

Description

The PS16 unregulated power supplies have been designed to complement **ADVANCED Motion Controls'** servo drives. Model PS16 is mounted on a base plate for multi-axis applications (mounting space provided on base plate for up to 6 drives). Model PS16-L is mounted on an "L"-shaped bracket for single-axis applications. These unregulated DC power sources are an excellent solution for most applications as **ADVANCED Motion Controls'** servo drives compensate for power supply output variations and AC ripple components.

PS16 Series power supplies are designed to provide the best cost-per-watt value. They have multiple windings for either 120 VAC (PS16L) or 240 VAC (PS16H) 50/60 Hz operation. These power supplies incorporate either a 30V, 36V or a 40V output transformer. The 30V and 40V transformers have four identical secondary windings and the 36V transformers have two identical secondary windings. These windings can be connected in series or in parallel for different output voltages and currents.

Ordering Note: For the L-Bracket option, add a "-L" to the end of each part number (e.g. PS16L40-L)

Power Supplies



PS16x30,36,40,60,72,80



PS16x30,36,40,60,72,80-L



PS16x120,160



PS16x120,160-L



PS16L170



PS16L170-L

Note: AC Power Cord included only with 120 VAC input models

Features

- ▲ Multiple Primary Windings: Either 120 VAC or 240 VAC, 50/60 Hz Operation
- ▲ Isolation Transformer on All Power Supply Models Except the PS16L170 and PS16L170-L
- ▲ 30 VDC, 36 VDC or 40 VDC Secondary Output Winding Taps
- ▲ Small Size, Low Cost, Ease of Use

Agency Approvals



Compliant with European CE for both the Class A EMC Directive 2004/108/EC on Electromagnetic Compatibility (specifically EN 61000-6-4:2007 and EN 61000-6-2:2005) and LVD requirements of directive 2006/95/EC (specifically EN 60204-1:2006), a low voltage directive to protect users from electrical shock.



RoHS (Reduction of Hazardous Substances) is intended to prevent hazardous substances such as lead from being manufactured in electrical and electronic equipment.

120 VAC Single Phase Input

240 VAC Single Phase Input

Power Supplies

| Model Number | DC Output Voltage | Output Current | Output Power | Isolation |
|--------------|-------------------|----------------|--------------|-----------|
| PS16L30 | 30 VDC | 27 A | 800 W | YES |
| PS16L36 | 36 VDC | 22 A | 800 W | YES |
| PS16L40 | 40 VDC | 20 A | 800 W | YES |
| PS16L60 | 60 VDC | 13 A | 800 W | YES |
| PS16L72 | 72 VDC | 11 A | 800 W | YES |
| PS16L80 | 80 VDC | 10 A | 800 W | YES |
| PS16L120 | 120 VDC | 7 A | 800 W | YES |
| PS16L160 | 160 VDC | 5 A | 800 W | YES |
| PS16L170 | 170 VDC | 15 A | 2550 W | NO |
| PS16H30 | 30 VDC | 27 A | 800 W | YES |
| PS16H36 | 36 VDC | 22 A | 800 W | YES |
| PS16H40 | 40 VDC | 20 A | 800 W | YES |
| PS16H60 | 60 VDC | 13 A | 800 W | YES |
| PS16H72 | 72 VDC | 11 A | 800 W | YES |
| PS16H80 | 80 VDC | 10 A | 800 W | YES |
| PS16H120 | 120 VDC | 7 A | 800 W | YES |
| PS16H160 | 160 VDC | 5 A | 800 W | YES |

SPECIFICATIONS

| Power Specifications (120 VAC Single Phase Power Supplies) | | | | | | | | | | |
|--|-------|--------------|---------|---------|---------|---------|---------|----------|----------|----------|
| Description | Units | PS16L30 | PS16L36 | PS16L40 | PS16L60 | PS16L72 | PS16L80 | PS16L120 | PS16L160 | PS16L170 |
| AC Supply Voltage Input | VAC | 120 | | | | | | | | |
| AC Supply Input Frequency | Hz | 50-60 Hz | | | | | | | | |
| AC Supply Input Phases | - | Single Phase | | | | | | | | |
| Output Voltage | VDC | 30 | 36 | 40 | 60 | 72 | 80 | 120 | 160 | 170 |
| Current Output | A | 27 | 22 | 20 | 13 | 11 | 10 | 7 | 5 | 15 |

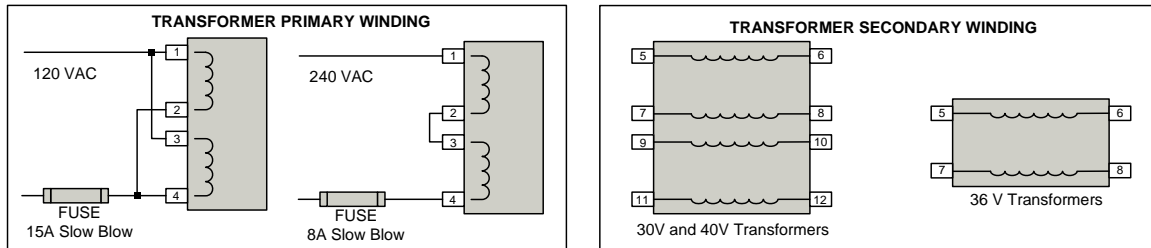
| Power Specifications (240 VAC Single Phase Power Supplies) | | | | | | | | | | |
|--|-------|--------------|---------|---------|---------|---------|---------|----------|----------|----------|
| Description | Units | PS16H30 | PS16H36 | PS16H40 | PS16H60 | PS16H72 | PS16H80 | PS16H120 | PS16H160 | PS16H160 |
| AC Supply Voltage Input | VAC | 240 | | | | | | | | |
| AC Supply Input Frequency | Hz | 50-60 Hz | | | | | | | | |
| AC Supply Input Phases | - | Single Phase | | | | | | | | |
| Output Voltage | VDC | 30 | 36 | 40 | 60 | 72 | 80 | 120 | 160 | 160 |
| Current Output | A | 27 | 22 | 20 | 13 | 11 | 10 | 7 | 5 | 5 |

| Mechanical Specifications | | | |
|---------------------------------|----------|--|--------------|
| Description | Units | PS16 | PS16-L |
| AC Input Connector ¹ | - | AC Cord Supplied | |
| DC Output Connector | - | Screw Terminals | Flying Leads |
| Size (H x W x D) ² | mm (in) | 330.2 x 266.7 x 152.4 (13.00 x 10.50 x 6.00) | |
| Weight | kg (lbs) | 11.3 (25) | |
| | | | 9.5 (21) |

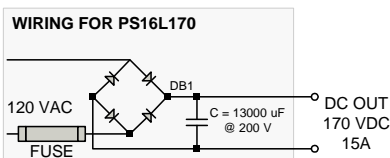
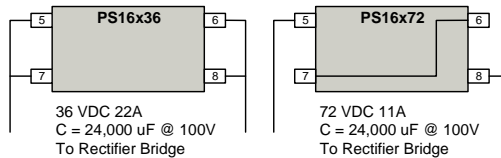
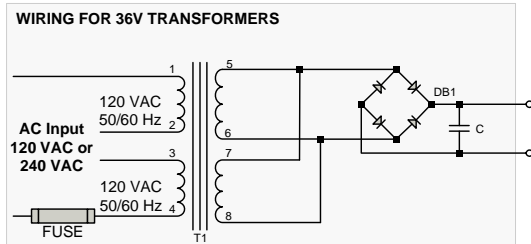
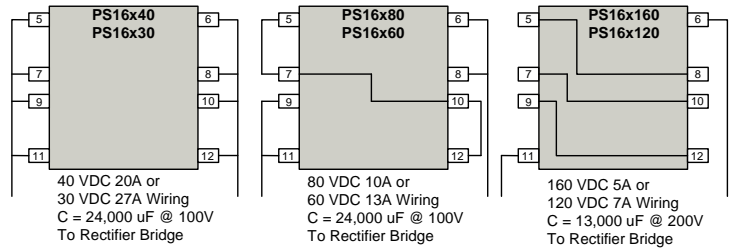
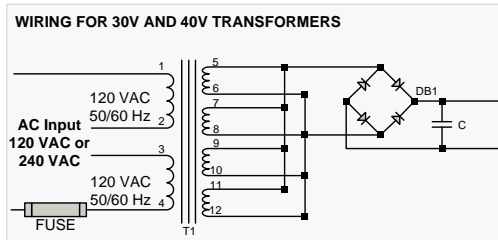
Notes

1. AC Cord included with 120 VAC input models only.
2. Worst case depth dimension. Depth varies with model number. See mounting dimensions for additional details.

BLOCK DIAGRAMS

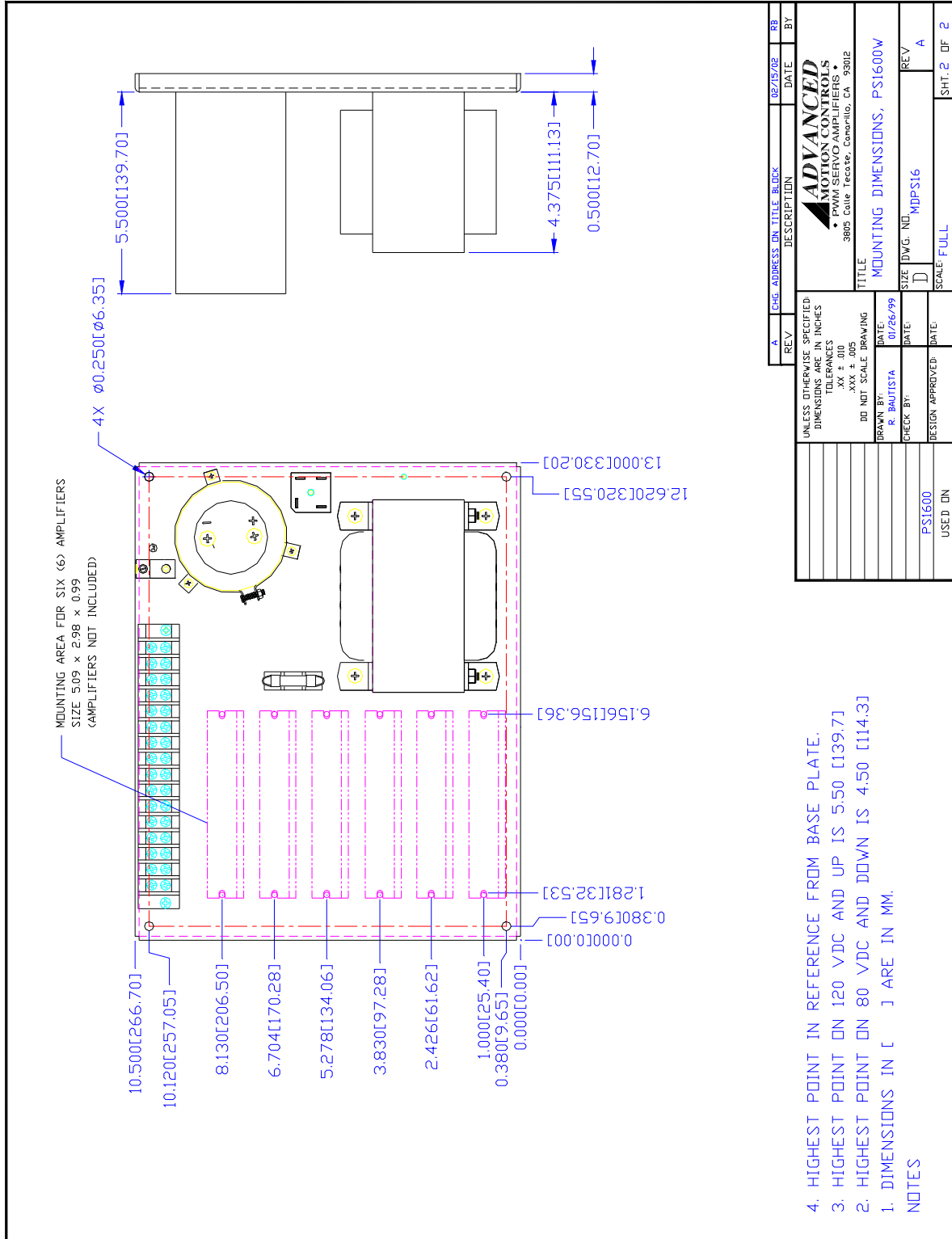


*Contact factory prior to rewiring transformer primary or secondary



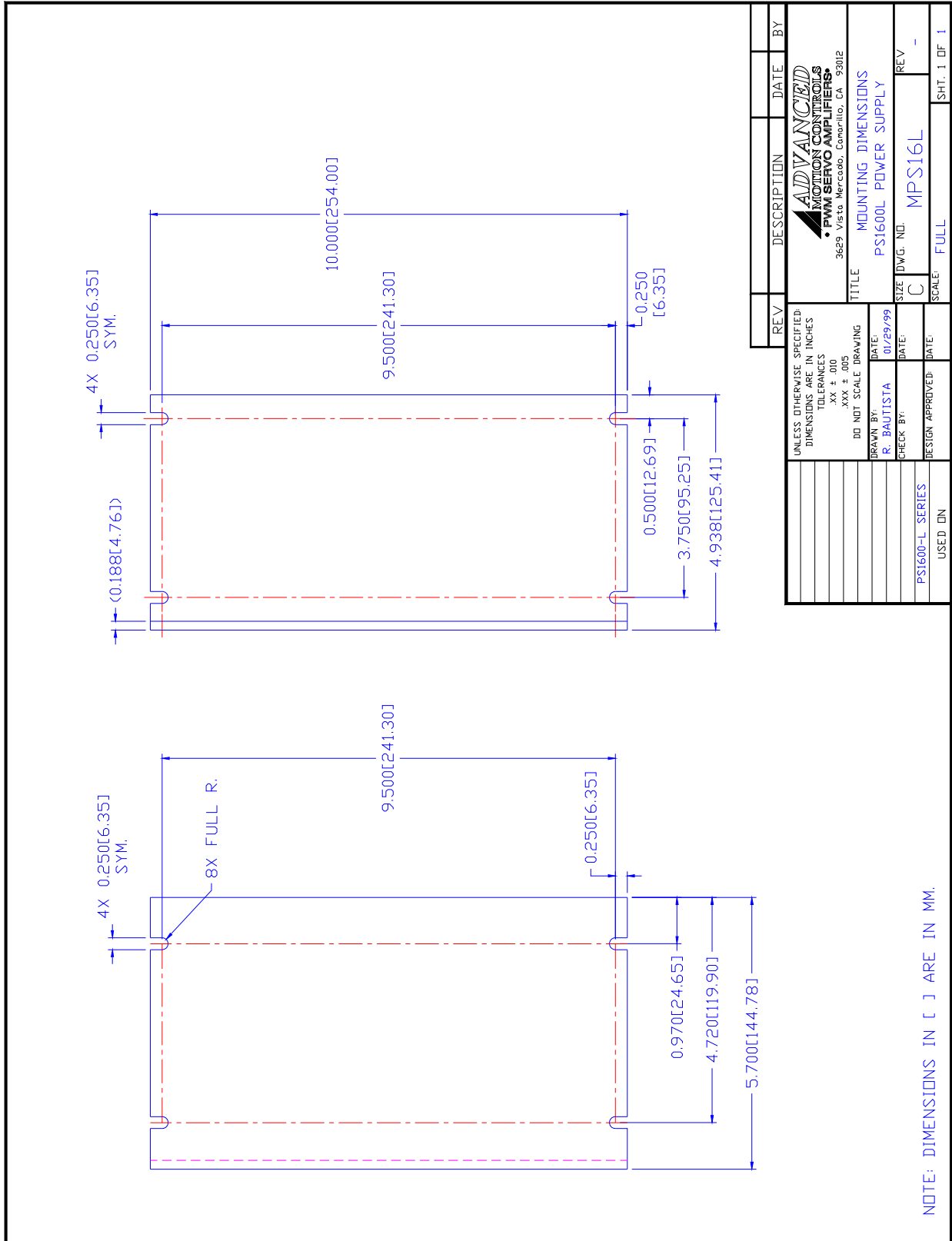
MOUNTING DIMENSIONS

Mounting Dimensions for PS16



- NOTES**
1. DIMENSIONS IN [] ARE IN MM.
 2. HIGHEST POINT ON 80 VDC AND DOWN IS 4.50 [114.3]
 3. HIGHEST POINT ON 120 VDC AND UP IS 5.50 [139.7]
 4. HIGHEST POINT IN REFERENCE FROM BASE PLATE.

Mounting Dimensions for PS16-L



CUSTOMIZATION INFORMATION

ADVANCED Motion Controls' products are available in many configurations. All models listed in the selection tables of the website are readily available, standard product offerings.

ADVANCED Motion Controls also has the capability to promptly develop and deliver specified products for OEMs with volume requests. Our Applications and Engineering Departments will work closely with your design team through all stages of development in order to provide the best servo drive solution for your system. Equipped with on-site manufacturing for quick-turn customs capabilities, ADVANCED Motion Controls utilizes our years of engineering and manufacturing expertise to decrease your costs and time-to-market while increasing system quality and reliability. Feel free to contact Applications Engineering for further information and details.

Examples of Customized Products

- ▲ Optimized Footprint
- ▲ Private Label Software
- ▲ OEM Specified Connectors
- ▲ No Outer Case
- ▲ Increased Current Resolution
- ▲ Increased Temperature Range
- ▲ Custom Control Interface
- ▲ Integrated System I/O
- ▲ Tailored Project File
- ▲ Silkscreen Branding
- ▲ Optimized Base Plate
- ▲ Increased Current Limits
- ▲ Increased Voltage Range
- ▲ Conformal Coating
- ▲ Multi-Axis Configurations
- ▲ Reduced Profile Size and Weight

Available Accessories

ADVANCED Motion Controls offers a variety of accessories designed to facilitate drive integration into a servo system. Visit www.a-m-c.com to see which accessories will assist with your application design and implementation.

