

EUROPEAN FEDERATION RADIO CONTROLLED AUTOMOBILES












**Samples of Motors included on this list have been checked for compliance to EFRA 2019 Rules:
For Brushless 'Spec.' 13.5T Motors.**












**Only Motors included on this list, can be used at EFRA Sanctioned events (EC or GP), for:
The Motor Class designated for the event.**

Whiist sample Motors submitted have been found to conform with EFRA 2019 rules for 'Spec' Brushless Motors, **it is the responsibility of ALL competitors to ensure that the versions they use also comply with all EFRA rules and requirements.**

NOTE: These motors differ from Brushless 'Modified' Motors.

Motor Builder	Type/ Range	Illustration only	Notes	Approval Date
Motors below this level must comply with EFRA Rules :- App.4, 4.8 & 4.9 which requires access to stator to allow measurement and visual appraisal of the laminates. Also 4.16, which requires the Rotor to be marked with Name or Logo & Part #.				
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.	15.05.19
			Option rotor: 30820416	17.06.19
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.	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
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.	14.01.19
			Option rotor: 520521, 12.3S on shaft. Later motors have two full length slots, and are allowed.	01.07.19
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.	14.01.19
			Option rotor MOV1318.	04.02.19
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
ITEM REMOVED FROM HOMOLOGATION LIST				24.06.19
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 12.11.18
Team Powers	Actinium V3.0 Pt. # TPBLM 135100 ACT-V3		Sensored system. Black Aluminium Sleeve & End-Cap. Stator with wind etched & visible. Sintered rotor with one balance ring. Body screws non-magnetic, timing screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with name, Part # TP125G-R2. Option rotor: TP123G-R2	17.09.18 02.07.19
Hoomark	Zombie CJ Edition. Part # M-TZ-RBE135T		Sensored system. "Y" Wind. Stator bonded but visible. Adjustable timing 0/+60 deg. Body screws non-magnetic, timing screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with: Zombie, Part # M-TZ-725125 on shaft. Option rotor: M-TZ-725125S	17.09.18
Tekin	Redline G3 SPEC-R Part # TT2698		Sensored system. "Y" Wind. Adj. timing 0/60. Machined Alum. Can, wind printed. Stator visible. 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 24.12.18
Surpass	Rocket V3 Pro Stock. Part # SUR6135		Sensored system. "Y" Wind. Stator bonded, has access. Adjustable timing 0/+45 deg. Wind etched on stator. Body screws non-magnetic, timing screws magnetic, Al. retaining housing, steel shielded bearings. Rotor with Surpass, Part # C74125 on shaft.	05.02.18
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
Reds Racing	VX2 Part # MTTE 0022		Sensored system. "Y" Wind. Red Al. timing adjuster. Adjustable timing 0-50. Stator removes & has wind etched. All screws magnetic, Al. sensor housing & retaining plate, steel shielded bearings. Rotor with name & Part # MSTE0017. Option rotor MSTE 0018	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 19.02.18
NOTE: ALL MOTORS SUBMITTED BEFORE 01.11.17, WERE HOMOLOGATED WITH MAGNETIC SCREWS AND STEEL SHIELDED BEARINGS FITTED. Changing these items invalidates the Motor Part # stated and contravenes App.4 Rule 4.6.				
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 20.11.17
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 09.04.18
Fantom	Fantom FR-1 v3R Pt. # FAN19411S		Sensored system. "Y" Wind. Stator glued in sleeve. Sleeve with wind & 'R' etched. Adjustable timing +20/+60 deg. Has stator access no hysol on outer edge. Wind etched on stator. Rotor with name, Part # - FAN19597.	25.09.17
Fantom	Fantom FR-1 v3T Pt. # FAN19412S		Sensored system. "Y" Wind. Stator glued in sleeve. Sleeve with wind & 'T' etched. Adjustable timing +20/+60 deg. Has stator access no hysol on outer edge. Wind etched on stator. Rotor with name, Part # - FAN19597.	25.09.17
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 rotors: 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 #'s: All MR-FZR :- 18TI, 19Z, 21TIZ, 21Z	24.07.17 31.10.17
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
PRT Electronic	PRT AIR 10 Part # A10135 (2017 ver.)		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	15.05.17
Hobbywing	Xerun Justock 3650 G2 Pt # 30408005		Sensored system. "Y" Wind. Black Alu. Can & End-Cap with Justock 3650G2. Nickel sintered rotor with one Alu. bal. ring. No timing adjustment. Stator and wind visible. Rotor Part # 30820007 stamped 7-12.5-A.	15.05.17

R1 Brushless Motor Lab.	R1 Part # R1-135B-125-V15 BRCA & EFRA		Sensored system. "Y" Wind. End-Plate with R1 (only) 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. Rotor with name & Part #: R1-125-720-002 Option rotors: R1-123-720-001, R1-125-720-001	13.02.17 03.04.17
Fantom	Fantom FR-1 v2R Pt. # FAN19471S		Sensored system. "Y" Wind. Stator glued in sleeve. Sleeve with wind etched. Adjustable timing +20/+60 deg. Has stator access but hysol on ends. Wind etched on stator. Rotor with name, Part # - FAN19591. Option Rotor: FAN19590.	23.01.17
Fantom	Fantom FR-1 v2T Pt. # FAN19472S		Sensored system. "Y" Wind. Stator glued in sleeve. Sleeve with wind etched. Adjustable timing +20/+60 deg. Has stator access but hysol on ends. Wind etched on stator. Rotor with name, Part # - FAN19591. Option Rotor: FAN19590.	23.01.17
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 13.02.17
Maclan	MRR Part # MCL1015		Sensored system. "Y" Wind. Black Can & End-Cap with copper timing plate & logo. Nickel rotor with one red Alu. bal. ring. Adjustable timing +20/+ 60 deg. Stator removes easily. Rotor Part # MCL4075. Optional rotors # MCL4076 & MCL4093.	16.01.17
Tianco	ORCA RT Pt. # OMT135RT		Sensored system. "Y" Wind. Black Can & E/Cap. Stator has access slots. Stator accepts 14.5mm gauge. ORCA RT & wind etched on End-Cap. Adjustable timing +/-50. Rotor with name & Part # ORR425S0. Option rotors:- ORR --- 325S1, 233SL, 238SL, 253SL, 258SL.	16.01.17
Reds Racing	VX Part # MTTE 0012		Sensored system. "Y" Wind. Red metal End-Plate at Term. End, with adjustable timing 0-45. Black Can/Sleeve. Stator separates & has wind etched. Rotor with Green drilled balance ring Part # MSTE0016. Optional rotors:- # MSTE0009, MSTE0010	19.12.16
Trinity	Monster Horsepower Part # TEP 1501 "M"		Sensored system. "Y" Wind. Green end-plate has Trinity etched. Stator sleeve with Trinity, M & Wind etched. Adjustable sensor plate timing 0-60 deg. Has stator access. Wind stamped on lower collector ring. Rotor with name & Part # TEP1118. Option Rotor # TEP1112.	14.11.16
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
Team Powers	Actinium Pt. # TPBLM 135100 ACT- V2		Sensored system. "Y" Wind. Black Aluminium Sleeves & End-Plates. Stator with wind etched & visible. Nickel sintered rotor with no balance ring. Has stator access. (UK Spec. label not mandatory). Rotor with name, Part # TP125G-R	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

Motiv	M Code Part # MOV10305S		Sensored system. "Y" Wind. Alu. timing plate with MOTIV logo. Mounting Cap removes. Nickel sintered rotor with no balance ring. Adjustable sensor plate timing 0/+50 deg. Has stator access. Rotor part # MOV1315	18.07.16
Fantom	Fantom FR-1 Type M Pt. # FAN19480S		Sensored system. "Y" Wind. Stator glued & spigoted in sleeve. Sleeve with wind etched. Adjustable sensor plate timing +20/+60 deg. Has stator access. Wind etched on stator. Rotor with name, Part # - FAN19591. Optional Rotor: FAN19590.	18.07.16 05.12.16
Fantom	Fantom FR-1 Type RS Pt. # FAN19481S		Sensored system. "Y" Wind. Stator glued & spigoted in sleeve. Sleeve with wind etched. Adjustable sensor plate timing +20/+60 deg. Has stator access. Wind etched on stator. Rotor with name, Part # - FAN19591. Optional Rotor: FAN19590.	18.07.16 05.12.16
Ruddog	Ruddog RP540 Part # RP-0013		Sensored system. "Y" Wind. Silver Alu. Can & End-Caps. Timing insert with Ruddog etched. Nickel rotor with one Alu. bal. ring. Adjustable timing +20/+ 60 deg. Lams.visible with wind visible on stator. Rotor Part # RP-12.5-7.2	30.05.16
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
Tekin	Redline Gen3 Part # TT2707		Sensored system. "Y" Wind. Black Alum. Timing plate 2.5mm above red ring.. Adj. timing 0/60. Machined Alum. Can with wind printed. Stator visible via. slots. Rotor with one brass balance ring Part # 2721. Option rotors: 2719, 2722	16.05.16
Tekin	Redline Gen3 Part # TT2706 RPM		Sensored system. "Y" Wind. Black Alum. Timing plate 2.5mm above red ring.. Adj. timing 0/60. Machined Alum. Can with wind printed. Stator visible via. slots. Rotor with one brass balance ring Part # 2721. Option rotors: 2719, 2722	16.05.16
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
Hobbywing	Xerun V10 G2 Pt # 30101107		Sensored system. "Y" Wind. Black Alu. Can & End-Cap, moulded timing insert with logo moulded. Nickel sintered rotor with one Alu. bal. ring. Adjustable timing +20/+ 50 deg. Stator and wind visible. Rotor Part # 30820007 stamped 7-12.5-A. Option Rotor: # 30820015 stamped 7-12.5-U-B Option End-Cap, timing +30/+60, Part # 30820054	18.01.16 12.12.16 21.11.16
Turnigy	Trackstar V2 Pt # 80134		Sensored system. "Y" Wind. Stator slides from sleeve.Sleeve with wind etched. Adjustable sensor plate timing 0-50 deg. Has stator access. Wind etched on stator. Rotor with name, sizes & Part #. Rotor Part # 919000281	23.11.15
Team Epic	ReVtech 24K Pt # REV1801		Sensored system. "Y" Wind. End-Plate has Revtech etched. Stator sleeve with ReVtech & Wind etched. Adjustable sensor plate timing 0-60 deg. Has stator access. Wind stamped on lower collector ring & visible. Rotor with name & Part # TEP1112. Optional rotor # TEP1118.	23.11.15 14.11.16
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 Rotors #'s: 272, 286.	17.10.15 15.05.17

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. Optional Rotors #'s: 273, 286.	17.10.15 15.05.17
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
Motors below this level must comply with EFRA Rule - App.4, 4.8 & 4.9, which requires access to the stator to allow measurement and visual appraisal of the laminates.				
King Golden	Speed Passion V4.0 13.5R #SP001231		Sensored system. "Y" Wind. Black End-Plates & Sleeve with wind etched. Nickel sintered rotor with one Purple balance ring, 12.5 dia, 7.1 core. Adjustable timing 0 -40 deg. Has stator access.	9.3.15
PRT Electronic	PRT AIR 10 Part # A10135		Sensored system. "Y" Wind. Black Alu. Caps & Sleeve, PRT on End-Plate. Nickel finish Rotor with Cyan Alu. balance ring, 12.5 dia, 7.2 core. Adjustable timing. Caps remove. Wind marked on sleeve. Has stator access. Rotor options:- PRT123RSHT Purple/Nickel. PRT125RS2 Grey/Nickel. PRT125RS Grey/Black. PRT123RS Purple/Black. Logo design updated.	19.01.15 14.08.15
Hirosaka	Hirosaka Part # HSK- PRO135T		Sensored system. "Y" Wind. Black metal End-Bell with plastic timing insert. Adjustable timing 0-45. Black Can/Sleeve. Nickel sintered rotor with Purple balance ring, 12.3 dia, 7.1 core. Caps & sleeve remove, has stator access. Stator marked with wind	15.12.14
EZpower	EZ Kicker EZBR213R		Sensored system. "Y" Wind. Gun-metal End-Plates & Sleeve. Adjustable red timing ring. Nickel sintered rotor with Red hollow balance ring marked EZ, 12.5 dia, 7.2 core. Caps & sleeve remove, has stator access.	17.11.14
Wurks	Wurks Part # R1-135-125-V7		Sensored system. "Y" Wind. End-Plate with R1 Wurks etched. Stator sleeve with Wind painted. Nickel sintered rotor painted Black, no balance ring, 12.5 dia, 7.2 core. Adjustable sensor plate timing 0-60 deg. Has stator access. Single collector ring at 'pinion' end of stator. Motors with Twin collector rings and/or epoxy filled windings not approved.	27.10.14. 16.12.15 26.10.16
Tianco	ORCA RX3 Part # OMR135X3		Sensored system. "Y" Wind. Black Can & E/Cap. Complete stator removes. Has stator access slots. ORCA RX3 & wind etched on End-Cap. End-Cap Alum., adjustable timing. Rotor with black balance ring 12.4 dia., 7.2 core. Rotor Part # OTR124ST.	20.10.14 25.05.15
Team Powers	Actinium Pt. # TPBLM 135100 ACT		Sensored system. "Y" Wind. Black Aluminium End-Plates, Team Powers etched. Gun-Metal stator sleeve with 13.5T etched. Nickel sintered rotor with no balance ring, 12.45 dia, 7.23 core. Has stator access. Optional End-Plate TP-ATEB-001 allowed. Optional Rotor # TP125G-R.	20.10.14 18.01.16
Trinity	D4 Part # TEP 1701		Sensored system. "Y" Wind. Purple Alu. timing plate with TRINITY & 4 etched. Caps and sleeve dark gun-metal, all parts remove. Nickel sintered rotor with one purple balance ring, 12.3 dia, 7.2 core. Adjustable sensor plate timing -10 + 60 deg. Has stator access. Optional rotor TEP 1112 approved	29.9.14
Absima	Revenge V2 Part # 2130020		Sensored system. "Y" Wind. Black Alu. Caps & Grey Sleeve, Logo only on End-Plate. Sintered rotor with one Alu. balance ring, 12.5 dia, 7.2 core. Sensor plate timing 0/+ 40 deg. Caps & sleeve remove, wind marked on stator. Only V2 version approved	30.6.14

Reds Racing	VX Part # MTTE 0006		Sensored system. "Y" Wind. Red metal End-Plate at Term. End, with adjustable timing 0-45. Black Can/Sleeve. Stator separates & has wind etched. Rotor with Black drilled balance ring MSTE0010. Optional rotors:- # MSTE0009, MSTE0016	05.05.14 06.07.16
G Force	G Force Super Sonic Pt # G0008		Sensored system. "Y" Wind. Black Alu. Caps & Sleeve, Alu. timing insert with logo printed. Nickel sintered rotor with one Alu. balance ring, 12.5 dia, 7.2 core. Adjustable sensor plate timing 0/+ 40 deg. Caps & sleeve remove, wind etched on stator. Option rotor G0045	07.04.14 27.07.15
Hobbywing	Xerun V10 Pt. # 30401020047		Sensored system. "Y" Wind. Black Alu. Can & End-Cap, moulded timing insert with logo printed. Nickel sintered rotor with one Alu. balance ring, 12.5 dia, 7.2 core. Adjustable sensor plate timing -20/+ 50 deg. Stator and wind visible via. sleeve slots.	3.3.14
Team Epic	ReVtech Killshot Pt # REV1601T		Sensored system. "Y" Wind. Copper colour Aluminium End-Plates, Revtech etched. Blue stator sleeve with RevTech & Wind painted. Nickel sintered rotor with one purple balance ring, 12.3 dia, 7.2 core. Adjustable sensor plate timing 0-80 deg. Has stator access. Optional rotor TEP 1112 approved.	09.12.13 07.04.14
Team Epic	ReVtech Killshot Pt # REV1601R		Sensored system. "Y" Wind. Copper colour Aluminium End-Plates, Revtech etched. Blue stator sleeve with RevTech & Wind painted. Nickel sintered rotor with one purple balance ring, 12.3 dia, 7.2 core. Adjustable sensor plate timing 0-80 deg. Has stator access. Optional rotor TEP 1112 approved.	09.12.13 07.04.14
Novak	Vulcan Pt. # 3643		Sensored system. "Y" Wind. Black Al. End-Plate with NOVAK etched. Stator sleeve with 13.5T label. 3/16 Bearing at Pinion end. Red plastic denoting 13.5. Adjustable timing. Nickel sint. Rotor Pt.# 5941 12.3, 7.1 core. Optional rotor Pt.# 5955 12.5 dia.	09.09.13 21.10.13
Mtroniks	MX-1 Pt. # MTMX135		Sensored system. "Y" Wind. Anodised Alum. End-Plates & Stator Sleeve, with wind printed. Fixed timing. Nickel sintered rotor with one hollow balance ring, 12.5 dia, 7.2 core. Stator visible via. Sleeve slots.	5.8.13
Muchmore	FLETA ZX Pt # MR-FZX135		Sensored system. "Y" Wind. Black metal End-Bell with plastic timing plate, with adjustable timing 0-45. Black Can/Sleeve. Stator separates. Nickel sintered rotor with Blue drilled balance ring. Rotor 7.2 core, 12.3 dia. Optional rotor MRFZR12 allowed. Aluminium timing-plate MR-FZAT fitted to later versions.	29.07.13 14.05.14 05.08.14
Nosram	Pure 2 Evolution Spec. Racing Pt.# 91844		Sensored system. "Y" Wind. Black moulded End-Bell with XTEC. Fixed End-Sleeve etched with wind. Sintered rotor, coloured Black, with 1 balance ring. Grey stator moulding. Rotor shaft Black stamped 12.5-25. Slot for stator access. Optional Green rotor # 90639 approved	08.07.13 28.12.15
Corally	Corally Pro Silver 13.5T 399135		Sensored system. "Y" Wind. Plain Alum. End-Plates. Adj. timing. Plain Alum. stator sleeve with wind etched. Nickel sintered rotor with one Black balance ring, 12.4 dia, 7.18 core. Stator visible via. Sleeve slots. All red S/Print decal also OK.	17.6.13
Tianco	ORCA TX Pt. # OTM 135TX		Sensored system. "Y" Wind. Dull Grey Aluminium casings. Main sleeve removes. Has stator access slots. ORCA TX & wind etched. End-Plate moulded, adjustable timing. 12.5mm Rotor no balance ring, shaft marked 125S-N. Option rotor 123S-N. 12.3mm. Option EndPlate OME111TX allowed. New sensor Ass. CAS-0220TX-30 fitted.	10.06.13 10.03.14 20.07.14
LRP	X20 13.5T Spec. # 50844		Sensored system. "Y" Wind. Black moulded End-Bell with XTEC. Fixed End-Sleeve etched with wind. Sintered rotor, coloured Black, with 1 balance ring. Grey stator moulding. Rotor shaft Black stamped 12.5-25. Slot for stator access. Optional Green rotor # 50639 approved.	22.04.13 28.12.15

Tekin	Redline GEN2 # TT2406 & TT2407		Sensored system. "Y" Wind. Black Alum. End-Plates, not joined. Adj. timing. Alum. Can with wind etched. Stator visible via. Sleeve holes. Nickel sintered rotor with one brass balance ring. Rotor 7.14 core. 2406=12.25 dia. 2407=12.5 dia.	1.4.13
Team Wave	Eclipse # TW2011- 135		Sensored system. "Y" Wind. Black Alum. End-Plates. Adj. timing. Black Alum. stator sleeve with wind etched. Nickel sintered rotor with one plain balance ring, 12.5 dia, 7.17 core, marked 125-R. Stator visible via. Sleeve slots.	1.4.13
Reedy	Reedy Sonic Mach 2 # 233		Sensored system. "Y" Wind. Black metal End-Bell at Term. End, with adjustable timing 0-45. Black Can/Sleeve. Stator separates. Nickel sintered rotor with drilled balance ring, 12.5 dia, 7.2 core # 956. Optional rotors:- # 954, # 955.	25.3.13
Savox	Savox SX.1 # SAV- BLH3650 991757		Sensored system. "Y" Wind. Aluminium casings. Slot for stator access included. Main sleeve removes, stator spigoted into fixed casing. Saxox X1 & wind etched. End-Plate moulded, adjustable timing. Rotor has no balance ring.	25.3.13
Team Orion	VST2 Pro Stock 13.5. # ORI 28251		Sensored system. "Y" Wind. Grey one-piece Can. Black Aluminium End-Plate retained with five screws, adjustable moulded timing plate. Wind etched. Nickel sintered rotor, 12.5 dia, 7.1 core, no balance rings. Optional 12.4 dia, 7.2 core.	25.3.13
Motors below this level retain approval, although they were approved before implementation of EFRA Rule App.4, 4.8 & 4.9, (requiring access to stator for measurement and visual appraisal of laminates). Some motors do allow stator access.				
Horizon Hobby	Dynamite Platinum 13.5T # DYP 1013		Sensored system. "Y" Wind. Black Aluminium End-Plate at Term. End, with adjustable timing. Wind etched on Term. Sleeve, Stator mould & Stator Lams. Stator separates. Nickel sintered rotor with drilled balance ring, 12.5 dia, 7.2 core.	20.8.12
Dualsky	Track & Field Z5 13.5T Pt # 53651		Sensored system. "Y" Wind. Silver Sleeve & Mounting-Plate. Z5, 13.5T, Track&Field etched on sleeve. Black Alu. End-Plate & retaining ring. Adjustable timing. Nickel sintered rotor with no balance ring, 12.5 dia, 7.2 core.	11.6.12
Team Epic	ReVtech R-Power Pt # REV1051		Sensored system. "Y" Wind. Copper colour Aluminium End-Plates, ReVtech painted. Blue stator sleeve with ReVtech & Wind painted. Nickel sintered rotor with one purple balance ring, 12.45 dia, 7.2 core. Adjustable sensor plate timing. Mounting Plate with 3 x 5.9mm slots.	12.3.12
Vampire	Vampire Type AB+ Bloodline Pt. # VR-3135		Sensored system. "Y" Wind. Black Plastic End-Plate at Term. End, with adjustable timing. Sensor plug horizontal. Purple End plates. Wind etched. Nickel sintered rotor with no balance rings, 12.5 dia, 7.21 core.	12.3.12
Graupner	GM Brushless PRO. Pt. # 97413. 2012 version.		Sensored system. "Y" Wind. Alum. Mounting-Plate with 3x5mm holes and 3 radiused slots. Plastic End-Cap with GM moulded. Adj. timing. Gun-Metal stator sleeve with Wind & Pt.# etched. Side entry sensor plug. Nickel rotor marked GM Stock, 12.51 dia, 7.24 core.	31.12.11
Tekin	Tekin Redline 13.5T Spec. Pt. # TT2252 (Etched Can)		Sensored system. "Y" Wind. Red Aluminium mounting plate. Black moulded End-Bell with Tekin. Grooved Al. bonded stator sleeve with 13.5T etched. Nickel plated sintered rotor, 12.5 dia, 7.1 core. No balance rings.	17.10.11

Thunder Power	Z3R-S Part # TPM-540A135		Sensored system. "Y" Wind. Black Plastic Moulding at Term. End, with adjustable timing. Red Can/Sleeve with silver end cover. Wind etched on stator. Stator separates. Nickel sintered rotor with drilled red balance ring, 12.25 dia, 7.2 core. Optional rotors: - Blue or Green balance ring.	17.10.11 16.04.12
Reedy	Reedy Sonic Pt. # 942		Sensored system. "Y" Wind. Black Plastic End-Plate at Term. End, with adjustable timing. Black Can/Sleeve. Wind etched. Stator separates. Nickel sintered rotor with drilled balance ring, 12.5 dia, 7.2 core. Later version has more timing graduations detailed & relocated pointer.	04.07.11 09.04.12
Speed Passion	Competition 3.0 MMM Version Pt.# SP000038		Sensored system. "Y" Wind. Dark Gun-Metal Aluminium Sleeve & End-Plates, SP etched. Sleeve with Wind & MMM etched. End-Plates with grooves. Red sensor board. Black sintered rotor with one balance ring, 12.3 dia, 7.2 core. Adjustable timing 11-20 deg.	4.7.11
Viper	Viper VST Pt. # 8VST 135001		Sensored system. "Y" Wind. Red Aluminium End-Plates, VST & 13.5T etched. Black grooved stator sleeve. Black sintered rotor with no balance rings, 12.5 dia, 7.35 core. Adjustable timing.	16.5.11
Novak	Ballistic Pt. # 3613		Sensored system. "Y" Wind. Black Al. End-Plate with NOVAK etched. Stator sleeve with 13.5T label. Ring etched. Nickel plated sintered rotor, 12.3 dia, 7.12 core. Red plastic denoting 13.5. Adjustable timing. Vented End-Bells # 5925 approved.	11.04.11 18.06.12
Team Powers	Plutonium Pt.# TP-BLM- 135100PL		Sensored system. "Y" Wind. Black Aluminium End-Plates, Team Powers etched. Gun-Metal stator sleeve with 13.5T etched. Nickel sintered rotor with no balance ring, 12.23 dia, 7.24 core. Adjustable sensor plate timing. Optional End-Plate TP-ATEB-001 allowed.	11.04.11 20.10.14
HPI	Flux Pro. Pt. # 101732		Sensored system. "Y" Wind. Black Aluminium End-Plates, HPI etched. Black stator sleeve with Wind etched. Nickel sintered rotor, 12.5 dia, 7.2 core. Adjustable timing. Optional rotor - 12.2 dia, 7.2 core, Nickel plt. Optional rotor 107252 - Mag. & Shaft Black.	28.03.11 07.05.12
Hobbywing	Xerun Pt. # 90040120		Sensored system. "Y" Wind. Polished Aluminium End-Plates, Hobbywing etched. Fixed timing. Blue stator sleeve with 13.5T & Pt.# etched. Sleeve & EndPlates also Gunmetal colour. Side entry sensor plug. Nickel sintered rotor, 12.4 dia, 7.2 core. Rotor with one balancing ring.	12.2.11
Graupner	GM Brushless PRO. Pt.# 97353 2011 version.		Sensored system. "Y" Wind. Gun-Metal Aluminium End-Plates, GM-Racing etched. 5 timing threads. Gun-Metal stator sleeve with S13.5T & Pt.# etched. Side entry sensor plug. Black sintered rotor, 12.4 dia, 7.21 core. Rotor with one balancing ring.	31.1.11
Tianco	ORCA RX2 Pt. # OBM135X2		Sensored system. "Y" Wind. Gun-Metal End-Plates, RX2 & 13.5T etched. Gun-Metal sleeve with RX2 & 13.5T etched. Black rotor, one balance ring, 12.2 dia, 7.23 core. Optional rotor OMA123PX 12.2mm nickel. Adjustable sensor plate timing. Mounting Plate 3 x 6mm holes & chamfer.	31.01.11 31.12.11
Trinity	Trinity D3 Pt. # TEP1051		Sensored system. "Y" Wind. Gun-Metal Aluminium End-Plates, Trinity etched. Black stator sleeve with D3 & 13.5T etched. Nickel sintered rotor with one balance ring, 12.25 dia, 7.21 core. Adjustable sensor plate timing.	31.1.11
Team Powers	Team Powers Brushless 13.5 Turns Pt. # TPBLM 135100		Sensored system. "Y" Wind. Black Aluminium End-Plates, Team Powers etched. 5 outer timing threads, 3 sensor mount threads. Black & Gold stator sleeves with 13.5T etched. Nickel plated sintered rotor, 12.3 dia, 7.24 core. No balancing rings.	10.10.10

Graupner	GM Brushless PRO. Pt.# 97294 2010 version.		Sensored system. "Y" Wind. Gun-Metal Aluminium End-Plates, GM-Racing etched. 5 timing threads. Gun-Metal stator sleeve with S13.5T & Pt.# etched. Side entry sensor plug. Black sintered rotor, 12.3 dia, 7.22 core. Rotor with one balancing ring.	1.2.10
LRP	X12 Vector Stock Spec. Pt.# 50842		Sensored system. "Y" Wind. Black moulded End-Bell with XTEC. Sleeve etched "13.5 Turns". Black Sintered rotor, 12.5 dia, 7.1 core. Rotor shaft, Black. Manufacturers 'grooved' Al. End-Bell with name engraved allowed at terminal end. Optional green rotor 50639 12.2, 7.1 core Later versions have rotor shaft stamped.	23.11.09 31.01.11 28.05.12
Nosram	Pure Evolution Spec. Racing Version. Pt.# 91841		Sensored system. "Y" Wind. Black moulded End-Bell with XTEC. Sleeve etched "13.5 Turns". Black Sintered rotor, 12.5 dia, 7.1 core. Rotor shaft, Black. Manufacturers 'grooved' Al. End-Bell with name engraved allowed at terminal end. Optional green rotor 90639 12.2, 7.1 core Later versions have rotor shaft stamped.	23.11.09 31.01.11 28.05.12
LRP	Vector X11 Stock Spec. Pt. # 50840		Sensored system. "Y" Wind. Black moulded End-Bell with XTEC. Red anodised ring. Chamfered mounting face. Sleeve etched "13.5 Turns". Sintered rotor, 12.3 dia, 7.35 core. Rotor shaft, Black. Manufacturers 'slotted' End Plates (std. & thin versions) allowed at pinion end. Manufacturers later 'grooved' Al. End Plate with name engraved allowed at terminal end.	5.10.09
Speed Passion	3.0 - 13.5R Pt.# SP138135V3		Sensored system. "Y" Wind. Light Gun-Metal Aluminium End-Plates, SP & 13.5T etched. Light Gun-Metal stator sleeve with SP13.5T etched. Black sensor board. Black sintered rotor with one balance ring, 12.3 dia, 7.22 core. Adjustable timing 0-10.	5.10.09
GM	Brushless PRO. Pt.# 97294		Sensored system. "Y" Wind. Dark Gun-Metal Aluminium End-Plates, GM-Racing etched. Dark Gun-Metal stator sleeve with S13.5T & Pt.# etched. Black sintered rotor, 12.3 dia, 7.2 core. Rotor with one balancing ring.	5.10.09
Nosram	Spec.' Storm Evolution Pt. No. 91840		Sensored system. "Y" Wind. Black moulded End-Bell with XTEC. Red anodised ring. Chamfered mounting face. Sleeve etched "13.5 Turns". Sintered rotor, 12.3 dia, 7.35 core. Rotor shaft, Black. Manufacturers 'slotted' End Plates (std. & thin versions) allowed at pinion end. Manufacturers later 'grooved' Al. End Plate with name engraved allowed at terminal end.	1.12.08

Paul Worsley. (EFRA Elec. Chairman). Last update 01.07.19.