

EUROPEAN FEDERATION RADIO CONTROLLED AUTOMOBILES

Motors shown on this list are "Known to Comply" with EFRA 2015 Rules for Brushless 'Spec.' 13.5T Motors.

This list is for reference only and should not be considered to be comprehensive. Products from other manufacturers may also comply with EFRA rules. Before using a motor not on this list, please bear in mind it is the competitors responsibility to ensure that any motor used complies with EFRA rules. It may be necessary to dismantle any unknown motor to check its legality, which is known to be a destructive process for most Brushless motors. Samples may be submitted for checking by EFRA officials before the event. If found to comply with the rules then they will be added to this list.

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.3, 2.2 (9) which requires access to the stator to allow measurement and visual appraisal of the laminates. Also 2.2 (7), which requires the Rotor to be marked with Name or Logo & Part #.				
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 .	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 .	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 .	27.07.15
Motors below this level must comply with EFRA Rule - App.3, 2.2(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.	09.03.15
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.	27.10.14
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	20.10.14
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	29.09.14
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	30.06.14
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 12.5 dia, 7.2 core. Optional rotors:- # MSTE0009.	05.05.14
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.	03.03.14
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.	05.08.13
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.	08.07.13
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.	17.06.13
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.	22.04.13
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.	01.04.13
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.	01.04.13
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.	25.03.13
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.	25.03.13
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.	25.03.13

Motors below this level retain approval, although they were approved before implementation of EFRA Rule App.3, 2.2(9), (requiring access to the 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 Alluminium 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.	20.08.12
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.	11.06.12
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.	12.03.12
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.	12.03.12
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.	04.07.11
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.	16.05.11
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.	12.02.11
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.	31.01.11
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.	31.01.11
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.	01.02.10
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.	05.10.09
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.	05.10.09
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.	05.10.09
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.	01.12.08

Paul Worsley. (EFRA Chairman) 17.10.15.