind stamped on lower collector ring. Rotor with name & Part # TEP1112, later versions TEP1119. Either options allowed.	16.10.17
Motiv	MCR Part # MOV101352S		Sensored system. "Y" Wind. Alu. timing plate with MOTIV logo. Both End-Caps remove. Nickel sintered rotor with black balance ring. Adjustable sensor plate timing +20/+50 deg. Has stator access. Rotor part # MOV1340	28.08.17
R1 Brushless Motor Lab.	R1 Part # R1-135B-125-V16 BRCA & EFRA		Sensored system. "Y" Wind. End-Plate with R1 etched. Stator sleeve with wind. Rotor with black balance ring. Adjustable timing 0-60 deg. Has stator access. Collector ring 3mm thick. Motors with epoxy filled windings not approved. V16 etched on sleeve. Rotor with name & Part #: R1-125-720-002 Option Rotor: R1-123-720-001	24.07.17
Muchmore	FLETA ZX V2 Part # MR-V2ZX135ER		Sensored system. "Y" Wind. Al. timing plate, adjust. timing 0-50. Stator removes but can be seen through holes. Wind etched on stator. Shaft etched with rotor dia. Rotor with name & part #. Rotor Part #: MR-FZR 21Y. Optional Rotor #: MR-FZR-18TI	24.07.17
PRT Electronic	PRT AIRs 10 Part # A10135S		Sensored system. "Y" Wind. Black Alu. Caps & Sleeve, PRT on End-Plate. Adjustable timing. Caps remove. Wind marked on sleeve. Has stator access. Rotor with name & Part # 125RSHT. Option Rotor: 123RSHT	31.05.17
Orion	Vortex Ultimate Stock LW (2016) # ORI28369		Sensored system. "Y" Wind. Full dia. Black sleeve with removable Alu. End-Plates, all retained with long screws. Adjustable timing 0/+40. Wind etched. Two sensor plug. Rotor has name & part # ORI 41554. Option Rotor: ORI 41553	23.01.17
Orion	Vortex VST2 Pro. Mg. LW (2016) # ORI28330		Sensored system. Dark grey one-piece Can. End-Plate has Team Orion & wind marked, retained with five screws. Adjustable timing +/- 10. Two sensor plugs. Has stator access. Rotor with name & Part # ORI 41476 Option Rotor: ORI 41517	24.10.16
Corally	Dynospeed Spec. 3.0 Part # C-61101		Sensored system, two ports. "Y" Wind. One end of stator visible but stator removes. Wind etched on End-Cap. End-Cap Alum., adjustable timing, no numbers. Rotor with logo, Part # 61130	08.08.16
Tesla	Tesla EP Part # TS-194135T-S		Sensored system. "Y" Wind. Blue Alu. Can & End-Caps. Timing insert with Tesla logo etched. Nickel sintered rotor with one Alu. bal. ring. Adjustable timing +20/+ 60 deg. Lams.visible. Rotor Part # TS-194136	18.07.16

Fenix	Fenix DFV2-13.5 Pt. # FM00135-2		Sensored system. "Y" Wind. Black Alu. Can & End-Caps. Timing insert with Fenix DFV2 etched. Nickel sintered rotor with one Alu. bal. ring. Adjustable timing +20/+ 60 deg. Lams.visible. Rotor Part # MF72-B Option Rotor: MF72	19.05.16
Fenix	Fenix DFV-13.5 Pt. # FM00135		Sensored system. "Y" Wind. Black Alu. Can & End-Caps. Timing insert with Fenix DFV etched. Nickel sintered rotor with one Alu. bal. ring. Adjustable timing +20/+ 60 deg. Lams.visible access with cap removed. Rotor Part # MF72.	18.01.16
Reedy	Reedy Sonic M3 Part # 255		Sensored system. "Y" Wind. Black Alu. Cap & Sleeve, Alu. timing insert with 'R' logo. Adjustable sensor plate timing 0/+ 50 deg. Caps remove and stator can be removed, wind etched on stator. Nickel sintered rotor with one Alu. balance ring. Rotor Part # 273. Optional Rotor #: 272.	17.10.15
Reedy	Reedy Sonic M3 - SS 1S Part # 270		Sensored system. "Y" Wind. Black Alu. Cap & Sleeve, Alu. timing insert with 'R' logo. Adjustable sensor plate timing 0/+ 50 deg. Caps remove and stator can be removed, wind etched on stator. Nickel sintered rotor with one Alu. balance ring. Rotor Part # 272. Option Rotor #: 273.	17.10.15
G Force	G Force Super Extreme Pt # G0150		Sensored system. "Y" Wind. Red Alu. Cap & Sleeve, Alu. timing insert with G logo. Adjustable sensor plate timing 0/+ 60 deg. Caps & sleeve remove, wind etched on stator. Nickel sintered rotor with one Alu. balance ring. Rotor Part # GF400003-54 Option Rotor G0045	27.7.15

P. Worsley. 20.08.23. (for IFMAR)