BMCRC FORMULA 400/Sub 64 Regulations 2023

1. ELIGIBLE MODELS

Machines must be production based models which would have been eligible for registration for road use at the time of manufacture.

2. POWER OUTPUT

2.1 For F400 The power of a 4stroke powered machines is open and unrestricted.

- **2.2** For **F400** The maximum power for 2-stroke powered machines shall be limited to 78bhp, as measured at the rear wheel on the BMCRC dynamometer, after racing. No tolerance will be allowed in this measurement.
- 2.3 For SUB 64 the power measurement on the BMCRC Dynamometer shall not exceed 64bhp (no tolerance)

3. MINIMUM WEIGHTS

The minimum post-race weight allowed for the machine, including fluids, lubricants, coolants and residual fuel (quantity as specified in ACU Standing Regulations) are:

400cc 4-stroke 140 kgs 400cc 2-stroke 127 kgs 250cc 2-stroke 117 kgs YPM TZR eligible 250cc 2-stroke 115kgs The replacement of fluids between the end of a race and the weighing of the bike, is not permitted.

4. ENGINE SIZE

Maximum engine capacity permissible is 415cc, allowing for overbores and engine wear. Both 4-stroke and 2-stroke, four or twin cylinder machines are permissible.

5. INDUCTION

Carburetted or fuel injected bikes permissable. Bikes manufactured with carburetted engines cannot be modified with a fuel injection system.

6. MODIFICATIONS ALLOWED

- **6.1** Frame & Engine Cases. The frame from headstock to swing-arm pivot, the rear swing-arm and the engine cases must all be from the same model, but these parts may be strengthened and excess lugs may be removed.
- 6.2 Cylinders and Cylinder Heads. These may be changed.
- 6.3 Exhaust System, Air-box and Jetting. These may be changed.
- 6.4 Engine. Internal parts may be modified or replaced.
- 6.5 Ignition. Standard Fitment ignition module or aftermarket are permitted, however any aftermarket ECU must not have the ability store more than 1 ignition map. (if in doubt please contact class rep or BMCRC Technical)
- 6.6 Coils. Stick Coils are permitted
- 6.7 Quickshifters. Or ignition interrupters are permitted
- 6.8 Wheels.

- F400 Any wheel is permitted. OE fitment or aftermarket, no restriction on material.
- SUB 64 Exotic Lightweight wheels e.g. Magnesium/Forged/Carbon are forbidden.

6.9 Front Forks and Suspension.

- Fork type is Open
- Any OEM production fork may be fitted.
- Radial caliper type forks are permitted.
- Fork springs may be replaced, and after market damper kits or valves may be installed
- Fork caps may be modified or replaced to allow external adjustments.

6.10 Brakes.

- Radial Calipers are permitted.
- Any front caliper allowed.
- The front master cylinder may be replaced with an alternative.
- 7. <u>TYRES</u>
 - Tyres can be treaded or slick. Rain tyres may be used..
- 8. <u>FUEL</u>

For 4-stroke powered machines, the only permissible fuel is from roadside outlets, on which the duty and tax has been



prepaid.

2-stroke powered machines, in addition to the above, may use "Avgas" either on its own, or mixed with the above permissible fuel.

9. BODYWORK

- The profile may be altered from the standard production model.

- Official sponsor stickers may have to be displayed on bodywork, position to be announced. Failure to display sponsor stickers will render bike ineligible for points.

10. CONFORMITY

In all other respects, the machine must conform to the ACU Standing Regulations for Solo Machines.

10.1 ENTRY TO THE FORMULA 400 Sub-64 Class

10.1.1 Entry to this class will also score in the main Formula 400 Championship.

- **10.1.2 Declaration.** When submitting an entry for the Formula 400 Class, riders and/or entrants who wish to participate in the Sub-64 Championship, must declare their intention to do so.
- **10.1.3 Pre-Race Compliance Test.** Before competing in their first race of the year in this class, riders are required to submit their machine for power output measurement on the BMCRC Dynamometer, where-by the measurement does not exceed **64bhp** (no tolerance) the bike will be eligible for Sub-64.
- **10.1.4 Pre-Race Compliance Test Result.** The result will be recorded by BMCRC Technical Official and, if the compliance test was passed, compliance marks and/or stickers may be attached as decided by the BMCRC Technical Official. The result will also be reported to the BMCRC Race Office.
- **10.1.5 Post-Race Compliance Test.** After any race, one or more Formula 400 Sub-64 machines may be randomly required to have their bike's power output measured at the rear wheel on the BMCRC Dynamometer.
- **10.1.6 Distinguishing bikes on track.** Riders in the Sub-64 Class are required to colour their rear seat units to 'appear' bright orange, or attach an orange Sub 64 sticker that is clearly visible from the rear. This is in order to clearly distinguish a Sub-64 bike when on circuit to any approaching rider.

10.1.7 Non Compliance Penalty.

10.1.7.1 Exclusion from Results. Any bike that exceeds the 64bhp limit will be reported to the Clerk of the Course, for the purpose of exclusion from the results of the Sub-64 class in that race. However, points will still be eligible for the MainChampionship.

10.1.7.2 Disputed Measurements and Appeals. Measurements, including those from the BMCRC Dynamometer, are statements of fact, and as such are final and not disputable nor appealable. Request for retesting to verify a measurement will not be allowed.

10.1.7.3 Restricted Further Competition. If a machine has failed a power measurement test, it will not be entitled to compete in the Formula 400 Sub-64 class again, until it has been retested and passed the **64bhp** limit (same as the Pre-Race Compliance Test) limit on the BMCRC Dynamometer. This eligibility must then be communicated by the Technical Official to the Race Office at least **one hour** before the next Sub-64 class race. Again, it is the rider's sole responsibility to ensure the compliant measurement is obtained in time to be provided to Race Office.

- **10.1.8 Persistent Non Compliance.** If a rider and/or same machine fails post-race power measurement **3 times** during a race season, they will then be excluded from the Sub-64 Championship for the whole season. However, points for the Main Championship will remain unaffected.
- 10.1.9 Retesting. It should be noted that riders may have to wait for Formula 400 Sub-64 tests if the Technical Officers are engaged in post-race power measurements of other classes. BMCRC will not normally charge for re-tests for compliance verification, but to deter abuse of this facility, the Technical Officials may impose a charge at their discretion