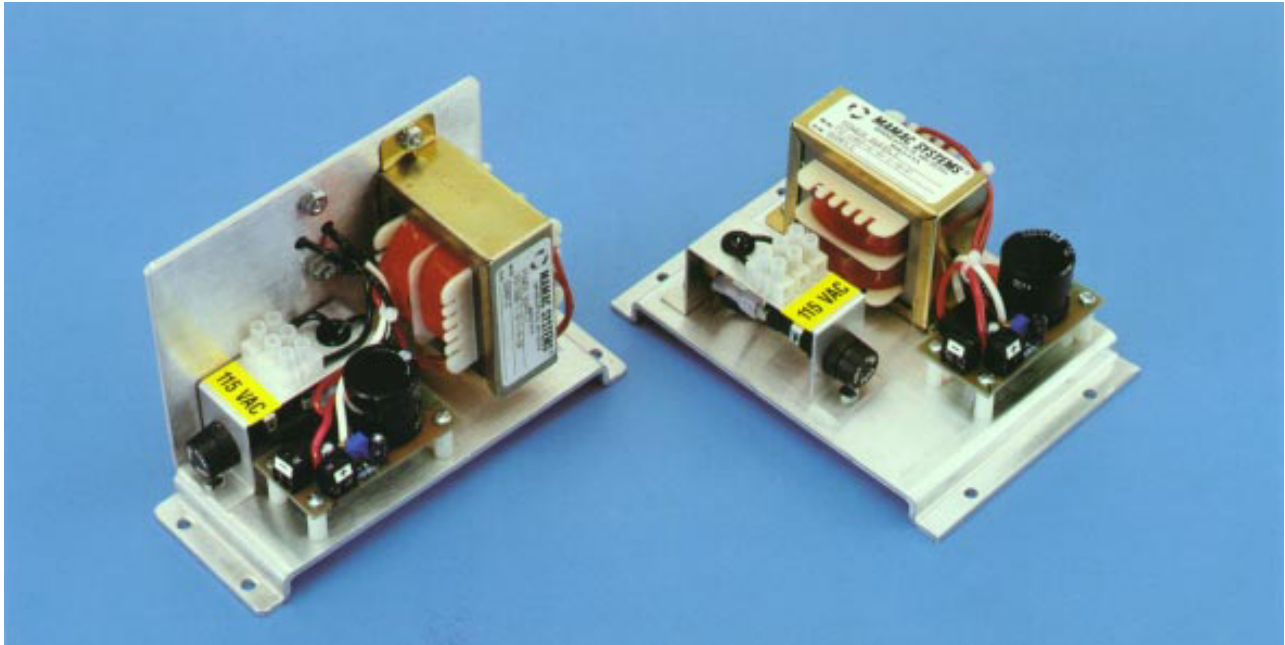


# Power Supply

## Model PS-200



The PS-200 accepts either 115, 230 or 24 VAC input and provides fully regulated, short circuit and thermal overload protected 5.0 to 25.0 VDC output. The PS-200 incorporates an inline fuse and terminal strip for the primary line voltage. Multi-position terminal strips are provided for the DC output. Two unique chassis options are available. The PS-200 is the most reliable, indestructible, stable and versatile power supply in the industry and requires the least amount of installation time.

- **Split bobbin transformer with 3500 VRMS isolation** •
  - **Clean, filtered and regulated DC output** •
  - **Fully adjustable from 5.0 to 25.0 VDC** •
    - **Easily accessible inline fuse** •
- **Output short circuit and over current protected** •
  - **Multi-position terminal strip for DC output** •
  - **Less than 2.0 mV pp ripple** •
- **Two unique chassis for ease of installation in control panels** •
  - **115 VAC/230 VAC/24 VAC line voltage options** •



**MAMAC SYSTEMS**®  
MONITOR • DECISION • CONTROL

7400 Flying Cloud Drive Minneapolis, MN 55344-3720 • USA  
800/843-5116 • 612/835-1626 • Fax 612/829-5331  
sales@mamacsys.com • www.mamacsys.com

Units 6&7 Baird House • Dudley Innovation Centre  
Pensnett Estate • Kingswinford  
West Midlands • DY6 8XZ • United Kingdom  
01384-271113 • Fax 01384-271114

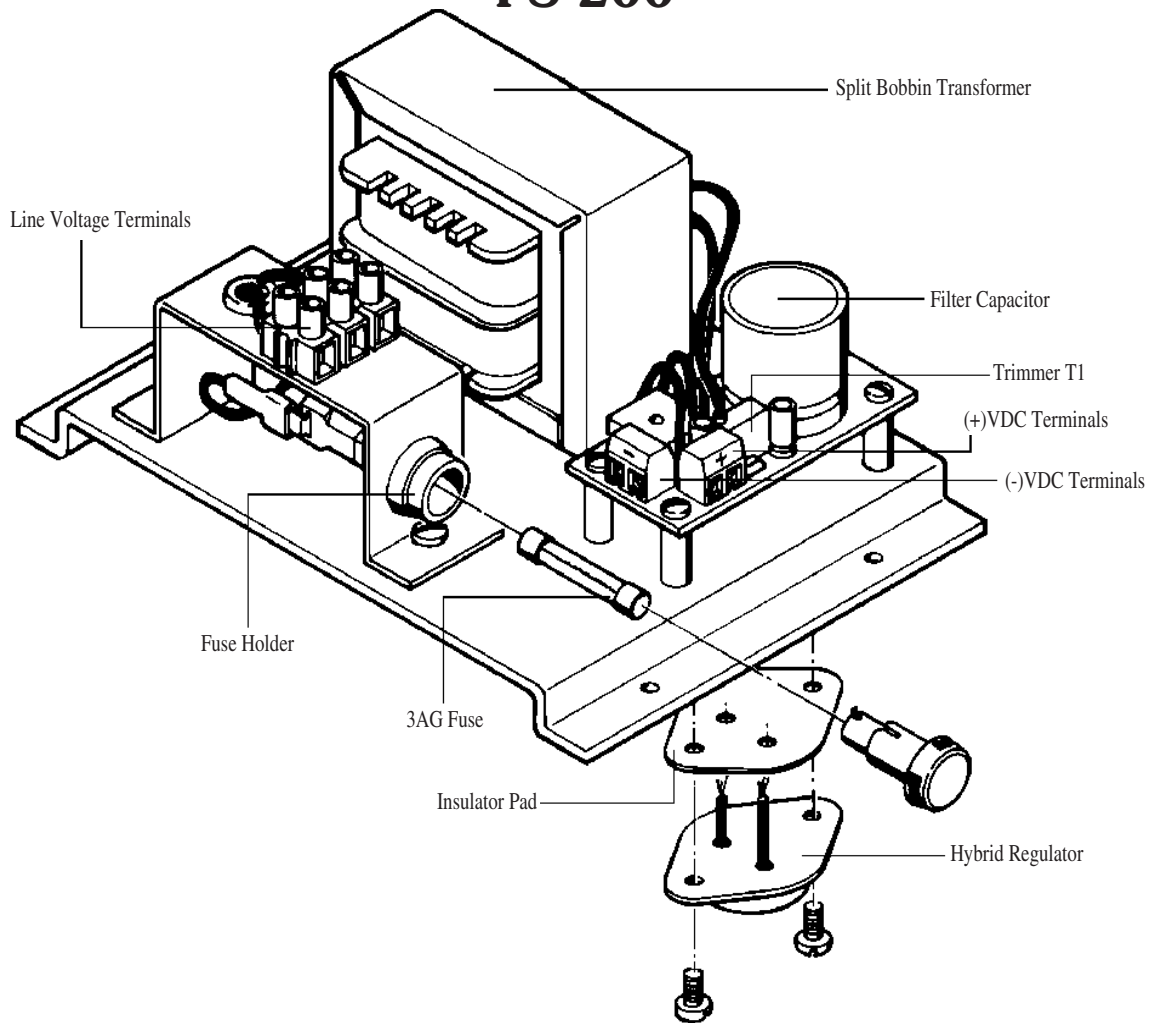
4 Armiger Court, Unit 2  
Holden Hill • S. A. 5088 • Australia  
08-8395-4333 • Fax 08-8395-4433

155 McIntosh Drive, Unit 5 • Markham  
Ontario • L3R 0N6 • Canada  
905-474-9215 • Fax 905-474-0876

5611 North Bridge Road  
03-06 • Eng Cheong Tower  
Singapore • 198782  
65-3927273 • Fax 65-3927276

© Registered Trademark MAMAC SYSTEMS, Inc.

# PS-200



PS-200 is a reliable, stable and fully protected DC power supply designed to power all control peripherals. Other open-frame linear power supplies require expensive modifications to add inline fuse, solder primary line voltage and secondary DC output leads, and to engineer a bracket to mount the power supply. To address the above issues, MAMAC Systems developed a power supply which eliminates all of the above expensive field modifications.

Our PS-200 incorporates a split bobbin transformer with 3500 VRMS isolation between the windings to provide reliable and consistent secondary output. The line voltage is fuse protected and the fuse holder is mounted on a bracket to make it easily accessible for replacement purposes. A conveniently located terminal strip is provided for the line voltage termination. All line voltage connections, including the fuse holder and the terminal strip, are fully insulated to protect against accidental

electrical shock hazard. The fuse holder accepts industry standard 3AG fuses which are readily available. The PS-200 is available with either 115 VAC, 230 VAC or 24 VAC line voltage options. These features enable the PS-200 to perform with any available line voltage.

PS-200 utilizes a full wave bridge rectifier to convert the secondary AC voltage to a DC output. A single I.C. reliable voltage regulator is used to provide a stable, regulated output with built in short circuit, thermal overload, inrush and line voltage spike protection. The output of the PS-200 can be indefinitely shorted without damaging the Power Supply. Similarly, if the load exceeds the rated specification, the PS-200 output shuts down and goes into a dormant state. As soon as the overload condition is removed, the Power Supply resumes functioning without any damage. In this way, the PS-200 is a very reliable, indestructible power supply designed for the controls industry.

# PS-200

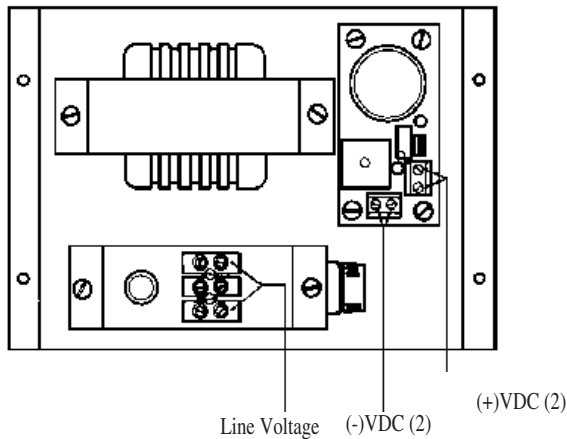
Multiple high grade low ESR and low leakage capacitors are used to filter the DC voltage and to provide less than 2.0mV pp ripple on the output. A multi-turn trimmer is provided to adjust the output from 5.0 to 25.0 VDC. Once adjusted, the output remains constant regardless of line voltage fluctuations or output load variations. Each PS-200 is shipped with the output adjusted to a specific value as desired by the customer. Multiple position terminal strips are provided for field wiring.

In order to facilitate the installation of our PS-200 in a control panel, MAMAC Systems. has developed two unique chassis options: 1) a low height chassis designed for shallow panels; 2) a narrow width chassis

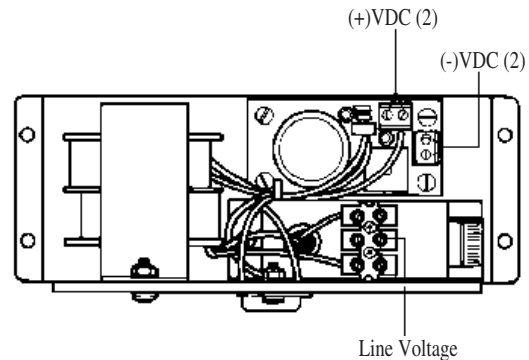
for deep panels where horizontal space is a premium. Both the chassis function as a heat sink and are engineered such that all the components are recessed to provide a flat surface for flush mounting in a control panel without stand-offs or spacers.

With two packaging options, fully adjustable output, short circuit and thermal overload protection, inrush and spike protection, fuse protection on line voltage and easily accessible terminal strip for supply and output voltages, our PS-200 is not only the most reliable, indestructible, stable and versatile power supply in the industry, but also requires the least amount of installation time in control panels.

Low Height



Narrow Width



## SPECIFICATIONS:

**Output Voltage Range:** 5.0 VDC to 25.0 VDC  
**Line Regulation:** 0.01%/V  
**Load Regulation:** 0.2% (no load to full load)  
**Current Limit:** 130% rated current  
**Output Ripple:** 2.0 mV pp maximum  
**Output Short Circuit:** Indefinite

**Weight:** 1.5 A= 2.5 lbs.; 3.0 A= 3.0 lbs.  
**Thermal Overload:** Internally protected  
**Inline Fuse:** 3AG 1.0/2.0  
**Input Voltage:** 90-130 VAC/208-240 VAC/24-29 VAC  
**Operating Temperature:** - 40° to + 120° F  
**Humidity:** 90% non-condensing

## ORDERING INFORMATION:

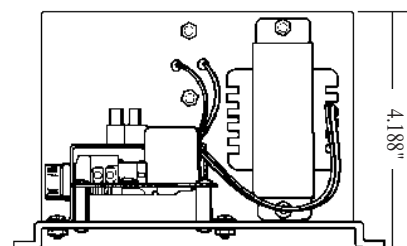
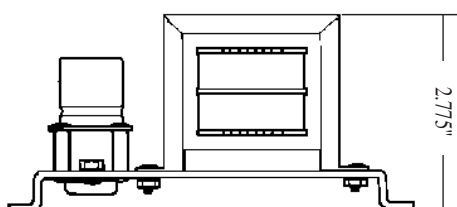
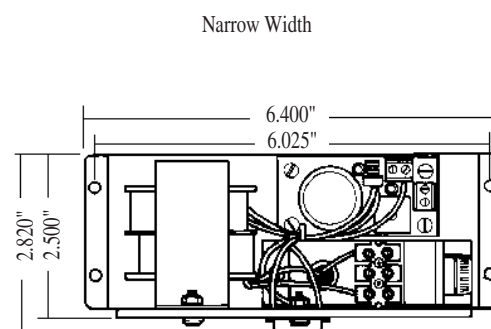
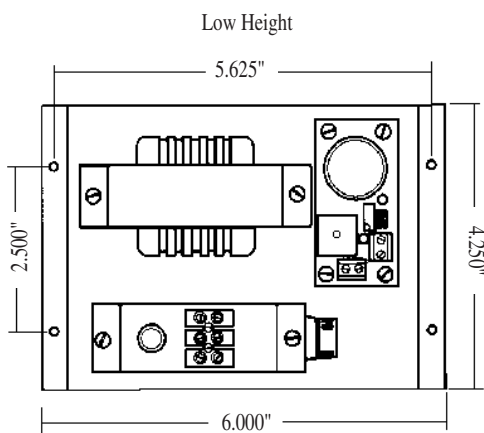
PS-200	OUTPUT VOLTAGE	OUTPUT CURRENT	LINE VOLTAGE	CHASSIS
	1) 24 VDC	A) 1.5 AMPS	1) 115 VAC	L) Low Height
	2) 12 VDC	B) 3.0 AMPS	2) 230 VAC	N) Narrow Width
	3) 5 VDC		3) 24 VAC*	
	4) Custom			

\* Available with 1.5 amps Output Current only

The MAMAC Systems warranty covers parts and labor for 2 years from date of shipment.

MAMAC Systems reserves the right to change any specifications without notice to improve performance, reliability, or function of our products.

# PS-200



## CALIBRATION INSTRUCTIONS:

NOTE: All units are factory calibrated to meet or exceed published MAMAC specifications. If field adjustment is needed, please perform the following steps:

- 1) Connect appropriate line voltage to the PS-200.
- 2) Connect the plus lead of an accurate voltmeter to the output plus terminal and connect the minus lead to the output minus terminal.
- 3) Adjust trimmer T1 to obtain the desired output voltage between 5.0 VDC to 25.0 VDC.

## A Complete Line of Control Peripherals From a Single Source

**MAMAC Systems** is the only manufacturer offering more than fifty products to satisfy all temp, humidity, pressure, flow, light, speed or any other DDC controls application. MAMAC's complete line of control peripherals is available in over two thousand different configurations of supply voltage, output, range and enclosure type to make our products guaranteed compatible to all HVAC controls, industrial automation and COGEN systems worldwide.

Single source accountability, liberal 2 year warranty, worldwide service and technical support, competitive pricing, accumulated experience of more than 10,000 installations are some of the benefits offered by MAMAC Systems which are second to none in the HVAC DDC controls industry.



**MAMAC SYSTEMS**®  
MONITOR • DECISION • CONTROL

7400 Flying Cloud Drive Minneapolis, MN 55344-3720 • USA  
800/843-5116 • 612/835-1626 • Fax 612/829-5331  
sales@mamacsys.com • www.mamacsys.com

Units 6&7 Baird House • Dudley Innovation Centre  
Pensnett Estate • Kingswinford  
West Midlands • DY6 8XZ • United Kingdom  
01384-271113 • Fax 01384-271114

4 Armiger Court, Unit 2  
Holden Hill • S. A. 5088 • Australia  
08-8395-4333 • Fax 08-8395-4433

155 McIntosh Drive, Unit 5 • Markham  
Ontario • L3R 0N6 • Canada  
905-474-9215 • Fax 905-474-0876

5611 North Bridge Road  
03-06 • Eng Cheong Tower  
Singapore • 198782  
65-3927273 • Fax 65-3927276

® Registered Trademark MAMAC SYSTEMS, Inc.