

## **PWM DC Motor Speed Controller**

### **BRT ZK-MG**

#### **Product Highlights:**

1. Comes with a start-stop button, and can be controlled by an external switch to meet various control needs of customers.
2. The motor soft start function slowly increases the current when the motor is started without impact current, effectively protecting the motor and extending the motor Service life.
3. The duty cycle upper and lower limits and working frequency can be set to facilitate customers according to their own electricity  
The operating characteristics of the machine are used for operation.
4. The digital encoder knob adjusts the motor speed than the ordinary potentiometer, the accuracy is higher and consistent  
Sex is better.
5. With a standard 5135 instrument case to facilitate customer installation.

#### **Technical Parameters:**

1. Working voltage: DC5V-30V input anti-reverse protection
2. Rated current: 5A maximum current 15A
3. Maximum power: 150W
4. Working frequency: 1KHz-99KHz adjustable 1KHz stepping default frequency 20KHz, accuracy about 1%
5. Duty cycle: 0-100%, 1% step
6. Product size: 79mm\*43mm\*26mm, **integration panel cut-out size: 76x39mm**
7. Product weight: 41g
8. Packing form: carton packaging

All settable parameters are stored after power off.

#### **Digital encoder knob operation:**

In the default interface: (The default display is the duty cycle)

Short press—switch the motor to start and stop

Long press—enter the setting interface

Counterclockwise rotation-duty cycle decreases

Clockwise rotation-duty cycle increases

In the settings interface

Short press—select the setting parameter, and the setting parameter switches between the lower duty cycle limit, the upper duty cycle limit and the operating frequency

The lower limit of the duty cycle is displayed as "L" + two digits. The upper limit of the duty cycle is displayed as "H" + two digits or "100"

The frequency display format is "F" + two digits

Long press—exit the setting interface

Counterclockwise rotation-the corresponding setting parameter decreases

Clockwise rotation-the corresponding setting parameter increases

STOP port on the back

It can be connected to a switch button or 3.3V level. The button is closed or the 3.3V level is pulled down to switch the power.  
Start/stop status of the machine.

DC Motor status indicator: motor running indicator is on, stop running, off



LED displays motor adjusting duty cycle, duty cycle upper/lower limits, frequency.

Long pressing down encoder knob to enter into parameters setting mode.

Rotate encoder: clockwise rotation, duty cycle is up, anticlockwise rotation, duty cycle is down; short pressing down, turn off motor

User can connect switching quantity signal or 3.3V level signal

to control the motor on/off.



Motor output -

Motor output +

Power supply input +

Power supply input -

Cut-out size: 76x39mm

Error:  $\pm 1\text{mm}$

