

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.

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

**120 VAC
Single
Phase Input**

**240 VAC
Single
Phase Input**

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

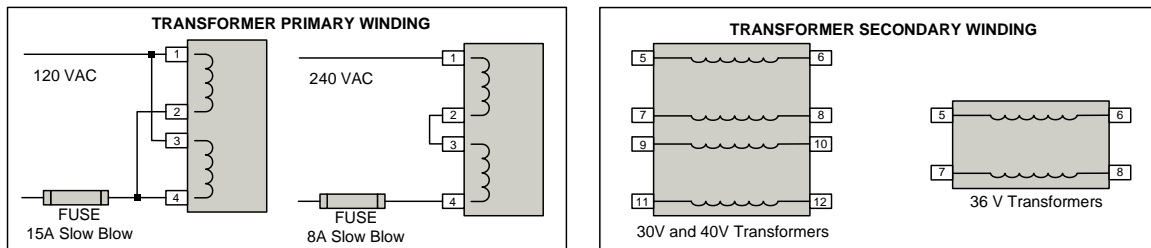
Power Specifications (240 VAC Single Phase Power Supplies)										
Description	Units	PS16H30	PS16H36	PS16H40	PS16H60	PS16H72	PS16H80	PS16H120	PS16H160	PS16H160
AC Supply Voltage Input	VAC	240								
AC Supply Input Frequency	Hz	50-60 Hz								
AC Supply Input Phases	-	Single Phase								
Output 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)	254 x 125.4 x 144.8 (10.00 x 4.94 x 5.70)
Weight	kg (lbs)	11.3 (25)	9.5 (21)

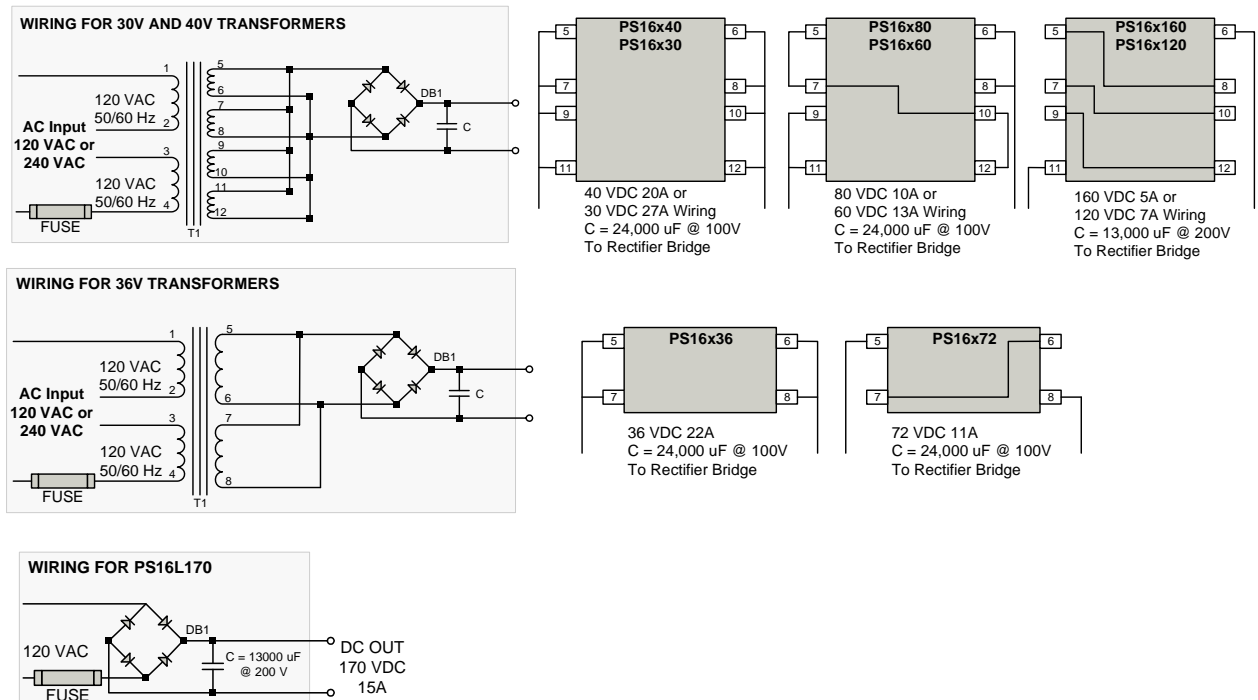
Notes

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

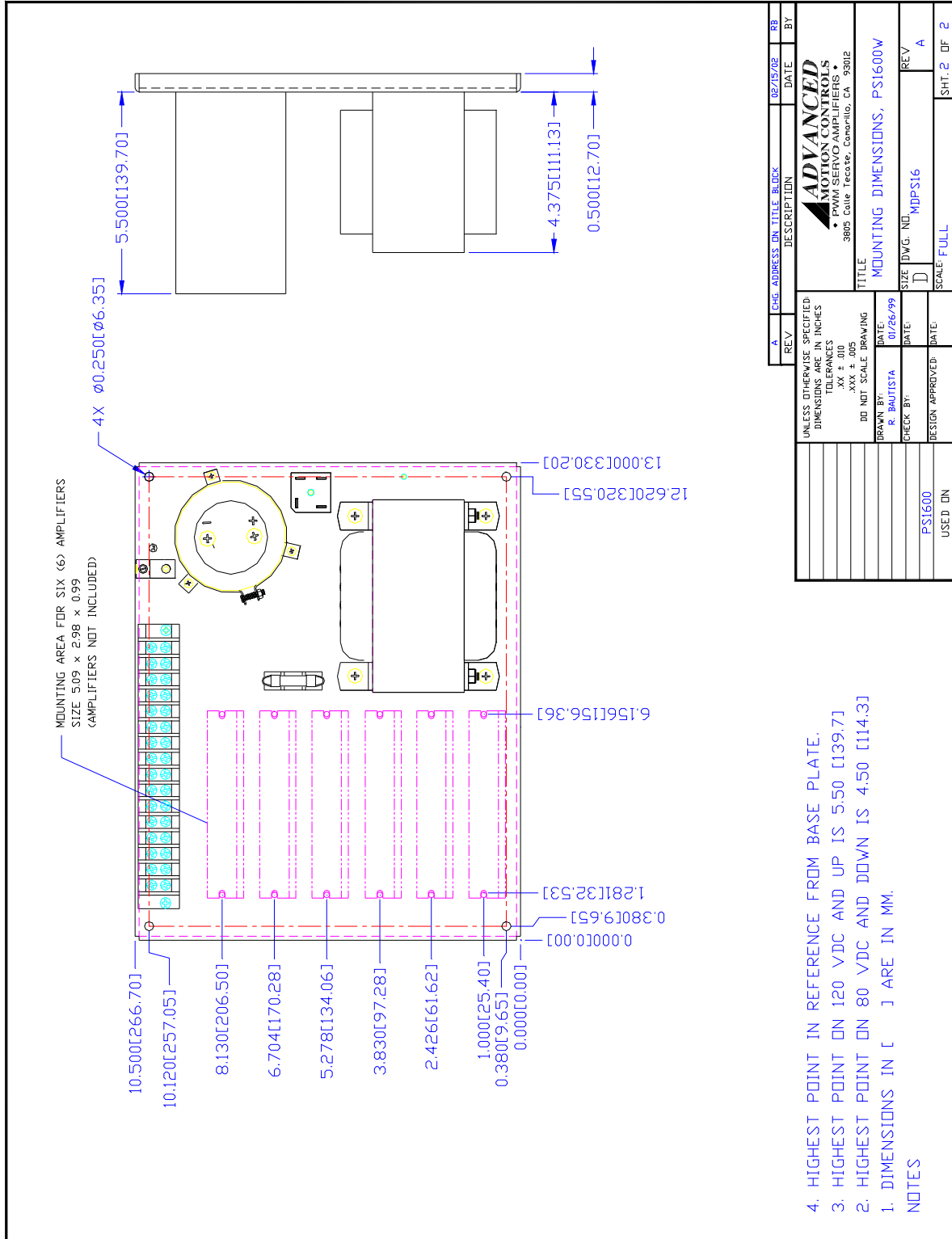


*Contact factory prior to rewiring transformer primary or secondary



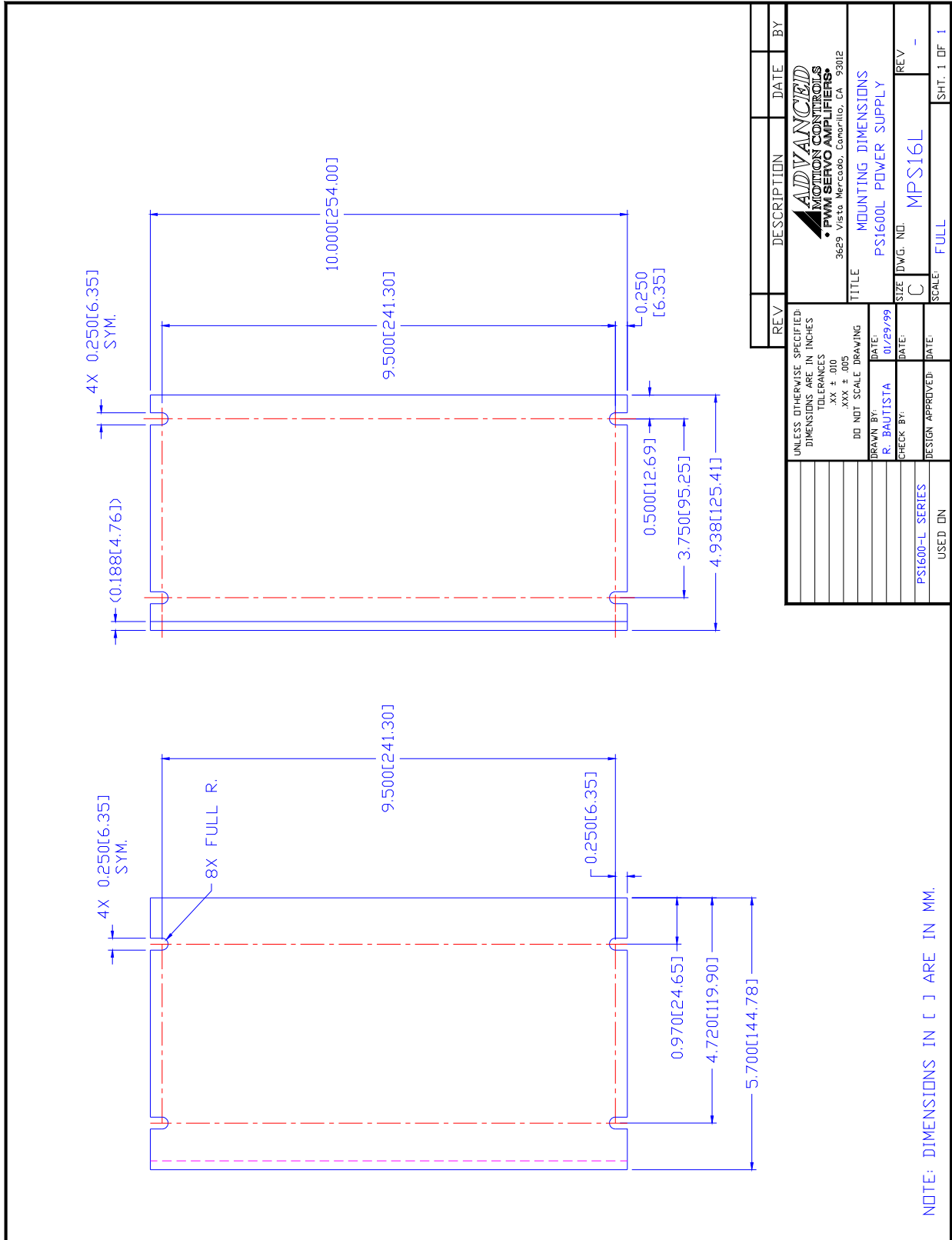
MOUNTING DIMENSIONS

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



REV	DESCRIPTION	DATE	BY
	ADVANCED MOTION CONTROLS • PWM SERVO AMPLIFIERS 3629 Vista Mercedo, Camarillo, CA 93012		
	TITLE PS1600L POWER SUPPLY		
	SIZE C	DWG. NO. MPS16L	REV -
	SCALE FULL		SHT. 1 OF 1
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES XXX ± .005			
DO NOT SCALE DRAWING			
DRAWN BY: R. BAUTISTA	DATE: 01/29/99		
CHECK BY:	DATE:		
DESIGN APPROVED:	DATE:		
PS1600-L SERIES USED ON			

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.

