

## XERUN USER MANUAL

Sensored Brushless Motor  
XERUN 3652/3662 DRX

HW-SMB575DUL00



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## 01 Warnings

- Please carefully check power devices and manual of car frame to ensure the power pairing is reasonable. Avoid incorrect pairing to overload and damage the motor.
- Always wire up all the parts of the equipment carefully. If any of the connections come loose as a result of vibration, your model RC may lose control.
- Never apply full throttle if the pinion is not installed. Due to the extremely high RPMs without load, the motor may get damaged.
- Never allow the motor case to get 100 degrees Celsius (212 degrees Fahrenheit) because the magnets maybe demagnetized by high temperature.

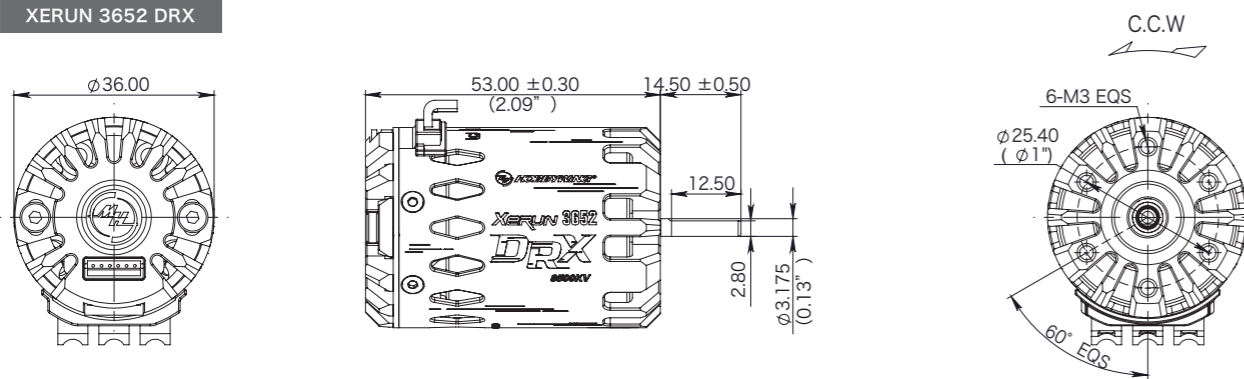
## 02 Features

- Ultra high rpm, super power, specially designed for Drag Racing.
- The motor case and end cover are of big opening structure, providing the best heat dissipation effect for the motor.
- Dual sensor interface design to meet various wiring/layout requirements.
- Widened and thickened copper bar design provides guarantee for large current application.
- The rotor adopts steel sleeve explosion-proof design, which withstand ultra-high rpm running conditions.

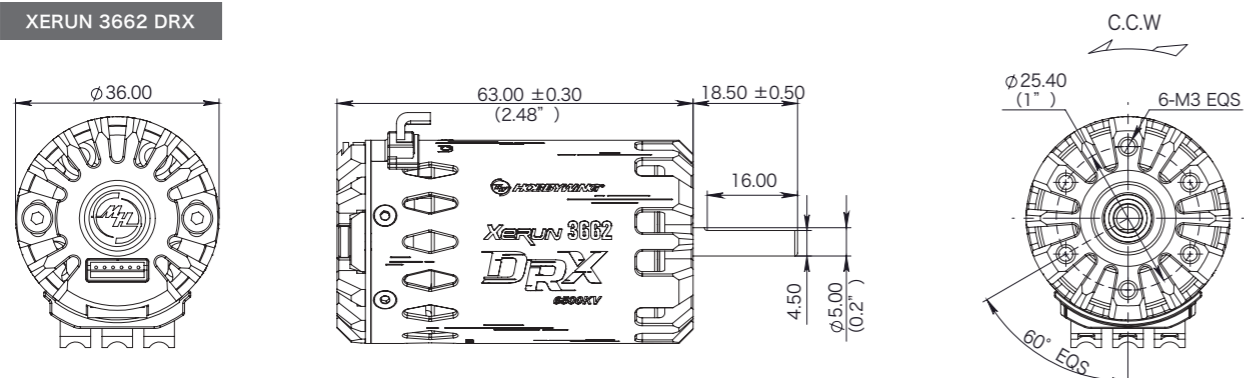
## 03 Specifications

Model	KV	LiPos	No-load Current (A)	Diameter/Length (mm)	Shaft Diameter/Length (mm)	Bearing size (mm)	Poles	Weight (g)	Applications
XERUN 3652 DRX-8500KV	8500KV	2S	8.2A	φ=36mm(1.42in) L=53mm(2.09in)	φ=3.175mm(0.13in) L=14.5mm(0.57in)	Front: D9*D4*T4 Rear: D8*D3*T4	4	177g	1/10 Drag Racing
XERUN 3652 DRX-9500KV	9500KV		8.6A	φ=36mm(1.42in) L=53mm(2.09in)	φ=3.175mm(0.13in) L=14.5mm(0.57in)	Front: D9*D4*T4 Rear: D8*D3*T4		187g	
XERUN 3662 DRX-6500KV	6500KV		8.0A	φ=36mm(1.42in) L=63mm(2.48in)	φ=5.0mm(0.20in) L=18.5mm(0.73in)	Front: D11*D5*T5 Rear: D8*D3*T4		240g	

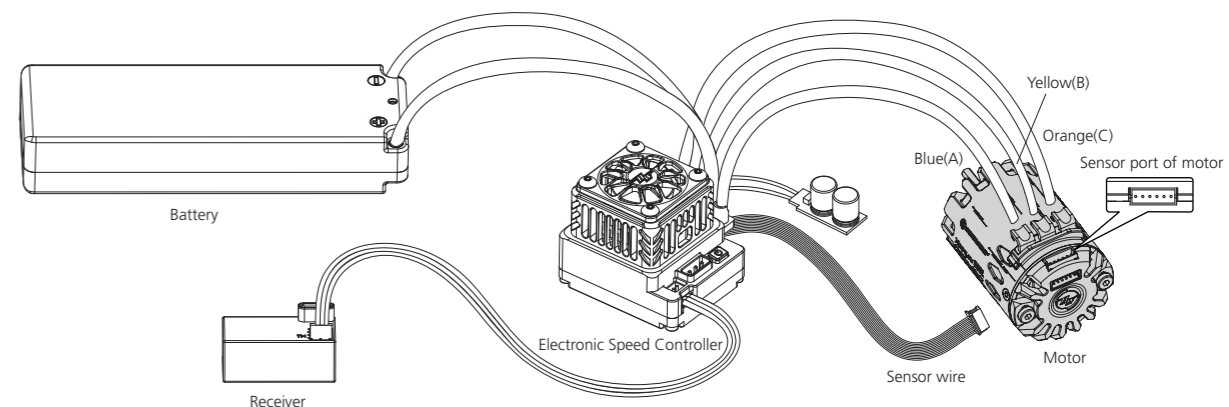
### XERUN 3652 DRX



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## 04 Installation & Connection



### 1. Installation of the motor

There are 6 motor mounting holes in M3 specification, and the mounting holes are 5mm in depth, before installing the motor on the vehicle, please carefully confirm whether the length of the screws is appropriate, so as not to damage the motor due to excessive length.

### 2. How to Connect the Motor to an ESC

When connecting the motor and esc, please pay attention to the marked three-phase position of A, B and C to ensure that the three wires of the motor and esc are connected in the order that, wire A of the esc matches wire A of the motor, wire B of the esc matches wire B of the motor, wire C of the esc matches wire C of the motor. Otherwise, it cannot run normally and even damage the esc and motor. And then connect the sensor cable to the motor and ESC.

### 3. Inspection

Before powering on the esc, please check the motor installation and the order of all connections.

## 05 Gearing

Reasonable selection of gear ratio is very important. Improper gear ratio may cause damage. You can select the gear ratio according to the following points!

### 1. The operating temperature of the motor

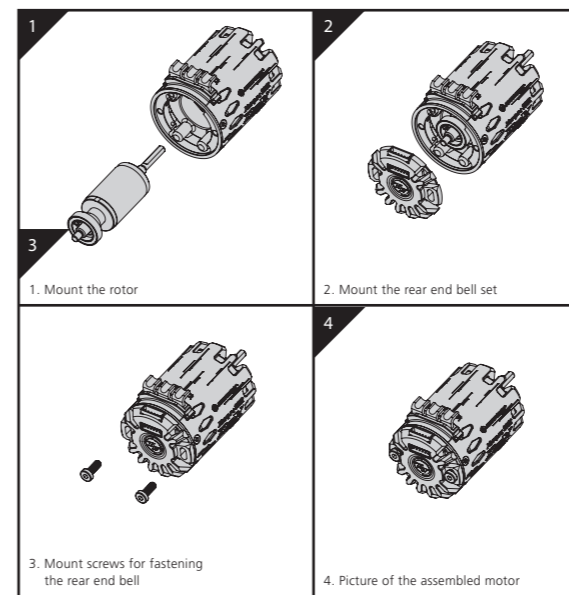
The motor temperature should be lower than 100 degrees Celsius (212 degrees Fahrenheit) in operation. High temperature may cause the magnets to get demagnetized, the coil to melt and short circuit, and the ESC to get damaged. A proper gearing ratio can effectively prevent the motor from overheating.

### 2. The principle of selecting gear ratio

To avoid the possible damage to ESC and motor caused by the overheating, please start with a small pinion/a big FDR and check the motor temperature regularly. If the motor and ESC temperature stays at a low level during the operation, you can change a larger pinion/a lower FDR and also check the motor temperature regularly to ensure that the new FDR is suitable for your vehicle, local weather and track condition. (Note: For the safety of electric devices, please check the ESC and motor temperature regularly.)

## 06 Assembly and Disassembly

In order for the motor have longer service life and higher efficiency, we suggest to regularly check the bearing and clean the dirt in the motor. The specific time depends on the frequency of using the motor and the site conditions. When installing, please follow the steps in the following assembly drawing; when disassembling, follow the reverse steps.



### Parts List

