



## MP JET ELECTROMOTOR AC 28/20-7 Mk2

We thank you for having bought our product and hope that it will quite comply with your requirements. We recommend you to study this instruction. Observance of the directions stated here will ensure you operating without problems, achieving of a good output and a corresponding service life of the engine.

### TECHNICAL SPECIFICATION OF ELECTROMOTOR

- three-phase AC brushless motor
- recommended for direct drive
- with external rotor
- FeNdB magnets
- winding impregnated high-temperature epoxy resin
- dual ball bearing with long life grease
- high speed ball bearings
- rotor turned from bar stock on CNC machine
- heat treated shaft 5 mm dia
- high quality MP JET gold 2,5 mm connectors
- the possibility to buy the conversion set for reverse mounting
- in case of reverse mounting the motor is supported by four silentblocks

Recommend regulator: three-phase, sensorless (with EMF detection version), suitable version 40A, 30A partially.

### MOUNTING DRIVE UNIT TO MODEL KIT

The electromotor mounting on the firewall with four screws M3. The firewall must be rigid with cooling holes.

Please make the holes in the front of the fuselage for air ventilation for cooling the electromotor.

The mounting of the propeller:

For folding propeller use one of the propeller spinners with a collet 5 mm dia, for non folding propeller a collet prop adapter MPJ 4704.

### CONNECTING ELECTROMOTOR TO REGULATOR

The electromotor has cable wires with male part of connectors (MPJ 21020). Female parts with shrinking isolations are included in the package and must be soldered to regulator output cables. Connectors must be disconnected by being pulled from the connector parts, without applying any force on the cable (or being pulled from the motor unit).

### COOLING

It is necessary to ensure cooling - inlet and outlet holes. The outlet holes must be approx. 1,5 bigger than the inlet ones.

### MAINTENANCE OF ELECTROMOTOR

The ball bearings have a longlife high quality grease, they can be changed if necessary. Avoid penetration of dirt or water into the electromotor.

### IMPORTANT SAFETY ADVICE

- the propeller must be undamaged and balanced
- propeller driver must be all metal, collet type. The type with socket head screws is not recommended.
- make sure that the onlookers stay at a safe distance when the motor runs
- use only propellers recommended for this power
- first switch on your transmitter, check the position of the throttle stick (and related switches if there are any). Only then connect your power pack to the speed controller and switch on the receiver.
- follow the manual of your regulator
- do not use the motor for other applications (non modeling use).
- this position product and this manual are subject to change without notice

### GUARANTEES

All electromotors are controlled and tested before purchase. Full guarantee for manufacturing and material defects is valid one year from the purchase date. The guarantee covers none of the following:

- improper mounting and overheating
- using the motor for other purposes than recommended
- periodic maintenance and repair or replacement of parts due to normal wear
- repair costs by non-authorized services or the customer himself

Number of cells	6-10
RPM per Volt	950
Maximum recommend speed (min <sup>-1</sup> )	12000
Maximum speed (min <sup>-1</sup> )	14000
Maximum efficiency (%)	approx. 81
Current for maximum efficiency (A)	10-25
Short time current (A)	40
Internal resistance (mΩ)	34
Dimensions - diameter/ length (mm)	36,5/48
Shaft diameter (mm)	5
Number of turns	7
Weight of electromotor (g)	170
Recommend propeller range	APC 9/5 - 14/5
Maximum weight of glider (g)	to 2000
Maximum weight of acrobatic model (g)	to 1500