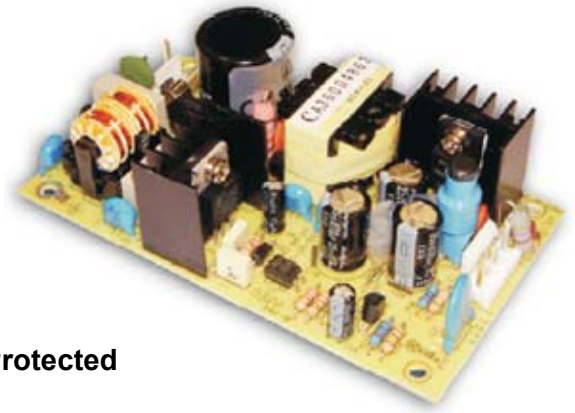
Wall Industries, Inc.

PSPS25 Series
Single Output
Up to 25 Watts
AC/DC Power Supply

FEATURES

- **Low Cost**
- **High Reliability**
- **2 Year Warranty**
- **100% Full Load Burn-In Test**
- **Low Leakage Current < 0.5mA**
- **Universal AC Input/ Full Range**
- **Cooling by Free Air Convection**
- **Fixed Switching Frequency at 100KHz**
- **Short Circuit, Overload, Over Voltage, and Over Temperature Protected**



SPECIFICATIONS: ***PSPS25 Series***	
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.	
INPUT SPECIFICATIONS	
Input Voltage	85 – 264VAC (120 – 370VDC)
Input Frequency	47 ~ 63Hz
AC Current (typical)	0.6A @ 115VAC 0.4A @ 230VAC
Inrush Current (typical)	36A cold start
Leakage Current	< 0.5mA @ 240VAC
OUTPUT SPECIFICATIONS	
Output Voltage	See Table
Output Voltage Tolerance (See Note 3)	PSPS-25-3.3: ±3.0% ±2.0% for all other models
Output Power	See Table
Line Regulation	3.3, 5, 7.5V outputs: ±0.5%; 12, 13.5, 15V outputs: ±0.3%; 24, 27, 48V outputs: ±0.2
Load Regulation	3.3V output: ±2.5%; 5 & 7.5V outputs: ±2.0%; 12, 13.5, 15V outputs: ±1.0%; 24, 27, 48V outputs: ±0.5%
Output Current	See Table
Ripple & Noise (See Note 2)	See Table
Setup, Rise Time	200ms, 20ms @ 230VAC 200ms, 30ms @ 115VAC and full load
Hold Up Time	100ms @ 230VAC 20ms @ 115VAC and full load
Temperature Coefficient	±0.03%/°C (0~50°C)
PROTECTION	
Over Voltage Protection	See Table Protection Type: Shutoff output voltage, clamping by Zener diode.
Overload Protection	Above 105% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
Over Temperature	Tj 135°C typically (U1) detect on main control IC. Protection Type: Shutdown output voltage, recovers automatically after temperature goes down.
GENERAL SPECIFICATIONS	
Switching Frequency (fixed)	100KHz
Efficiency (typical)	See Table
Withstand Voltage	3KVAC (input to output), 1.5KVAC (input to FG), 0.5KVAC (output to FG).
Isolation Resistance	100MΩ / 500VDC (input to output, input to FG, output to FG)
ENVIRONMENTAL SPECIFICATIONS	
Working Temperature	-10°C to +60°C (refer to output load derating curve)
Storage Temperature	-20°C to +85°C
Working Humidity (non-condensing)	20% ~ 90% RH non-condensing
Storage Humidity (non-condensing)	10% ~ 95% RH
Vibration	10~500Hz, 2G 10min./1cycle, Period for 60 minutes each along X, Y, and Z axes.
MTBF	576,400 hours min. MIL-HDBK-217 (25°C)
PHYSICAL SPECIFICATIONS	
Weight	18 oz.
Dimensions	107(L) x 61(W) x 28(H) mm
Warranty	2 years
SAFETY & EMC (See Note 4)	
Safety Standards	UL60950-1, TUV EN60950-1 Approved
EMI Conduction and Radiation	Compliance to EN55022 (CISPR22) Class B
Harmonic Current	Compliance to EN61000-3-2,3
EMS Immunity	Compliance to EN61000-4-2,3,4,5, light industry level, criteria A.

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603-778-2300 www.wallindustries.com Fax 603-778-9797

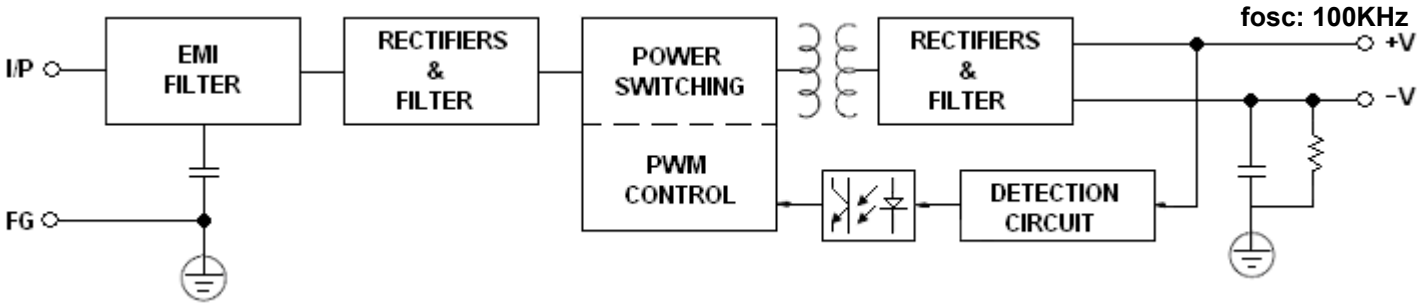
OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Input Voltage	Output Voltage	Output Current Range	Ripple & Noise	Output Power	Over Voltage Protection	Efficiency
PSPS-25-3.3	85 ~ 264 VAC (120 ~ 370 VDC)	3.3 VDC	0 ~ 5A	80mVp-p	16.5W	3.8 ~ 4.46V	66%
PSPS-25-5		5 VDC	0 ~ 5A	80mVp-p	25W	5.75 ~ 6.75V	74%
PSPS-25-7.5		7.5 VDC	0 ~ 3.3A	80mVp-p	24.8W	8.6 ~ 10.1V	76%
PSPS-25-12		12 VDC	0 ~ 2.1A	100mVp-p	25.2W	13.8 ~ 16.2V	78%
PSPS-25-13.5		13.5 VDC	0 ~ 1.9A	100mVp-p	25.7W	15.5 ~ 18.2V	78%
PSPS-25-15		15 VDC	0 ~ 1.7A	100mVp-p	25.5W	17.3 ~ 20.3V	78%
PSPS-25-24		24 VDC	0 ~ 1A	240mVp-p	24W	27.6 ~ 32.4V	79%
PSPS-25-27		27 VDC	0 ~ 0.9A	240mVp-p	24.3W	31 ~ 36.5V	79%
PSPS-25-48		48 VDC	0 ~ 0.5A	350mVp-p	24W	55.2 ~ 64.8V	79%

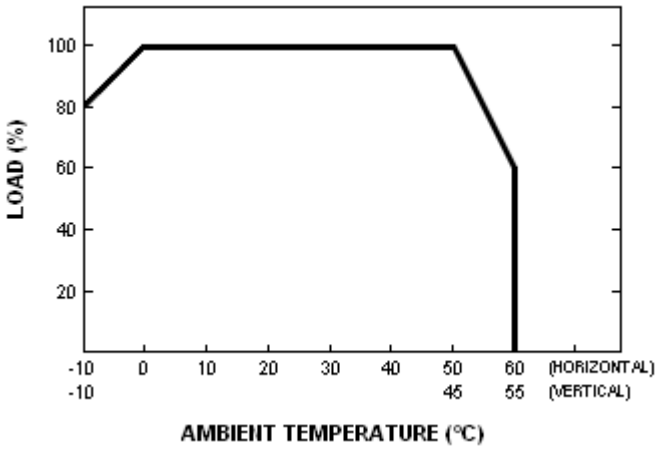
NOTES

1. All parameters not specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz using a 12" twisted pair-wire terminated with 0.1uF & 47uF capacitors in parallel.
3. Tolerance: includes set up tolerance, line regulation, and load regulation.
4. The power supply is considered a component, which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

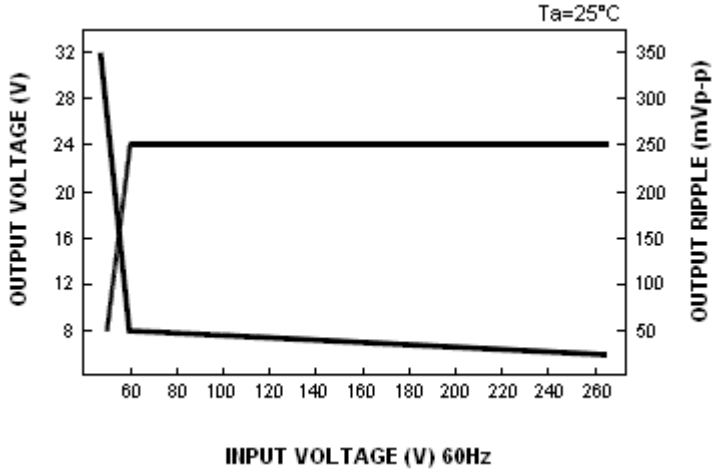
BLOCK DIAGRAM



DERATING CURVE

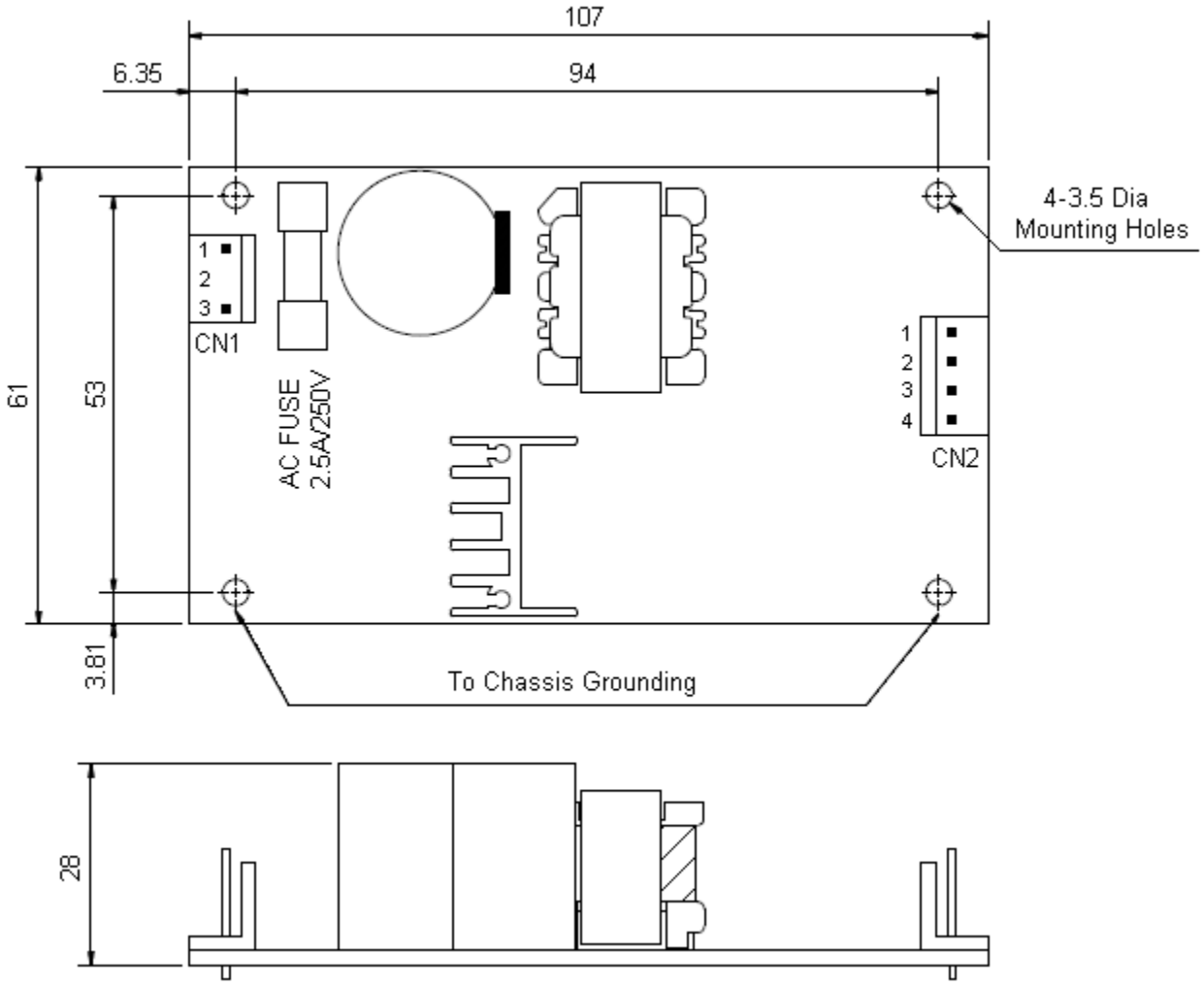


STATIC CHARACTERISTICS (24V)



MECHANICAL DRAWING

Unit: mm



AC INPUT CONNECTOR (CN1)	
Pin. No	**Assignment**
1	AC/L
2	No Pin
3	AC/N

DC OUTPUT CONNECTOR (CN2)	
Pin No.	**Assignment**
1,2	+V
3,4	-V