

## MPWM60-20 Large power PWMA

### 1 Features

- Customer Design
- The circuit contains a PID current loop control circuit
- Wide input voltage: 16V~100V
- $\pm 10V$  Analog DC signal input
- Max continuous input current 30A
- The product includes a current limiting circuit
- Work in the rated power without the need for external radiator



### 2 Applications

- DC motor drive control
- Drive the reactive load

### 3 Descriptions

MPWM60-20 is a switching mode PWMA, It can provide 5KW maximum load power for the load; the product needs three power supplies,  $\pm 15V$  for the small signal control circuit power supply PID current loop control circuit; 16V-100V motor power supply for the internal H bridge; input circuit control signal for the bipolar analog DC input ( $\pm 10V$ ) flat signal; Output pulse square wave signal frequency 2KHz. When the output current is greater than 50A, the circuit will close the four power driving tubes of the H bridge circuit to make the product into the protection state. The circuit can back to work normally again until restart.

MPWM60-20 PWMA using excellent structural design to ensure the rated power conditions within the product dissipation power can be better passed to the shell without the need for external cooling device, easy to use and easy to install. The connection of the

product and system only needs to be done through the connection socket, without any external components.

## 4 Technical Specifications

Form 1 Electrical characteristics

Absolute Maximum Ratings	Recommended working conditions
Supply voltage +Vs: 120V Supply voltage +Vcc: 16V Internal power loss : 380W ( Total power consumption of two tubes ) Storage temperature: -55°C~105°C Operating temperature (Tc) : -40°C~85°C Input voltage +PWM: ±10V	Supply voltage +Vs: 16V~100V Supply voltage +Vcc: 15V Input voltage +PWM: ±2V

## 5 Lead function description

MPWM60-20 PWMA is equipped with two sockets connected to the system, respectively, socket 1 and socket 2, the connection diagram is as follows:

Socket 1: Model is DC13P6dS1Z

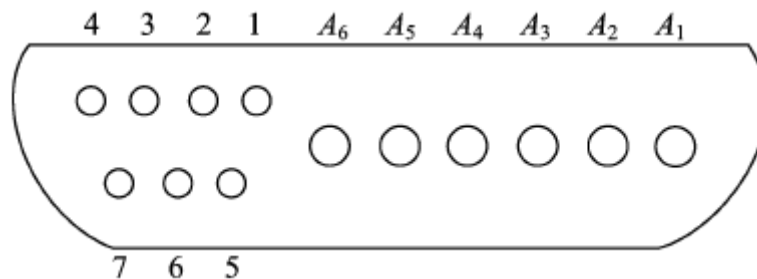
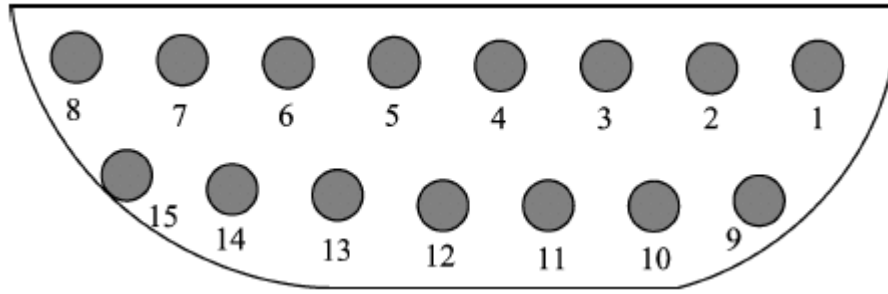


Fig 2 Bottom view

A1: +60V                      A2: Power Ground

A3: Output 1                A3: Output 2

Socket 2: Model is DA15PS3



1: +15V                      4: -15V  
 5: GND                      14: GND ( $V_i$ )

## 6 Circuit block diagram

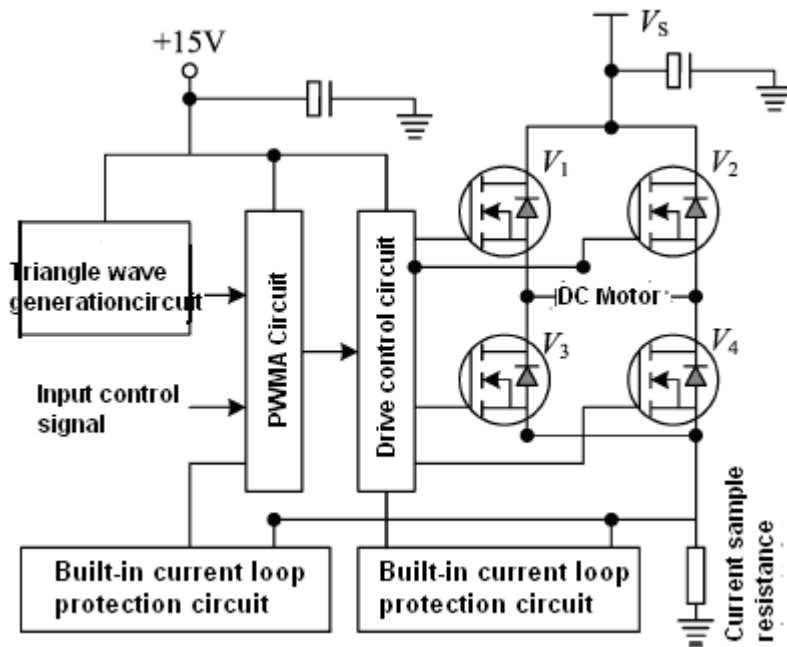


Fig 4 Circuit block diagram

## 7. Typical Connection Diagram

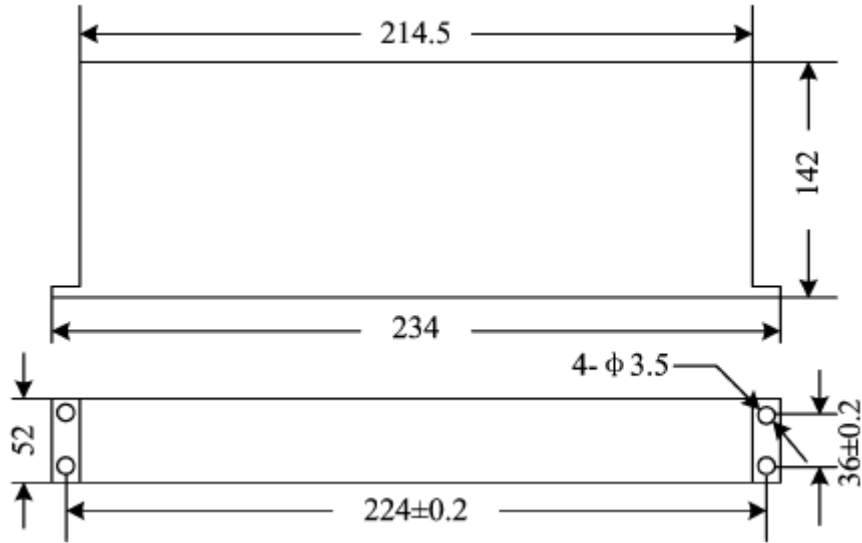


Fig 4

Application notes please refer to the appendix, must read it carefully