

# **SPECIFICATION FOR PMSM**

# TZ155HA07-T48-SZ



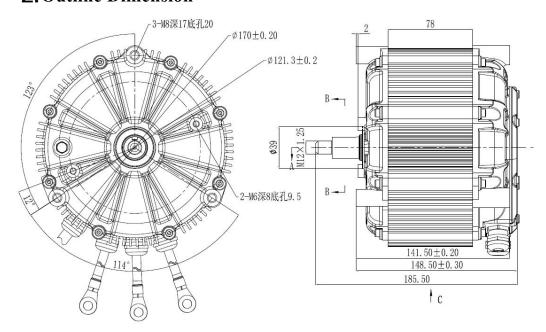




# 1. Product Model & Specification

TZ155HA07-T48-SZ				
Rated Voltage	72 V	Cooling	Air	
Rated Power	5 kW	Peak Power	18 kW	
Rated Speed	3,183 rpm	Peak Speed	7,000 rpm	
Rated Torque	15 Nm	Peak Torque	65 Nm	
Product Weight	10.5 kg	Size	170*185.5 mm	
Application	Two-wheel Electric Motorcycle, ATV, etc.			

# 2. Outline Dimension



## 3. Interface Function

# 3.1. Motor Installation and Matching Cable:

#### 3.1.1. Power Cable Selection:

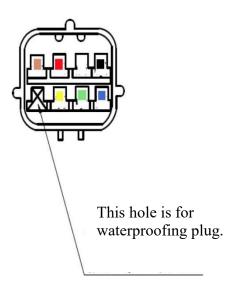
- $1.\ Three-phase\ cables:\ power\ cable-600v-UL3512-6AWG-3200/0.08TS-silicone\ rubber\ with\ insulation\ thickness\ of\ 1.5.$
- -Orange.
- 2. Wiring of encoder -7-core cable-black



3.1.2. Wiring Definition

No.	Color	Definition
U	Yellow	U-Phase of Three-phase Motor
V	Green	V-Phase of Three-phase Motor
W	Blue	W Phase of Three-phase Motor
Encoder And Temperature Sensor Line	Black	Wiring of Magnetic Encoder and Temperature Sensor

#### 3.1.3. Terminal Model and Pin Definition



Connector model: Tyco AMP-174984-2, plug model: Tyco AMP-2822393-1, temperature sensor model: KTY84-130

Terminal No.	Function
Brown	PWM Signal Line
Red	+5V
White	Temperature Sensor Signal
Black	GND
Yellow	A Signal
Green	B Signal
Blue	Z Signal



### 4. Other

### 4.1. Design Standard

A. The theoretical weight of the motor is 10.5kg; Cogging torque is 1.5N·m (test before installing oil seal); the radial circle runout is  $\leq 0.035$ mm, the axial clearance is 0.3mm, and the noise of the motor during no-load operation is less than 65dB.

- B. Duty: S9 (working system with non-periodic changes in load and rotating speed), the external temperature of the motor is -40°C-50°C when working.
- C. Other performance requirements shall comply with relevant requirements of QC/T 792-2007.

#### **4.2 Safety Standard**

The limit requirements of prohibited substances and toxic and harmful substances meet the latest edition of GB/T 30512.