

**Power Supplies**

|                                   | Model Number | DC Output Voltage | Output Current | Output Power | Isolation | Drives Accomodated |
|-----------------------------------|--------------|-------------------|----------------|--------------|-----------|--------------------|
| <b>120 VAC Single Phase Input</b> | PS2X3W24     | 24 VDC            | 12 A           | 300 W        | YES       | 2                  |
|                                   | PS4X3W24     | 24 VDC            | 12 A           | 300 W        | YES       | 4                  |
|                                   | PS2X3W48     | 48 VDC            | 6 A            | 300 W        | YES       | 2                  |
|                                   | PS4X3W48     | 48 VDC            | 6 A            | 300 W        | YES       | 4                  |
|                                   | PS2X3W72     | 72 VDC            | 3 A            | 220 W        | YES       | 2                  |
|                                   | PS2X3W96     | 96 VDC            | 3 A            | 300 W        | YES       | 2                  |
| <b>240 VAC Single Phase Input</b> | PS2X3H24     | 24 VDC            | 12 A           | 300 W        | YES       | 2                  |
|                                   | PS2X3H48     | 48 VDC            | 6 A            | 300 W        | YES       | 2                  |
|                                   | PS4X3H48     | 48 VDC            | 6 A            | 300 W        | YES       | 4                  |
|                                   | PS2X3H72     | 72 VDC            | 3 A            | 220 W        | YES       | 2                  |
|                                   | PS2X3H96     | 96 VDC            | 3 A            | 300 W        | YES       | 2                  |



**PS2X3x24,48,72,96**



**PS4X3x24,48**

**Description**

The PS2X3 and PS4X3 unregulated power supplies have been designed to complement **ADVANCED Motion Controls'** servo drives and to provide the user with a complete solution to single and multi-axis DC drive 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.

**PS2X3** Series power supplies are designed to provide the best cost-per-watt value while mechanically hosting two servo drives. The **PS4X3** power supplies are identical to the PS2X3 power supplies except they have an extended mounting plate to accommodate two additional drives. Both series have multiple primary windings for either 120 VAC (PS2X3W) or 240 VAC (PS2X3H) 50/60 Hz operation. These power supplies feature four identical secondary windings that can be connected in series or in parallel for different output voltages and currents.

**Features**

- ▲ Multiple Primary Windings: Either 120 VAC or 240 VAC, 50/60 Hz Operation
- ▲ 24 VDC Secondary Output Winding Taps
- ▲ Small Size, Low Cost, Ease of Use
- ▲ Isolation Transformer on All PS2X300W and PS4X300W Models
- ▲ Slow Blow Fuse on AC Input

**Approvals and Compliances**

|  |  |
|--|--|
|  | US and Canadian safety compliance with UL 508c, the industrial standard for power conversion electronics. UL registered under file number E140173. Note that machine components compliant with UL are considered UL registered as opposed to UL listed, as would be the case for commercial products.          |
|  | 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.  |

### SPECIFICATIONS

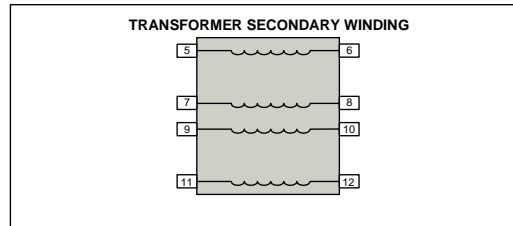
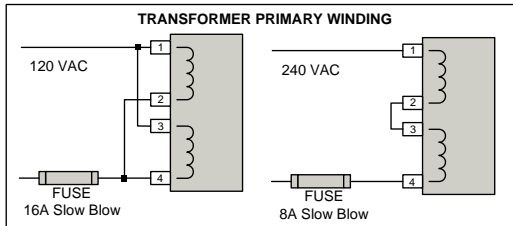
| Power Specifications (120 VAC Single Phase Power Supplies) |       |                     |                     |          |          |
|--|-------|---------------------|---------------------|----------|----------|
| Description  | Units | PS2X3W24 / PS4X3W24 | PS2X3W48 / PS4X3W48 | PS2X3W72 | PS2X3W96 |
| AC Supply Voltage Input                                    | VAC   | 30 - 125            |                     |          |          |
| AC Supply Input Frequency                                  | Hz    | 50-60 Hz            |                     |          |          |
| AC Supply Input Phases                                     | -     | Single Phase        |                     |          |          |
| Output Voltage   | VDC   | 24                  | 48                  | 72       | 96       |
| Current Output   | A     | 12                  | 6                   | 3        | 3        |
| Power Specifications (240 VAC Single Phase Power Supplies) |       |                     |                     |          |          |
| Description  | Units | PS2X3H24            | PS2X3H48 / PS4X3H48 | PS2X3H72 | PS2X3H96 |
| AC Supply Voltage Input                                    | VAC   | 45 - 240            |                     |          |          |
| AC Supply Input Frequency                                  | Hz    | 50-60 Hz            |                     |          |          |
| AC Supply Input Phases                                     | -     | Single Phase        |                     |          |          |
| Output Voltage   | VDC   | 24                  | 48                  | 72       | 96       |
| Current Output   | A     | 12                  | 6                   | 3        | 3        |

**Notes**

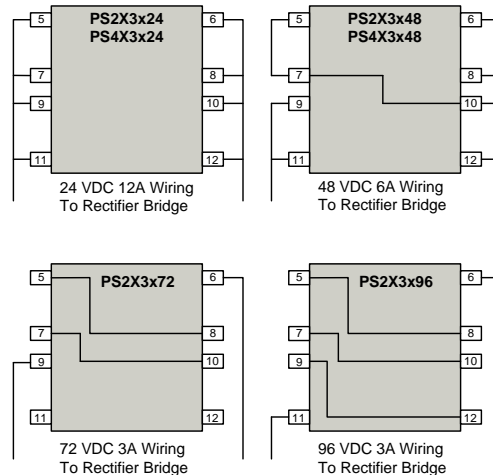
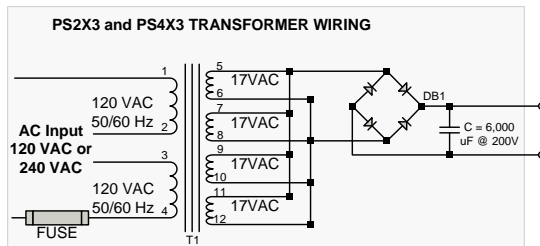
- Power ratings are identical for PS2X300W and PS4X300W series.

| Mechanical Specifications |          |   |       |  |       |
|---------------------------|----------|---|-------|--|-------|
| Description               | Units    | PS2X3                                     | PS2X3 | PS4X3                                      | PS4X3 |
| AC Input Connector        | -        | AC Cord (not included with power supply)  |       |  |       |
| DC Output Connector       | -        | Flying Leads                              |       |  |       |
| Size (H x W x D)          | mm (in)  | 228.6 x 146.1 x 88.1 (9.00 x 5.75 x 3.47) |       | 286.4 x 146.1 x 88.1 (11.28 x 5.75 x 3.47) |       |
| Weight                    | kg (lbs) | 4.1 (9)                                   |       | 4.4 (9.6)                                  |       |

### BLOCK DIAGRAMS

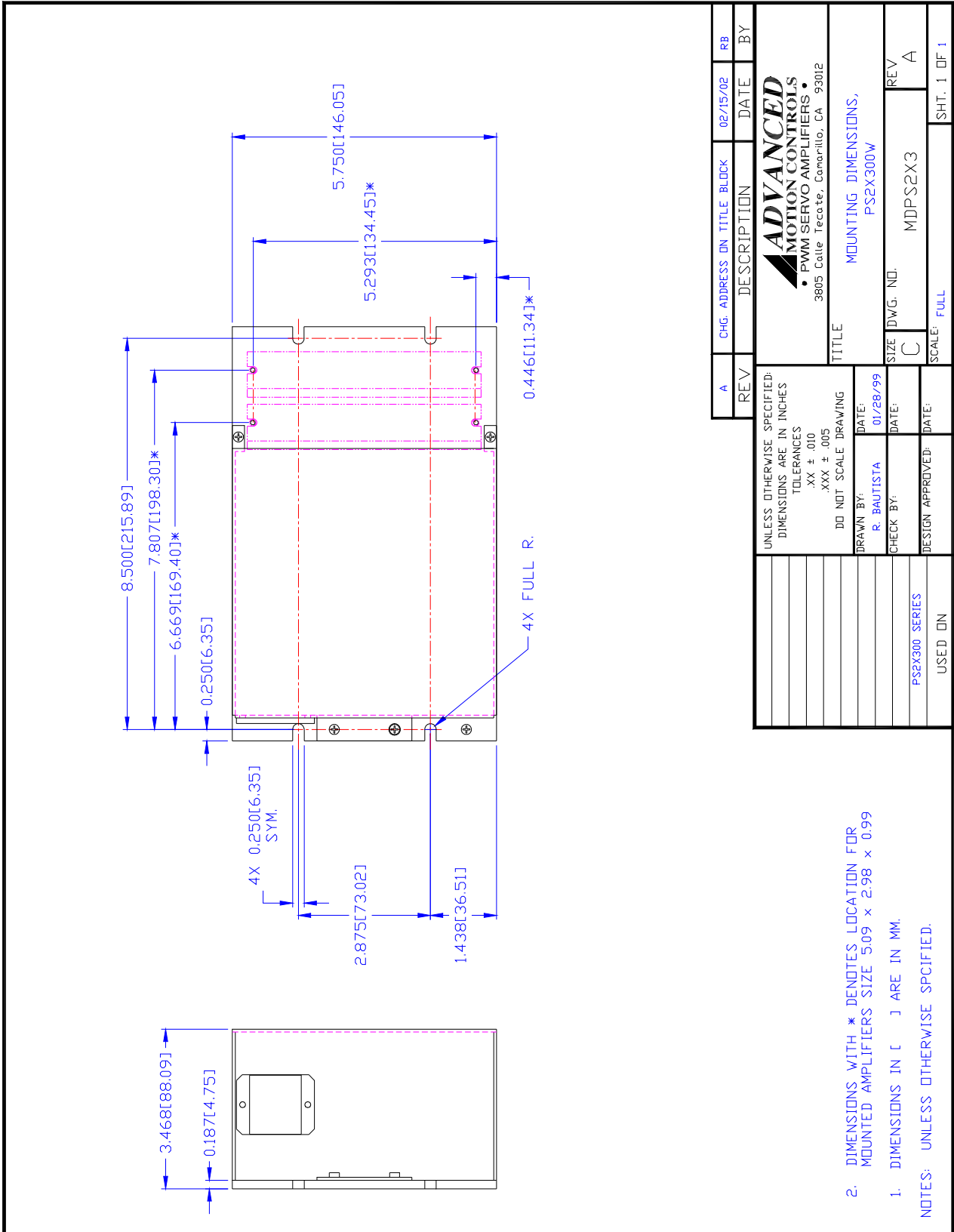


\*Contact factory prior to rewiring transformer primary or secondary

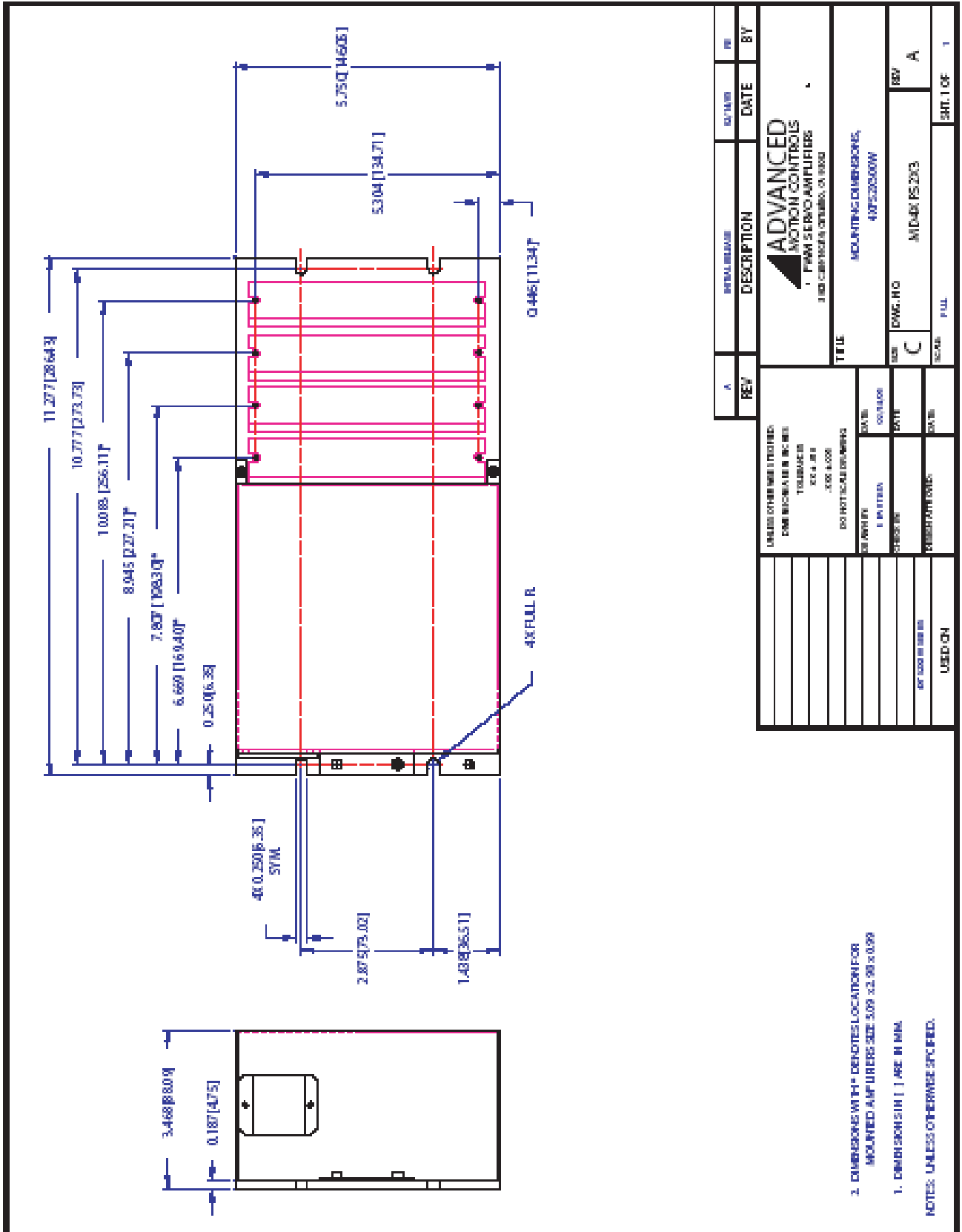


**MOUNTING DIMENSIONS**

**Mounting Dimensions for PS2X3 Models**



Mounting Dimensions for PS4X3 Models



| REV | DESCRIPTION     | DATE | BY |
|-----|-----------------|------|----|
| A   | INITIAL RELEASE |      |    |

|  |                       |
|--|-----------------------|
| <b>ADVANCED</b><br>MOTION CONTROLS<br>FPM SERVO AMPLIFIERS<br>3000 CAMPBELL DRIVE, CHICAGO, IL 60630 |                       |
| TITLE: MOUNTING DIMENSIONS, 40752000W  |                       |
| REV: C   | DWG. NO: M-DWG PS-203 |
| SCALE: FULL  | SHEET 1 OF 1          |

|  |                            |
|--|----------------------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES<br>FRACTIONS<br>DECIMALS<br>ANGLES | DO NOT SCALE DIMENSIONS    |
| 3X FINISH  | 3X HOLE                    |
| 2X FINISH  | 2X HOLE                    |
| 1X FINISH  | 1X HOLE                    |
| AS SHOWN   | AS SHOWN                   |
| UNLESS OTHERWISE SPECIFIED   | UNLESS OTHERWISE SPECIFIED |

2. DIMENSIONS WITH \* DENOTES LOCATION FOR MOUNTED AMP URBES SIZE 509 x 2.98 x 0.99

1. DIMENSIONS IN [ ] ARE IN MM.

NOTES: UNLESS OTHERWISE SPECIFIED.

## 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          | ▲ Tailored Project File           |
| ▲ Private Label Software       | ▲ Silkscreen Branding             |
| ▲ OEM Specified Connectors     | ▲ Optimized Base Plate            |
| ▲ No Outer Case                | ▲ Increased Current Limits        |
| ▲ Increased Current Resolution | ▲ Increased Voltage Range         |
| ▲ Increased Temperature Range  | ▲ Conformal Coating               |
| ▲ Custom Control Interface     | ▲ Multi-Axis Configurations       |
| ▲ Integrated System I/O        | ▲ 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](http://www.a-m-c.com) to see which accessories will assist with your application design and implementation.

