

PWR36 Hardware Manual

Document Revision B9

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Table of Contents

PWR36™

1.1	Features	3
1.2	Specifications	3

Installation

2.1	Installation & Wiring	6
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Appendix A.	PWR36 Connector Pin Descriptions	7
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3 PWR36

3.1 Features

The PWR36 is a complete power source for a single or multi-axis stepper-motor driver. It is designed to provide ample power and excellent regulation. Built-in MOV transient suppression protects the electronics from damage caused by surges and spikes on the AC line. The PWR36 can be used in conjunction with the OPTIDRIVER PLUS[™] and OPTISTEP PLUS[™] products to provide a complete stepper motor control solution.

The features of PWR36 include:

- Single board provides both high-voltage motor power, +5V logic power and power ok signal.
- User selectable AC input voltages (115 VAC or 230 VAC)
- Separately fused DC outputs for easy fault isolation.
- Two LED's indicate status of output voltages.
- Small footprint requires minimal mounting space.
- Includes transformer, cables and PCB mounting hardware.

3.2 Specifications

Electrical Specifications

Voltage inputs 230 or 115 volts, selectable

Current..... 2.5 amps at 115 volts

Voltage outputs 36 volts unregulated at 10 Amps
5 volts regulated at 3 Amps

Physical dimensions

(power board) 4.2" w X 4.56" d X 2.7" h

(transformer) 4.5" w X 3.3" d X 3.8" h

Working temperature range (32°F ~ 104° F (0° C ~ 40° C)

Mechanical Specifications

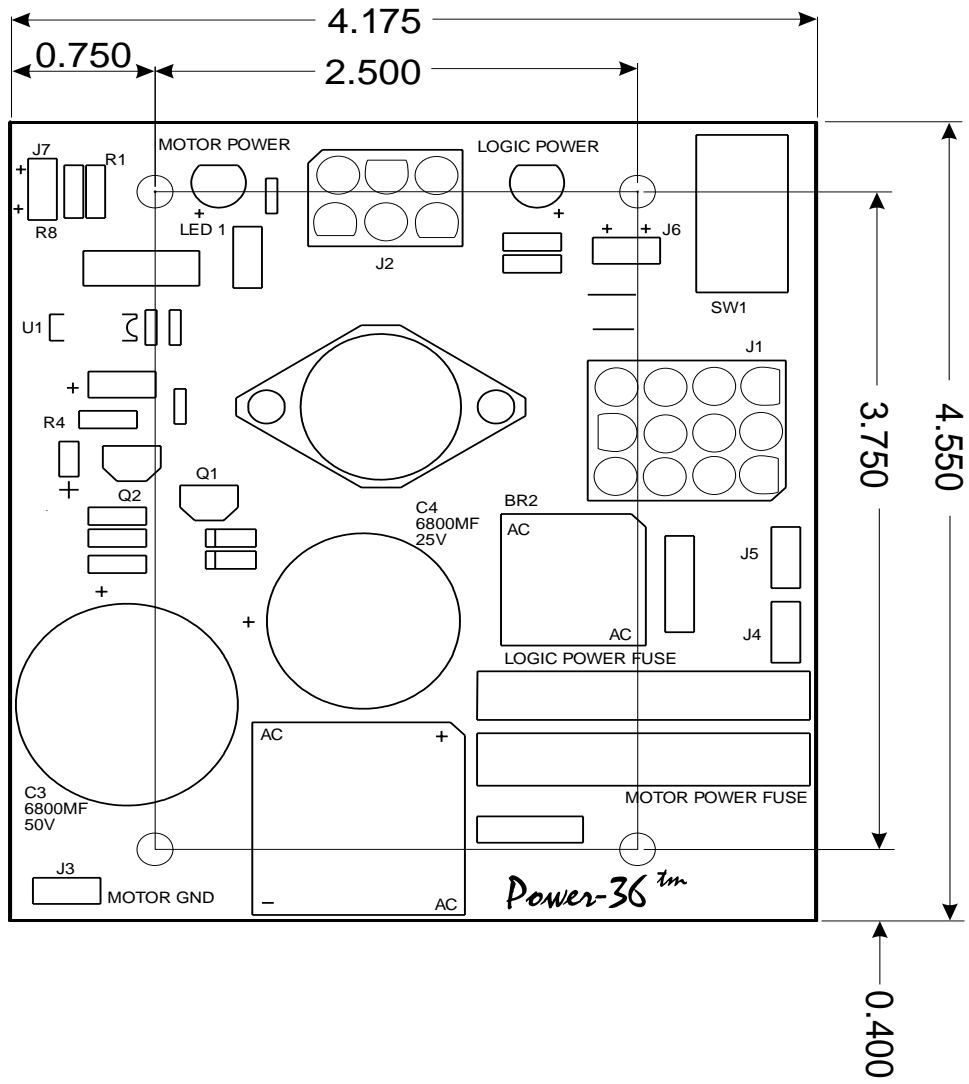


Figure - 1 PWR36 Mechanical Layout Diagram

Mechanical Specifications

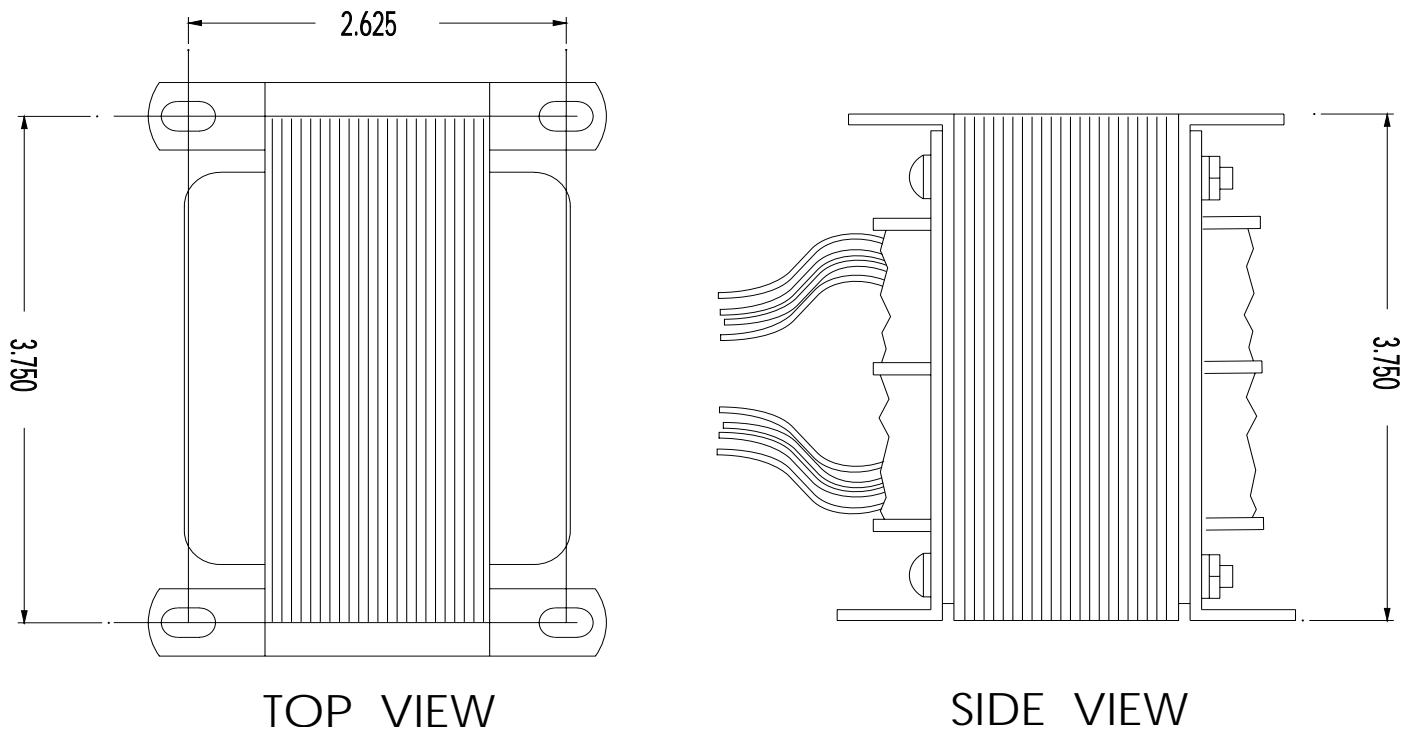


Figure - 2 Power Transformer Mechanical Layout Diagram

2 Installation

2.1 Installation & Wiring

Follow these instructions for proper installation:

- 1) Mount the transformer and the power supply board in a suitable metal enclosure using the supplied plastic standoffs for the board to prevent shorting.
- 2) Plug the connector from the transformer into connector J1 on the power board.
- 3) Connect power out from J2 to driver(s) (see pin descriptions - page 7).
- 4) Plug the power cord into a 120 Vac outlet.

APPENDIX A

PWR 36, Revision F & G.

CONNECTOR PIN DESCRIPTIONS

PIN# J1 AC , T1 PRIMARIES & T1 SECONDARIES

1	AC IN
2	AC IN
3	PRIMARY #1
4	PRIMARY #1 RETURN
5	NOT USED
6	PRIMARY #2 RETURN
7	PRIMARY #2
8	NOT USED
9	SECONDARY #1
10	SECONDARY #1 RETURN
11	SECONDARY #2
12	SECONDARY #2 RETURN

PIN# J2 POWER OUT

1	+36 GROUND REFERENCE
2	+5 GROUND REFERENCE
3	POWER OK SIGNAL
4	+5 VOLTS DC
5	NOT USED
6	+36 VOLTDS DC

J3

MOTOR SUPPLY GROUND

J4

LOGIC SUPPLY GROUND

J5 AUXILLARY DC SUPPLY

+9 VOLTS DC UNREGULATED