

XLB-60

Light Bee Motor



TECH SPECS

XLB-60 Motor (Light Bee) Specifications

PEAK POWER	35000W
VOLTAGE RANGE	48v – 104v
MAX TORQUE	52Nm
MAX STABLE ROTOR RPM	13000RPM
MAX EFFICIENCY	93%
MOTOR CONFIGURATION	10 poles and 12 slots
WINDING TYPE	Dual Y parallel connection
STATOR AND ROTOR STACK THICKNESS	60MM
SENSING METHOD	NJDC 605 Encoder
KV Value	95KV
Rated power	Air cooled:
	13,600W(Continuous run for 28 mins)
	24,000W(Continuous run for 2 min 20 seconds)
	Water cooled:
	26,000W(4 min 30 seconds)
Warranty	2 Year

EBMX XLB-60 MOTOR

Our new motors have been engineered for performance enthusiasts and experienced riders in controlled environments. These motors are significantly faster than standard motors, and their extreme speed can pose serious risks if not handled with caution.



The EBMX motor range has been specifically designed to surpass the performance of other motors in their classes.

We built these motors to stay cool under race conditions to ensure you focus on your riding and not your motor temperatures. It doesn't matter if you are on the track, street or local trail, if you want the best, then this motor is for you.

35KW rated and tested, designed from the ground up to handle the heat, 180C rated windings with U42H magnets.

Custom IPM rotor design and industry leading 1mm rotor air gap revving out to rated 13000RPM. Encoder based motor control for increased low end torque response and smooth predictable power delivery.

In contrast to many of our competitors who utilise hall sensors, we have opted to incorporate encoder sensors in our motors. This decision stems from the fact that encoder sensors demonstrate greater stability under demanding riding conditions. While hall sensors rely on estimated rotor positions, encoder sensors consistently provide precise angle measurements of the rotor's position. Hall sensors are typically employed for tracking motor position during start-up and up to approximately 2000 rpm, after which the motor operates in a "sensorless" manner. However, during intense riding situations such as wheel spinning and sudden deceleration combined with rapid throttle adjustments, hall sensors angle detection can result in substantial current spikes in the controller. This can pose significant issues for many controllers, leading to tripping and loss of throttle power, although this is less prevalent in the X-9000.

Encoder sensors, on the other hand, are capable of tracking motor position at all speeds and do so more frequently than hall sensors. As a result, they can deliver a smoother more responsive and controllable powerband and they do not generate the same type of current spikes that often cause controller issues. Furthermore, they contribute to improved low-end torque control and overall motor response.

EBMX motor have been custom built and are finely tuned to work with the EBMX X-9000 controller. These motors will work with many other types of controllers; however they may require you to do your own custom tuning.

A custom EBMX Bash Plate is included with your motor.

