RCM-BL600XL Brushless Motor User Manual

RCM-BL600XL Brushless Motor

This new Brushless motor developed by the ALIGN POWER R&D TEAM, is packed with the latest, cutting edge technology available today. It features exceptional levels of high-torque power. The 600×L utilizes an 6-pole outrunner stator-rotor and unrivaled Ndfeb extra strong magnets that traditional magnets cannot compare to. Also included is a high temperature, wear-resisting, low friction, double ZZ high efficiency bearing. The 600×L will be the most revolutionary motor operating on low current amperage, and delivering high torque to RC models.

Specification





Brushless Motor Black Black Black Black Black Black Black Controller Black (Receiver)

Exchange two wire for changing motor rotation direction.

Illustration

Model	Input voltage	Dimension	Weight	κv	Max. Current	Max. Output Power
RCM-BL60	0XL DC11.1V-22.2V 3-6 cell Li-Po	Shaft 5x43.3x65mm	Approx 300g	1700KV	70A/85A(60sec)	1600W/2000W(60sec)

Features

- 1. New powerful 600XL brushless motor is using 6 cell Li-po as standard, it makes much more improvement on the torque and the performance is much power under 3D flying, features continuously strong torque.
- 2. Maintenance free, high torque, high efficiency, stable and quiet.
- 3. These new brushless motors are designed with a new radiator system. The motors are built with an integrated cooling fan and has air ingress/egress vents, circulating cool air inside the rotor continuously. The motors efficiently lower operating temperature.
- 4. The motors feature High-speed ball bearings, powerful magnetic outrunner rotor.

These high-torque, high-speed, brushless motors, RCM-BL600XL, are suitable for RC electronic products. The features of high efficiency output, low amperage, and light weight are suitable for electronic helicopters which require high-torque and high-speed power systems. We recommend using one of our perfectly mated Brushless Speed Controllers, such ALIGN or other brushless electronic speed controllers available on the market.

Rotor is constructed with very powerful N dfeb Magnets. The stator is coiled by our NC auto winding machine, formed and protected with high strength resin for heat resistance and low vibration. The spindle is designed with Hardened Stainless Steel and a double ZZ high speed bearing. Additionally, 600 brushless AC motor is custom developed by ALIGN R&D technology specifically for RC model use. These motors provide long lasting, high efficiency, impact-resistance, low magnetic loss. These new product have passed various thorough inspections made by our technical department, including motive testing, static testing, magnetic field testing, heat resistance and magnetic loss testing, running balance and vibration testing, noise testing, and many hours of actual loading and flying testing, etc. Align is proud to provide the latest innovations in RC Modeling to its consumers. Please enjoy your Align products safely.

CONSTANT VOLTAGE TESTING REFERENCE(USING T-REX 600)

Battery:ALIGN Li-Poly 22.2V 4600mAh 20C

ALIGN



Motor Gear	Main Rotor Blade	PITCH		Current(A) approx.	Throttle Curve	RPM approx.
10T (17:1)	600mm Carbon Fiber Blades	Hover	+4°	19.5	70%	1670(RPM)
		ldle2	0°	27.5	85%	2150(RPM)
			0°	32	100%	2230(RPM)
			±9°	50	100%	2080(RPM)
			±11°	58	100%	2050(RPM)
11T (15.45:1)	600mm Carbon Fiber Blades	Hover	+4°	21	65%	1680(RPM)
		ldle2	0°	31	85%	2250(RPM)
			0°	36	100%	2370(RPM)
			±9°	58	100%	2160(RPM)
			±11°	66	100%	2130(RPM)

Note: Please use the pitch gauge to adjust the pitch value. Incorrect pitch setting may affect the helicopter performance and reduce ESC's life and battery's life.

ALIGN CORPORATION LIMITED http://www.align.com.tw

No.345, SHUI-YUAN ROAD, FENG YUAN, TAIWAN, R.O.C. Toll-free line: 0800-000-444 _{G20261}