

DynAero MCR ULC Model Guide

The DynAero MCR ULC is a two-seat, low-wing, single-engine piston ultralight (ULM Class 3 in France) with a carbon wing and an 80 l fuel tank. The flight manual approves Rotax 912 UL, 912 ULS and 912 ULS-FR engines. Day VFR only, no icing, no aerobatics.

KEY TAKEAWAYS

- Two seats, low cantilever carbon wing, 8.66 m span, 5.53 m long overall; cabin width 1.12 m.
- Max takeoff weight is 450 kg without a parachute and 472.5 kg with one.
- Approved engines: Rotax 912 UL (80 HP), 912 ULS (100 HP) and 912 ULS-FR.
- Flap-control bronze nut is life-limited to 300 hours or 3 years (mandatory SB BS 13 D 0044).

LIMITS AND OPERATIONS

Day VFR only, outside icing conditions. Aerobatics and spins are prohibited. Load factors are +4 / -2 g. Minimum crew is one pilot, maximum two seats. When flying solo, buckle the harness of the unused seat. Instrument panel weight is capped at 15 kg.

ENGINES AND PROPELLERS

Rotax 912 UL gives 80 HP for takeoff and 78 HP continuous. Rotax 912 ULS gives 100 HP and 98.6 HP continuous. Both are limited to 5800 RPM for takeoff and 5500 RPM continuous. Many MT, E-Prop and AUPA propellers are listed. Fixed-pitch props must be retightened before the first flight, after 1 h and after 5 h, then checked every 50 h.

FUEL AND FLAPS

Total fuel is 80 l, of which 79 l is usable; a 150 l wing tank option is mentioned. Flaps travel 0-45°. The 45° notch is for short-field landings on final only, when no go-around is planned. Slips and sideslips are forbidden with full flaps.

SPECIFICATIONS

Wingspan M	8.66
Wing Area M2	8.31
Length M	5.53
Height M	1.53
Cabin Width M	1.12
Fuel Capacity L	80
Usable Fuel L	79
Max Takeoff Weight Kg	450

PERFORMANCE

Max Speed Vne Kts	146
Max Cruise Vno Kts	113
Glide Ratio	16
Load Factor Max G	4
Load Factor Min G	-2

V-SPEEDS

Vne Kts	146
Vno Kts	113
Va Kts	93
Vfe Flaps 17 Kts	76
Stall Flaps Down White Arc Start Kts	34
Green Arc Start Kts	46

WEIGHT & BALANCE

Max Takeoff Weight No Parachute Kg	450
Max Takeoff Weight With Parachute Kg	472.5
Max Landing Weight No Parachute Kg	450
Max Landing Weight With Parachute Kg	472.5
Cg Range Forward Pct Mac	22
Cg Range Aft Pct Mac	40
Mac Mm	960

SAFETY NOTES

- Service Bulletin BS 13 D 0044 is mandatory: inspect the flap control system before the next flight; replace the bronze nut if the inspection is unsatisfactory.
- Engine failure after takeoff: never try to turn back to the runway. Recommended glide speed is 130 km/h with a glide ratio of 16.
- The manual lists no aerobatic manoeuvres as approved and prohibits spins; for an unintentional spin it gives a recovery procedure.