HQ-SXPWM-A High-Power Pulse AC90-260V Input 0-110VDC 90VDC 180VDC 220VDC Output 8A Motor Controller Digital Voltage and Current

1. **Introductions:**

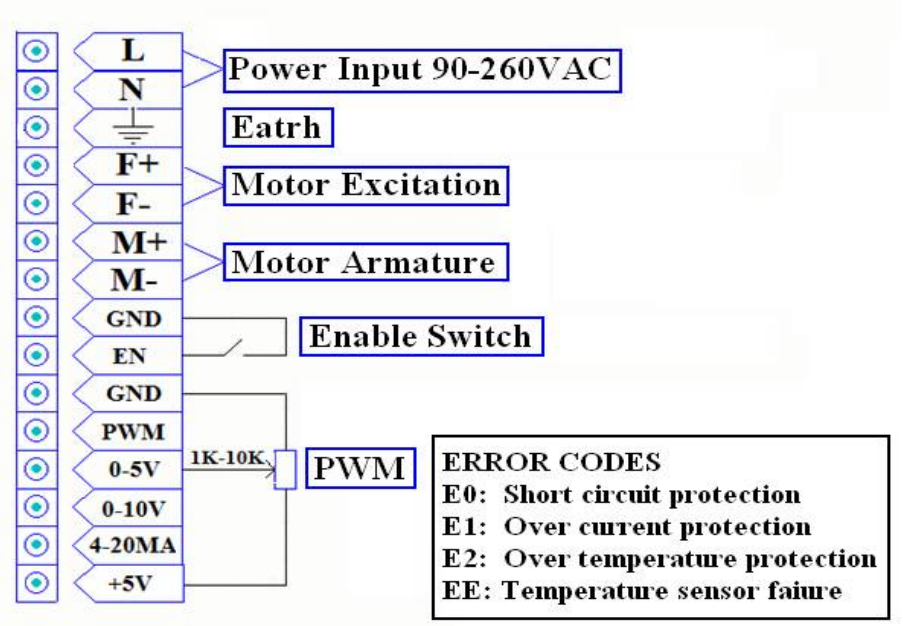
   The latest products HX-SXPWM-A (ultra-wide voltage AC90V-AC260V) input high-power DC motor controller. The controller using pulse width modulation technology, selection of today's advanced switching device design and production, with a small size, no noise, high efficiency. And has advanced short circuit, over-current, over-temperature protection, and the armature voltage stability of the output voltage, the armature voltage from zero to rated continuously adjustable, which makes the motor speed is very convenient. Speed controller as a result of high frequency, so as to ensure that the motor at low speed to stabilize the work (that is, there is no crawling phenomenon), is an ideal alternative to SCR power supply products. Widely used in wire, cable, light industry, textile, paper, chemical, printing and dyeing, metallurgy, rubber, drawing, extrusion machinery, medical equipment, food production, printing and packaging industries, small DC motor armature, DC motor to achieve constant torque stepless speed regulation.

2. **Parameters:**
   a. Input power (VAC): AC90-260V 50/60 Hz
   b. Output motor voltages range (VDC): 0 to max voltage set 250VDC.
   c. Current range: 8A (0.1A-10A can be set) If the current is too high an increase of heat will be noticeable.
   d. Output excitation coil voltage range (VDC): 100/200 (default to manufacture settings).
   e. Output excitation current fixed at: 1A
   f. Operating frequency: 16 KHz
   g. Input signal modes (V / mA): the default potentiometer, 0-5V, 0-10V, 4-20mA, PWM, button type
   h. Enable control mode (EN): switch
   i. Soft start (acceleration time adjustment range) (S): 0-10S (default 2 seconds)
   j. Soft stop (deceleration time adjustment range) (S): 0-10S (default 2 seconds)
   k. double closed-loop PI regulation, (voltage, current) control more reliable
   l. IR torque compensation range: 0-100% (default 0)
   m. Over-current protection range: 0-set value (default 8A)
   n. Over-current protection: stop the output and displays error code **E1**.
   o. Short-circuit protection: stop the output and displays error code **E0**.
   p. Overheating protection: temperature exceeds 100°C turn off the output and displays error code **E2**.
   q. Built-in digital display module, for real-time operating voltage and current.
   r. Dimensions: length 140 × width 98 × height 38mm.
   t. Connection: Plug-in screw terminal.

3. **Operating Conditions:**
   a. Ambient temperature: -10 ~ 40 ° C
   b. Relative humidity below 85% and well ventilated
   c. No vibration, and non volatile environment.

4. **Features:**
   a. Pulse width technology (PWM) to make the speed more stable, low-speed efforts
   b. With short circuit, over current, over-temperature protection cut-off device to make operations safer.
   c. Soft-start device to eliminate the motor starting current that is too high.
   d. High and low voltage signal completely isolated, the use of more reliable operations.

5. **Attention:**
   a. The input power terminals are high-voltage and can be fatal to electric shock!
   b. The two wires of the DC permanent magnet motor must be connected directly to the M + and M- terminals.



6. **Instructions for use:**

PWM signal requirements:

PWM signal level is 5V, the signal frequency 1KHZ above, with a load capacity of not more than 0.5mA. 2,5V level without a resistance Input at PWM port.

10V level PWM input from 0-10V port or a current limiting 10K resistor at PWM port input, 12V level variable 3.9K resistor from 0-10V port input or a current limiting 13.7K resistor In the PWM port input, 24V level a current limiting 27K resistor from 0-10V port input or a current limiting 16.8K resistor in the PWM port input.

7. **Parameters Setting:**

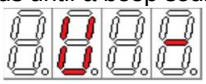
To make adjustments to the setting, first disconnect the EN and GND plug to enable the Setting Mode.

SW1 = Enter mode and togger to next mode.

SW2 = (down) count decrees and holding it down will accelerate the count.

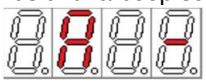
SW3 = (UP) count increase and holding it down will accelerate the count.

1st, hold SW1 for 3 seconds until a beep sound is heard. This will enter the Voltage Setting page:

with a display.  for the voltage settings. Stetting's can only be adjusted while the display is flashing.

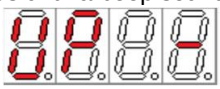
Range 48V to 250V, Set Motor voltage to match the motor you are operation.

2nd, hold SW1 for 3 seconds until a beep sound is heard and press SW1 once. For the current settings

with a display. 

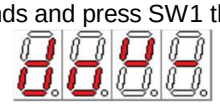
Range: 0.1AQ to 10A. Select the operating current for your motor

3rd hold SW1 for 3 seconds until a beep sound is heard and press SW1 twice. For the Acceleration time settings.

with a display.  also known as soft start to limit the inrush current.

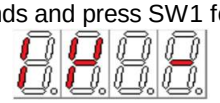
Acceleration range: 0.0 to 10.0 seconds

4th hold SW1 for 3 seconds and press SW1 three times. For the Deceleration time settings.

with a display. 

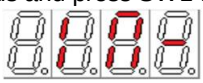
Deceleration range: 0.0 to -10.0 seconds.

5th hold SW1 for 3 seconds and press SW1 four times. For the IR settings.

with a display.  For spinal speed compensation under heavy cutting.

Motor IR torque compensation range: 0 to 100%

6th hold SW1 for 3 seconds and press SW1 five times. For the Input signal settings;

with a display. 

Input signal setting range: 0-5 = 0-5V or 4-20 = 4-20mA, make your preferred selection

Replace the EN Plug when adjustments are completed.