INTERNATIONAL IAME EVENTS PROMOTED BY RGMMC 2023 - TECHNICAL REGULATIONS (JNR/SNR)

The CIK/FIA Karting Technical regulation applies for the IAME International events orgnaised by RGMMC. The ENGLISH language is the authentic version. The Organizer of the event RGMMC GMBH, following the agreement of the ASN presenting the event, reserves the right to issue additional statements concerning the Technical Regulations. Such statements are issued to all registered competitors by way of Competitors' Bulletins at the race meetings, or posted to the address (email) detailed on the event registration form, or written on the official website of the series

ARTICLE 1. CLASSIFICATION AND DEFINITION

1.1 Classification: Article 1.1 of the CIK/Fia Karting Technical Regulations.

1.2 Definition: Article 1.2 of the CIK/Fia Karting Technical Regulations.

ARTICLE 2. GENERAL PRESCRIPTION

2.1 General: Article 2.1 of the CIK/Fia Karting Technical Regulations

ARTICLE 3. KART AND EQUIPMENT SAFETY

3.1 Kart Safety: Article 3.1 of the CIK/Fia Karting Technical Regulations

3.2 Equipment Safety: Article 3.2 of the CIK/Fia Karting Technical Regulations

ARTICLE 4. GENERAL PRESCRIPTION FOR GROUP 2 KARTS

4.1 Chassis: Article 5.1 of the CIK/Fia Karting Technical Regulations

5. SCRUTINEERING

5.1 A mandatory check is carried out before the start of the Non Qualifying Practice. It must be possible to identify the homologated equipment by the technical descriptions (drawings, dimensions, etc.) on the Homologation Form.

5.2 Each competitor shall be able to submit the Homologation Forms relevant to the equipment employed.

6. CHASSIS PRESCRIPTIONS

6.1 Chassis must have the current 2020-2023 CIK/FIA Karting homologation or the previous homologation.

6.2 Front brakes are not allowed in classes X30 Junior and X30 Senior.

6.3 Chassis for the " IAME GEARBOX" class must have a CIK/FIA Karting homologation for KZ class.

6.4 Rear shafts CIK/FIA Karting manufacturer identification sticker (CIK/FIA Karting Technical Regulations - Appendix No. 10) and manufacturer's logo stamped or engraved on the outside are not mandatory.

6.5 The use of the front fairing retaining system CIK / FIA 2015-2020, as per CIK drawings N. 2c and 2d, is mandatory in X30 Junior, X30 Senior.

6.6 The technical committee reserves the right to refuse front fairings, front fairing retaining systems or other components that do not meet the required standards.

6.7 The front fairing must be CIK/FIA Karting homologated and must remain in the correct position at any time of a competition (qualifying heats or final races), as described in the Technical Drawing CIK / FIA No. 2c and 2d.

7. AMOUNT OF EQUIPMENT (CHASSIS)

7.1 Each driver is allowed with one (1) chassis only.

7.2 If a damage occurs to a chassis previously scrutinized for the meeting and it is in the opinion of the Scrutineers that it is not practical to repair in time, one chassis of the same make and model as the damaged chassis may be scrutinized, to continue the meeting.

8. AMOUNT OF EQUIPMENT (ENGINES)

8.1 Each driver is allowed to submit to Scrutineering and use only two (2) engines per driver and per category.

9. Fuel

9.1 Fuel will be non "Parc Ferme" status, unless stated in the Specific Regulations of the event

9.2 The requirements specified in these regulations are intended to ensure the use of fuels predominantly composed of compounds normally found in commercial fuel and to forbid the use of specific power-boosting chemical compounds.

9.3 At any time the volume of fuel in the tank must be over or equal to 1.5 litres.

9.4 The fuel must be Panta fuel Kart RON 102 available from Panta.

9.5 The oil mixture ratio shall be 4%/6%.

9.6 It is forbidden to add any liquid and/or power-boosting chemicals in the fuel

9.7 The technical Scrutineers have the right to change/replace any Driver/Entrant petrol at their discretion and at any time.

In such a case, the driver is asked to enter servicing park without fuel in the fuel tank and the fuel from the organization is provided. The replace fuel will be the same fuel as stated in the supplementary regulations of the event. All replaced fuel is provided at no cost for the driver.

9.8 The evaluation of the fuel at the racetrack can be conducted using one or all of the following tests:

1) Digatron DT- 47 Fuel Meter Test or others
2) Specific Gravity Test
3) Water Solubility Test

9.9 Further tests will be at the cost of the Entrant/Driver. If a non-conformity is ascertained, the cost will be invoiced to the Driver/Entrant. The cost will be stated in the supplementary regulations of the event.

10. LUBRICANT

10.1 The oil must be CIK-FIA approved / homologated 2-stroke oil, which must be stated on the scrutineering card/passport upon completing technical check.

11. TYRES

11.1 Slick tyres X30 Junior

Model:	MG SH
Size Front:	10 x 4,60-5
Size Rear:	11 x 7,10–5
Max. allowed:	4 front and 4 rear tyres starting from the Qualifying Practice

11.2 Slick tyres X30 Senior

Model:	MG SM
Size Front:	10 x 4,60-5
Size Rear:	11 x 7,10–5
Max. allowed:	4 front and 4 rear tyres starting from the Qualifying Practice

11.2 Wet tyres all classes

Model:	MG SW
Size Front:	10 x 4,20-5
Size Rear:	11 x 6,00-5
Max. allowed**:**	4 front and 4 rear tyres starting from the Qualifying Practice

11.3 Any modification of a tyre is forbidden.

11.4 Heating and cooling of tyres by any method and/or remoulding or treating the tyres with any chemical substance is forbidden.

11.5 The measuring device MiniRAE Lite of the company «RAE Systems Inc. (USA)» is employed in Qualifying Practice, Qualifying Heats, and final phase to check that the tyres are in compliance with the regulations.
The VOC measurement of the tyres may not exceed the maximum ppm limiting value (4) under any circumstances.

11.6 Polluting of the tyres, e.g. through chain grease, must be avoided as this can result in the limiting value being exceeded.

11.7 Should the check at the “Start” Servicing Park establish that one or more tyre is not in compliance with the regulations, the relevant Driver will not be allowed access to the Pre-Gird.

11.8 Should the test be carried at the “Finish” Servicing Park and one or more tyres result not in compliance with the regulations, the Driver is disqualified from the race.

11.9 Appeals against this procedure are not admitted.

12. RACE NUMBERS AND DRIVERS ID ON KARTS

12.1 Article 12 FIA Karting Specific Prescriptions

12.2 The numbers shall be black on a clear yellow background and shall be at least 15 cm high and have a 2 cm thick stroke and represented with an Arial type or similar font. The competition number shall be bordered by a yellow background of 1 cm minimum. They must be fitted before free practice and must be clearly visible during the hole race event (damaged numbers and I.D must be replaced regularly) on both front and rear and on both sides towards the rear of the bodywork. The number plates fitted at the back of the kart shall be plane and have rounded corners (diameter of rounded corners 15 to 25 mm) with 22 cm sides. The plates shall be flexible and made of opaque plastic, and they shall always be visible (fixation without a possible displacement).

12.3 Driver’s name as well as the flag of his nationality (Origin of Licence) shall be in the fore part of the lateral bodywork. The minimum height of the flag and the letters of the name shall be 3 cm.

12.4 The Driver is responsible at all times to make sure that the required numbers and I.D are clearly visible to Officials, Timekeepers and Marshals.

12.5 Karts not in compliance with article 5.8. may not be allowed to join Free-Practice, Time-Qualifying, Qualifying Heats, Pre-Final or Final Race.

13. EXCHANGE OF EQUIPMENT

13.1 The exchange of registered equipment among Drivers is not allowed.

14. MINIMUM WEIGHT

14.1 X30 Junior: 145Kg

14.2 X30 Senior: 158 Kg

15. ENGINES GENERAL

15.1 Category X30 Junior: IAME - X30 125cc RL TaG - (125cc- centrifugal dry clutch drive-water cooled-TaG)

15.2 Category X30 Senior: IAME - X30 125cc RL TaG - (125cc-centrifugal dry clutch drive-water cooled-TaG)

16. INSPECTIONS

16.1 The engine technical inspection is performed by the technical stewards.

16.2 The technical stewards have the right to inspect any part to the point that it can no longer be employed. Inspected parts resulting as regular will be replaced to the driver at no cost. Any part resulting irregular will not be refunded.

16.3 In any moment, the technical officials have the right to replace any part, any accessory or even the entire engine.

16.4 The Promoter, while guaranteeing the perfect efficiency and operation of the supplied material, will in no case be held liable for any malfunction occurring as a result of the replacement.

16.5 The technical forms are the main comparison reference for Scrutineers.

16.6 In case of doubts on the engine parts conformity, the comparison with the sample engine will be the definitive probating element.

16.7 In case of extremely controversial events during engines scrutineering, the Scrutineers can decree the delivery of the concerned part, duly sealed, to IAME S.p.A. for an accurate inspection at the factory at the presence of representatives of the Entrant and the Sporting Authority (ASN).

16.8 Controls can be carried on the engines, in race conditions, at any time of the Event.

17. APPENDIXES

The following appendixes are integral part of the regulations:

APPENDIX 1: Homologation form n. 254X - IAME X30 125cc RL – TaG
APPENDIX 2: Homologation form n. 348B - Carburateur Tillotson HW27A
APPENDIX 3: Exhaust silencer – X30 Junior – X30 Senior
APPENDIX 4: Tyres regulations
APPENDIX 5: Official petrol
APPENDIX 6: Squish & timing control procedure

All technical regulations, technical forms and appendices are available at: www.iamekarting.com

18. ENGINE IAME X30 125cc – X30 JUNIOR and X30 SENIOR

18.1 Each Driver is authorized with only one (1) chassis and with valid CIK-FIA homologation or having been CIK/FIA homologated.

18.2 In the event of damage to a chassis, after examination by the Scrutineers, if it is in the opinion that it is not practical to repair in time, a replacement chassis of the same make and model as the damaged chassis may be authorized to continue the event.

18.3 Each Driver is authorized to submit to scrutineering and to use only two (2) engines.

19. ENGINE IAME X30 125cc

19.1 Any modification to the engine and its accessories is strictly prohibited, unless expressly authorised.

19.2 IAME considers as modifications any action modifying the initial appearance and dimensions of an original part. Any modification and/or installation resulting in the modification of a dimension and/or its possibility of control is strictly prohibited. Polishing, sanding, trimming or machining are prohibited.

19.3 Any heat treatment or additional surface treatment is prohibited. The competitor is responsible for the conformity of his own equipment.

19.4 Only the IAME X30 125cc, original and strictly in accordance with the manufacturer's technical from (Technical characteristics, dimensions, weights, diagrams with the tolerances prescribed by the manufacturer) is allowed

19.5 The pictures on the original engine tech form are also valid to identify the engine and the parts.

19.6 The engines must be provided with their original serial number.

19.7 No modification, improvement, polishing, addition or removal of material from any part of the engine is allowed

19.8 Each internal or external part of the engine must be mounted in its original position and function according to the original design specifications.

19.9 The machining, assembly and adjustment tolerances indicated on the engine tech form refer exclusively to the manufacturing tolerances.

19.10 The competitor is absolutely not authorized to intervene on the engine, even if, after his intervention, the characteristic dimensions remain within the prescribed tolerances.

19.11 Any tuning is prohibited. The maximum and minimum values allowed and the volume of the combustion chamber must be measured in accordance with the technical regulations of the CIK/FIA Karting.

19.12 Diagrams and volume chart: see the engine tech form

19.13 All the gauges described in the engine homologation form are considered as valid means and certified by the Manufacturer to check the conformity of the part for which they were designed.

20. CYLINDER HEAD

20.1 The cylinder head must be strictly original.

20.2 Only the thread repair by means of a helicoil M14 x1,25 of the same length as the original thread is authorized. The spark plug clamped to the cylinder head should not protrude above the top of the combustion chamber dome.

20.3 The squish (distance between the piston and the cylinder head) must comply, in all respects, with the engine tech form.

20.4 The Squish measurement will be carried out with a Ø 1.5mm tin/lead wire, according to the method described in appendix 12 of the international IAME technical regulations.

20.5 The original IAME template ATT-025/1 is the reference for checking the conformity of the cylinder head profile. The shape of the gauge should match the profile of the dome, the squish area and the joint plane.

20.6 The CIK insert tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome.

21. CYLINDER

21.1 Strictly original and supplied with the original safety pin and IAME markings.

21.2 Polishing, sanding, deburring or adjustments are prohibited.

21.3 Only reboring is allowed. In case of doubt, the shape and the height of the ports will be compared to the cylinder of the sample engine.

21.4 No heat treatment or additional surface treatment is allowed.

21.5 Adjustment of the diagram is permitted only by means of cylinder gasket replacement.

21.6 The number of cylinder gaskets is not limited. Only original gaskets are allowed.

21.7 No cylinder head gasket is permitted.

21.8 The original IAME gauge n. ATT-025/2 is the reference for measuring the height of cylinder ports.

21.9 The original IAME gauge n. ATT-035/1 is the reference for carrying out a visual inspection of all the ports.

21.10 Only the straight water connection on the bottom of the cylinder can be replaced by an elbow connection.

21.11 Cylinder heat shields are allowed as long as they can't be removed when the vehicle is in motion.

22. CRANKCASE - CRANKSHAFT - CONNECTING ROD - CRANK PIN

22.1 Strictly original and without any modification.

22.2 The original IAME ATT-035/3 template is the reference for checking the gasket plane of the reed valve block.

22.3 The original IAME ATT-035/4 template is the reference for checking the center distance of the cylinder indexing pins.

22.4 The original IAME ATT-035/5 template is the reference for checking the height of the crankcase base plane.

22.5 Only original connecting rod roller cages (X30125431), connecting rod small end roller cages (E-10440/E-10441) and washers (X30125436/X30125437) are authorized.

22.6 Crankcase/crankshaft oil seals must be installed correctly with the hollow side inboard of the crankcase and not filled with any material. Under no circumstances can they be modified.

23. BEARINGS

23.1 Only crankshaft bearings 6206 set C4 and SKF roller bearings BC1-3342 B are authorized. It is forbidden to mix ball bearings and roller bearings on the same motor. Only balance shaft bearings 6202 C3/C4/C4H and 6005 C3/C4 with steel ball bearings and polyamide cage are authorized.

23.2 Bearings with oblique contact prohibited.

23.3 Ceramic balls prohibited.

23.4 The bearings must be mounted with balls visible from the inside of the crankcase

23.5 All bearings that do not have the correct and clearly visible reference number, as described in these regulations, are expressly prohibited.

23.6 The use of spacers behind the bearings is allowed, in order to obtain the correct axial play.

23.7 All the internal parts of the engine must be original manufacturer, the same number as the assembly of the factory and mounted in the same direction.

24. PISTON – PISTON RING – PISTON PIN

24.1 Strictly original without any modifications and in compliance with the technical form of the engine.

24.2 The original IAME ATT-035/2 template is the reference for checking the shape of the piston dome.

25. REED VALVE

25.1 Strictly original without any modification.

25.2 No machining of gasket planes is authorized.

25.3 Original reed valve cover without modification.

25.4 The thickness of the reed valve/housing gasket is 1mm (allowed tolerance +/- 0.3mm).

25.5 The thickness of the conveyor/housing gasket is 0.8 mm (allowed tolerance +/- 0.3 mm).

26. REED PETALS

26.1 Fiberglass petals (minimum thickness 0.30mm), marked and IAME original authorized

26.2 Carbon fiber petals (minimum thickness 0.24mm), marked and IAME original authorized

26.3 Mixing fiberglass and carbon petals is prohibited.

26.4 Prohibition to modify the original shape

27. CARBURETTOR

27.1 Only the Tillotson HW-27A carburettor supplied with the engine in its original configuration (same brand, same model, same reference) is permitted.

27.2 Only the accessories supplied with the original carburettor and shown on the carburettor data sheet are authorised.

27.3 The spring and the fork are free.

27.4 The mounting of the carburettor is free. (Pump up or down)

27.5 The thickness of the carburettor gasket is 1 mm (Admitted tolerance +/- 0.3mm).

27.6 The original IAME template ATT-035/2 is the only reference to check the shape of the carburettor inlet duct. The shape of the duct must correspond in all respects and over its entire length to the profile of the template.

27.7 The original IAME template ATT-035/12 is the reference to check the height of the atomizer.

28. INLET SILENCER

28.1 The inlet silencer (ref. X30125740) must be identical to the original one supplied with the engine (same brand, same model, same reference) with intake tubes of 22mm maximum diameter.

28.2 Protective grilles are optional.

28.3 The rubber sleeve with air filter connecting the inlet silencer to the carburettor is mandatory, it must be installed and comply with the homologation form.

28.4 Any injection and/or spray system is prohibited.

28.5 In the event of rain, only the inlet silencer protection device reference SKE005-PN-IAME is authorised.

29. CLUTCH

29.1 The centrifugal clutch must engage at 4,000 rpm maximum and begin to move the kart with the Driver in racing conditions.

29.2 The clutch should be fully engaged at 6,000 rpm maximum in any condition, this measurement can be checked with the appropriate hardware if necessary.

29.3 Each Driver will be responsible for the state of wear and cleanliness of the clutch and the friction parts (Friction material and bell).

29.4 The proper functioning of the clutch can be checked at any time during the event, and even after each phase. The original IAME ATT-047/4 gauge is the reference for checking the clutch drum. In the event of a pre-grid check, any Driver who does not comply with the prescribed value will be prevented from starting. In the event of a check on arrival, any Driver who does not comply with the prescribed value will be subject to a report of technical non-compliance.

29.5 The tool must not enter the clutch housing in a perpendicular position with respect to the axis of the clutch housing.

30. IGNITION

30.1 Only the original ignitions, Selettra Digital "K" or Selettra Digital "S" are authorized, without any modification.

30.2 The Scrutineers may request the replacement of the entire ignition system or part at any time during the meeting.

30.3 The organizer cannot be held responsible for any possible breakdown occurring after the replacement.

30.4 Only the electronic box/coil the type "C" (16000 rpm) are authorized and must be fixed to the frame or to the engine.

30.5 The markings on the electronic box/coil are mandatory and must be clearly visible without dismantling the electronic box/coil. Covering them with adhesive tape is prohibited.

30.6 Modifications to the stator mounting, shape and thickness of the rotor key, rotor keyways and crankshaft are prohibited.

30.7 The original IAME ATT-035/7 gauge is the reference to check the correct position of the phase reference marking on the rotor.

30.8 The battery must be secured to the frame and connected to the wiring harness.

31. SPARK PLUG

31.1 Only NGK B9EG - B10EG - BR9EG - BR9EIX - BR10EG - BR10EIX - R6252K-105 - R6254E-105 spark plugs are authorized, strictly original and without any modification.

31.2 The spark plug must be fitted with its original gasket.

31.3 The porcelain insulator must not protrude from the spark plug base and the length of the spark plug base (gasket included) must be 18.5 mm. maximum (Appendix 7 of the CIK technical regulations).

31.4 The only authorized spark plug caps are NGK TB05EMA, PVL 401 222, Selettra 5KOhm (IAME ref. 10543 & 10544).

32. EXHAUST PLANT

32.1 Only the original muffler and exhaust manifold delivered with the engine are authorised, strictly original and compliant with the tech form. No modification of structure or dimensions is authorized.

32.2 Drilling and welding operations on the muffler are only authorized for the installation of a temperature probe.

32.3 The complete sealing of the exhaust gases between the cylinder and the exhaust manifold must be guaranteed at all times.

32.4 The exhaust gas sealing check can be carried out at any time by plugging the outlet of the exhaust pipe and filling it through the exhaust port with liquid in order to check the sealing.

32.5 The proper sealing of the exhaust system is the responsibility of the Driver.

32.6 A minimum of one original gasket between the cylinder and the exhaust manifold is permitted.

32.7 The use of original IAME X30125375 spacer (thickness 3 mm +/- 0.5) for adjusting the exhaust length is authorised.

32.8 X30 Junior: the use of the original exhaust manifold with the restrictor of 22.7mm as described in the tech form is compulsory. No modifications allowed.

32.9 The use of the exhaust silencer described in appendix n.5 is mandatory at all times.

32.10 Exhaust manifold reference template: ATT-035/9

33. COOLING SYSTEM

33.1 The cooling system must be in its original configuration: a single IAME original radiator (T-8000B or T-8001), a single IAME original water pump (aluminium or black/blue plastic) is authorized and in compliance with the tech form.

33.2 A single IAME original water pump pulley (aluminium or black/blue plastic) is authorized and in compliance with the tech form form.

33.3 The number of radiator supports, black or chrome, is not limited. Machined supports prohibited.

33.4 Only original IAME single or bypass thermostats are authorized, and their use is optional. The housing containing the two-way thermostat can also be installed without the thermostat capsule inside and function as a fitting.

33.5 Only water without any other additives is allowed for cooling.

33.6 Radiator shields, adhesive or mechanical, are permitted but must not be removable while the kart is in motion.

33.7 Original blue water hoses supplied with the engine.

33.8 The type of water pump drive belt is free.

33.9 The use of the pulley with the belts in position is mandatory.

33.10 The combination of plastic or aluminium water pumps with plastic or aluminium water pump pulleys is permitted.

33.11 All heaters or heater connection systems on the water circuit are strictly prohibited.

34. STARTER

34.1 The engine is fitted with an on-board electric starter.

34.2 The original on-board starting system must be installed with all its components, properly connected and in working properly.

35. SPROCKETS

35.1 Only IAME original Z10 / Z11 / Z12 / Z13 sprockets are allowed.