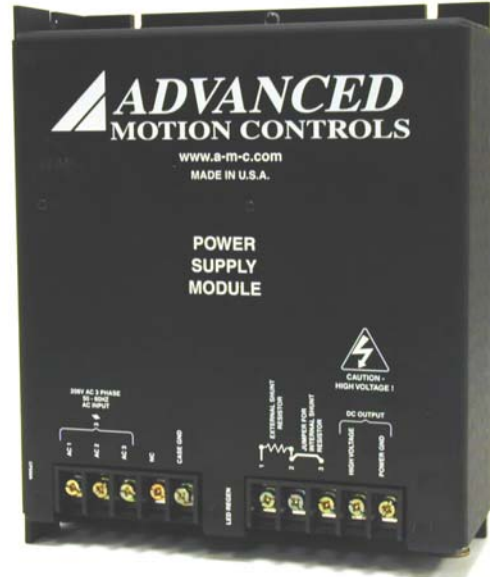


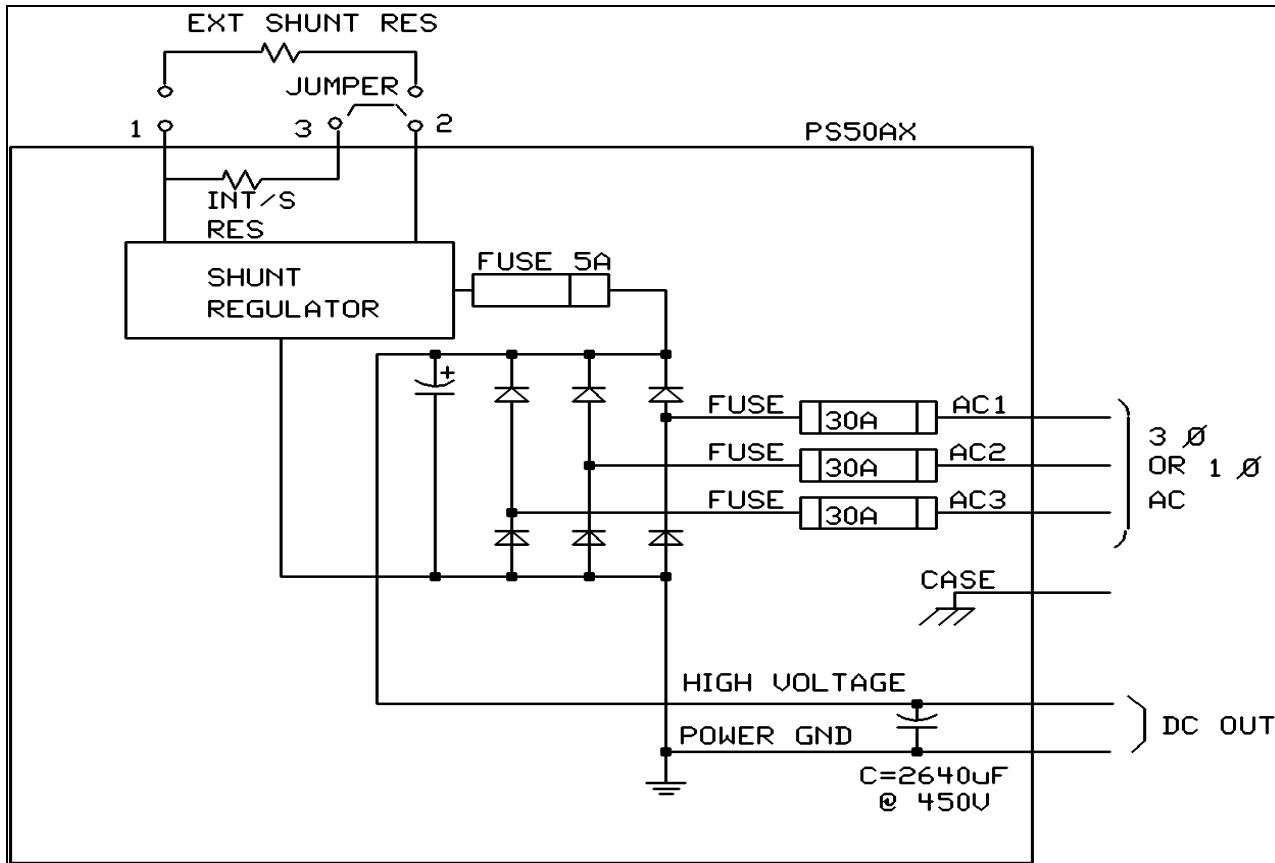
PS50A SERIES POWER SUPPLY
Model: PS50A, PS50A-LV

FEATURES:

- Surface-mount technology
- Accepts Three Phase or Single Phase AC Supply
- Built-In Shunt Regulator with Bicolor Led Indicator
- External Shunt Resistor Provisions
- Compact Design
- Agency Approvals Pending



BLOCK DIAGRAM:



ADVANCED MOTION CONTROLS
 3805 Calle Tecate, Camarillo, CA 93012 Tel: (805) 389-1935, Fax: (805) 389-1165

Power Supplies, Filter Cards & Shunt Regulators

DESCRIPTION: The PS50A unregulated power supply is designed to complement *ADVANCED* MOTION CONTROLS' high voltage servo amplifiers. These unregulated DC power supplies are an acceptable solution for multi-axis applications since *ADVANCED* MOTION CONTROLS servo amplifiers compensate for power supply output variations and AC ripple components.

POWER SPECIFICATIONS	MODEL	
	PS50A	PS50A-LV
AC SUPPLY VOLTAGE	45-240 VAC, 3 phase, 50-60 Hz	30-125 VAC, 1 or 3 phase, 50-60 Hz
CONTINUOUS DC CURRENT AVAILABLE FROM INTERNAL SUPPLY	50 A for three phase AC input 25 A for single phase AC input	
PEAK DC CURRENT AVAILABLE FROM INTERNAL SUPPLY (MAXIMUM 2 SECONDS)	100 A for three phase AC input 50 A for single phase AC input	
INTERNAL SHUNT RESISTOR	20 Ω @ 180 W	
SHUNT SWITCH-ON VOLTAGE	390 V	190 V
BUS CAPACITANCE	2640 μ F	8000 μ F
SHUNT FUSE (d=13/32 inches, L=1.50 inches)	5 A Time Delay rated @ 500 VAC	
AC LINE FUSES (d=13/32 inches, L=1.50 inches)	30 A Time Delay rated @ 250 VAC	

MECHANICAL SPECIFICATIONS	
AC CONNECTOR: C1	Screw terminals
DC OUT AND EXTERNAL SHUNT CONNECTOR: C2	Screw terminals
SIZE	9.25x7.71x3.14 inches
	234.9x164x79.7 mm
WEIGHT	5.74 lb.
	2.61 kg.

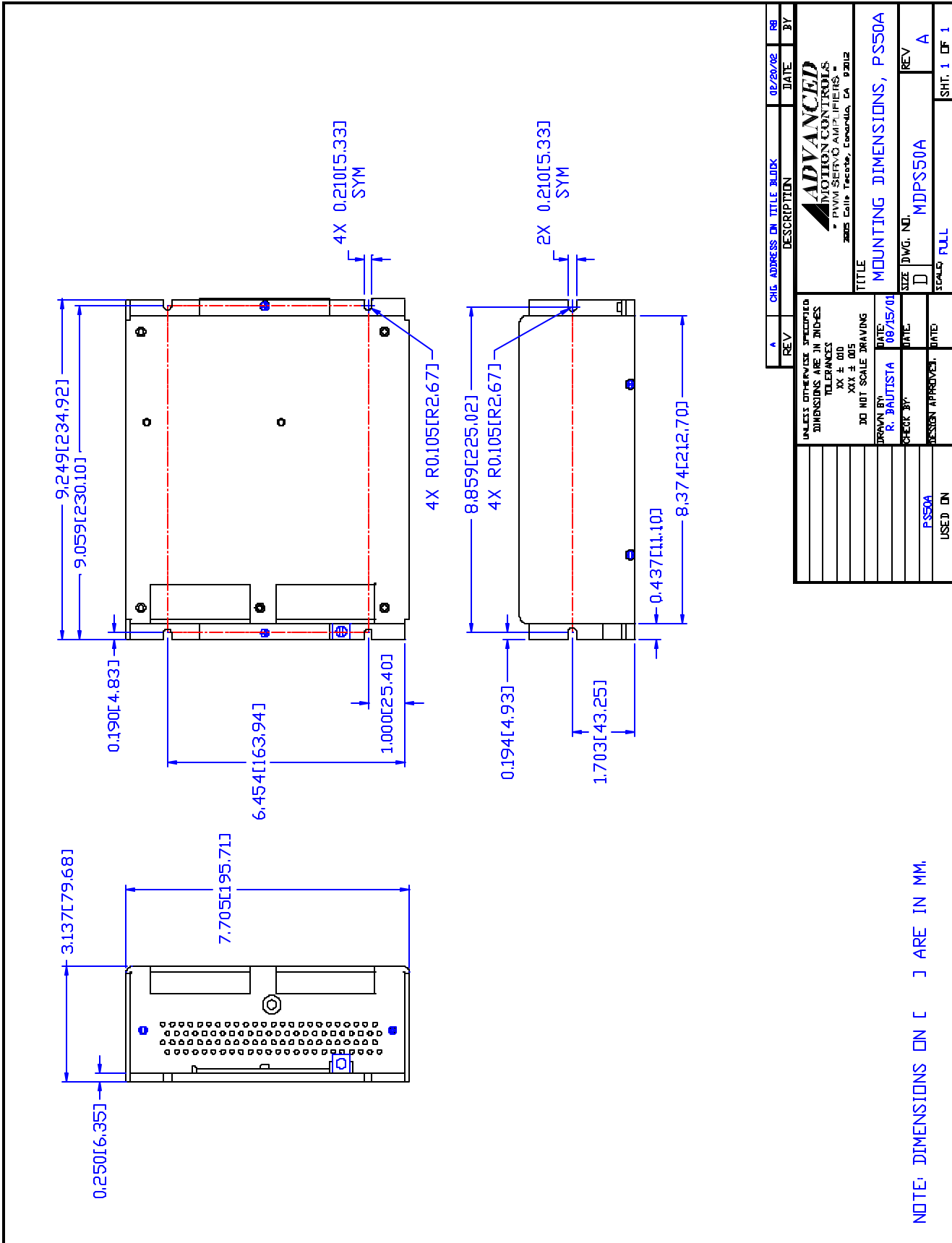
These power supplies contain a rectifier bridge and filter capacitors to generate the DC bus internally from the AC input power. The DC bus voltage is 1.4 times AC voltage (RMS), e.g. 310 VDC from 220 VAC. During braking much of the stored mechanical energy is fed back into the power supply and charges the bus capacitor to a higher voltage. If this voltage reaches the amplifier's over-voltage shutdown point, output current and braking will cease. To ensure smooth braking of large inertial loads, a built-in "shunt regulator" is provided in the PS50A. The shunt regulator will switch on the internal power resistor when the bus voltage reaches 390 VDC. This allows the bus capacitor to discharge and thus lower the bus voltage. During regeneration, the regeneration led will blink (solid green is non-regeneration mode). An external shunt resistor can be added parallel to the internal resistor (between 1 and 2). Removing the jumper between 2 and 3 will disable the internal shunt resistor.

ORDERING INFORMATION:

Model: PS50AX

X indicates current revision letter.

MOUNTING DIMENSIONS: See page F-34.



NOTE: DIMENSIONS ON [] ARE IN MM.

REV	DESCRIPTION	DATE	BY
A	CHG. ADDRESS DN. TITLE: BLOCK	02/29/02	RR

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES XX ± .010 XXX ± .005 DO NOT SCALE DRAWING	
DESIGNED BY	R. BRUTISTA
DATE	08/15/01
CHECK BY	
DATE	
DESIGN APPROVED	
DATE	
USED ON	PSS0A

ADVANCED MOTION CONTROLS - PVM SERV AMPLIFIERS - 2825 Calle Teodoro, Covington, CA 92612	
TITLE: MOUNTING DIMENSIONS, PSS0A	
SIZE	D
DWG. NO.	MDPSS0A
SCALE	FULL
REV	A
SHT. 1 OF 1	