

# MP JET ELECTROMOTOR AC 22/4-90 D

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
- recommend connectors MP JET 1,8 mm size

Recommend ESC: three-phase, sensorless, with bEMF detection version, suitable version 4A.

### MOUNTING DRIVE UNIT TO MODEL KIT

The electromotor mounting on the firewall with three Pan Head screws 2.2x6.5.

The firewall must be rigid and with the holes for cables from electromotor to ESC. Please make the holes in the front of the motor cover for air ventilation of cooling the electromotor.

### The mounting of the propeller:

For mounting of the propeller use the screw M2. Its length must be in according with your propeller. Do not over tighteen this screw. The other possibility is to use the flexible propeller mount MPJ 4608.

#### CONNECTING ELECTROMOTOR TO ESC

The electromotor has a cables for direct soldering of the cables to ESC. The second possibility is use recommend MP JET connectors (MPJ 21011). 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). For change of the direction of run change please two from three cables between ESC and electromotor.

#### COOLING

It is necessary to ensure cooling - inlet and outlet holes in motor cover. 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 magnetic parts, dirt or water into the electromotor.

### IMPORTANT SAFETY ADVICE

- the propeller must be undamaged and balanced
- 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 ESC
- 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-authorised services or the customer himself

This type is not recommended for 3D acrobatic models.

Number of cells LiPol	2
RPM per Volt	1300
Maximum recommend speed (min-1)	12000
Maximum speed (min-1)	15000
Maximum efficiency (%)	approx. 76
Current for maximum efficiency (A)	to 2
Short time current (A)	3,5
Internal resistance (m $\Omega$ )	700
Dimensions - diameter/ length (mm)	27/14,5
Propeller screw size	M2
Number of turns	90
Weight of electromotor (g)	17
Recommend propeller range	7/3 - 8/4
Maximum weight of acrobatic model (g)	to 150

