Wall Industries, Inc.

PSS25 Series
25 Watt
Single Output
AC/DC Power Supply

FEATURES

- 2 Year Warranty
- Approvals: UL/TUV/CE
- Low Cost, High Reliability
- Fixed Switching Frequency
- Compact Size, Light Weight
- 100% Full Load Burn-In Test
- Cooling by Free Air Convection
- Universal AC Input / Full Range
- Built-In EMI Filter, Low Ripple and Noise
- High Efficiency, Low Working Temperature
- Short Circuit, Overload, and Over Voltage Protected



SPECIFICATIONS: *PSS25 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 Range	85 ~ 264VAC or 120 ~ 370VDC
Input Frequency	47 to 63Hz
AC Current (typical)	0.6A @ 115VAC 0.35A @ 230VAC
Inrush Current (typical)	Cold Start 13A @ 115VAC 25A @ 230VAC
Leakage Current	< 0.75mA @ 240VAC
OUTPUT SPECIFICATIONS	
Output Voltage	See Table
Output Power	See Table
Voltage Tolerance (See Note 3)	PSS-25-5: ±2.0%; Other Models: ±1.0%
Voltage Adjustment Range	See Table
Line Regulation	±0.5%
Load Regulation	PSS-25-5: ±1.0%; Other Models: ±0.5%
Output Current	See Table
Ripple & Noise (max) (See Note 2)	PSS-25-5: 50mVp-p; Other Models: 100mVp-p
Setup, Rise Time	300ms, 50ms @ 230VAC 800ms, 50ms @ 115VAC and full load
Hold Up Time (typical)	90ms @ 230VAC 12ms @115VAC and full load
Temperature Coefficient	±0.03%/°C (0 ~ 50°C)
PROTECTION	
Over Voltage Protection	115% to 135% (See Table) Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
Overload Protection	105 ~ 150% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
GENERAL SPECIFICATIONS	
Switching Frequency	56KHz
Efficiency	See Table
Withstand Voltage	3000VAC (Input to Output), 1500VAC (Input to FG), 500VAC (Output to FG)
Isolation Resistance	100MΩ/500DC (Input to Output, Input to FG, and 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	20 ~ 90% RH non-condensing
Storage Humidity	10 ~ 95% RH
Cooling	Free air convection
Vibration	10 ~ 500Hz, 2G 10min./1 cycle, 60min each along X, Y, Z axes.
MTBF	> 330,800 hours min. @ 25°C (MIL-HDBK-217F)
PHYSICAL SPECIFICATIONS	
Weight	370 grams
Dimensions	98.5(L) x 97(W) x 36(H) mm
SAFETY & EMC	
Safety Standards	UL1012, TUV EN60950-1 Approved
EMI Conduction & 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; ENV50204, EN55024, Light industry level, criteria A

Wall Industries, Inc. 5 Watson Brook Road Exeter, NH 03833
603-778-2300 www.wallindustries.com Fax 603-778-9797

OUTPUT VOLTAGE / CURRENT RATING CHART

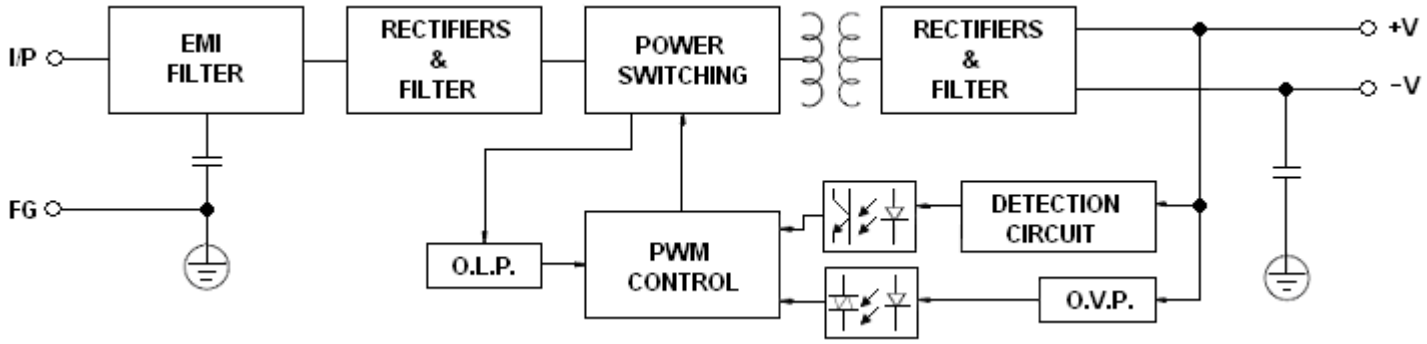
Model Number	Input Voltage	Output Voltage	Voltage Adjust. Range	Output Current	Output Power	Efficiency (115 VAC)	Over Voltage Protection
PSS-25-5	85 ~ 264VAC (120 ~ 370VDC)	5 VDC	4.75 ~ 5.5V	5A	25W	72%	5.75 ~ 6.75V
PSS-25-12		12 VDC	10.8 ~ 13.2V	2.1A	25.2W	76%	13.8 ~ 16.2V
PSS-25-15		15 VDC	13.5 ~ 16.5V	1.7A	25.5W	77%	17.25 ~ 20.25V
PSS-25-24		24 VDC	21.6 ~ 26.4V	1.1A	26.4W	80%	27.6 ~ 32.4V

NOTES

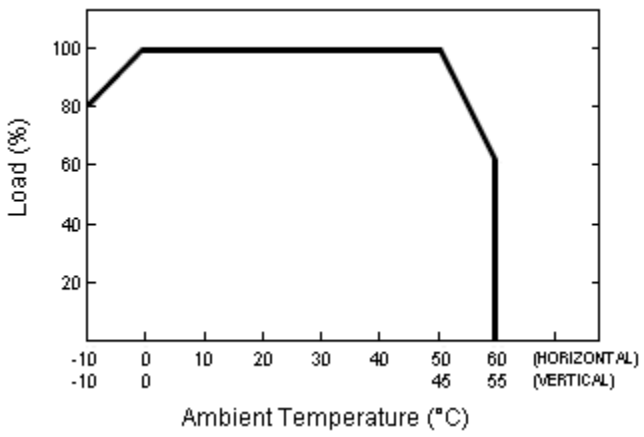
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF& 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation, and load regulation.
4. Line Regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 0% to 100% rated load.
6. 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

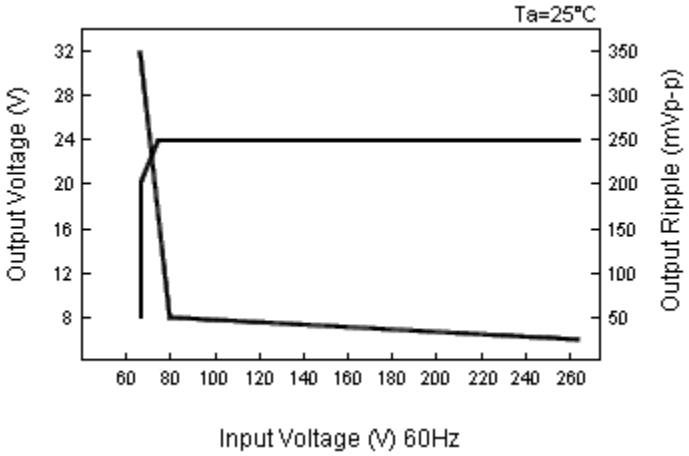
fosc: 56KHz



DERATING CURVE



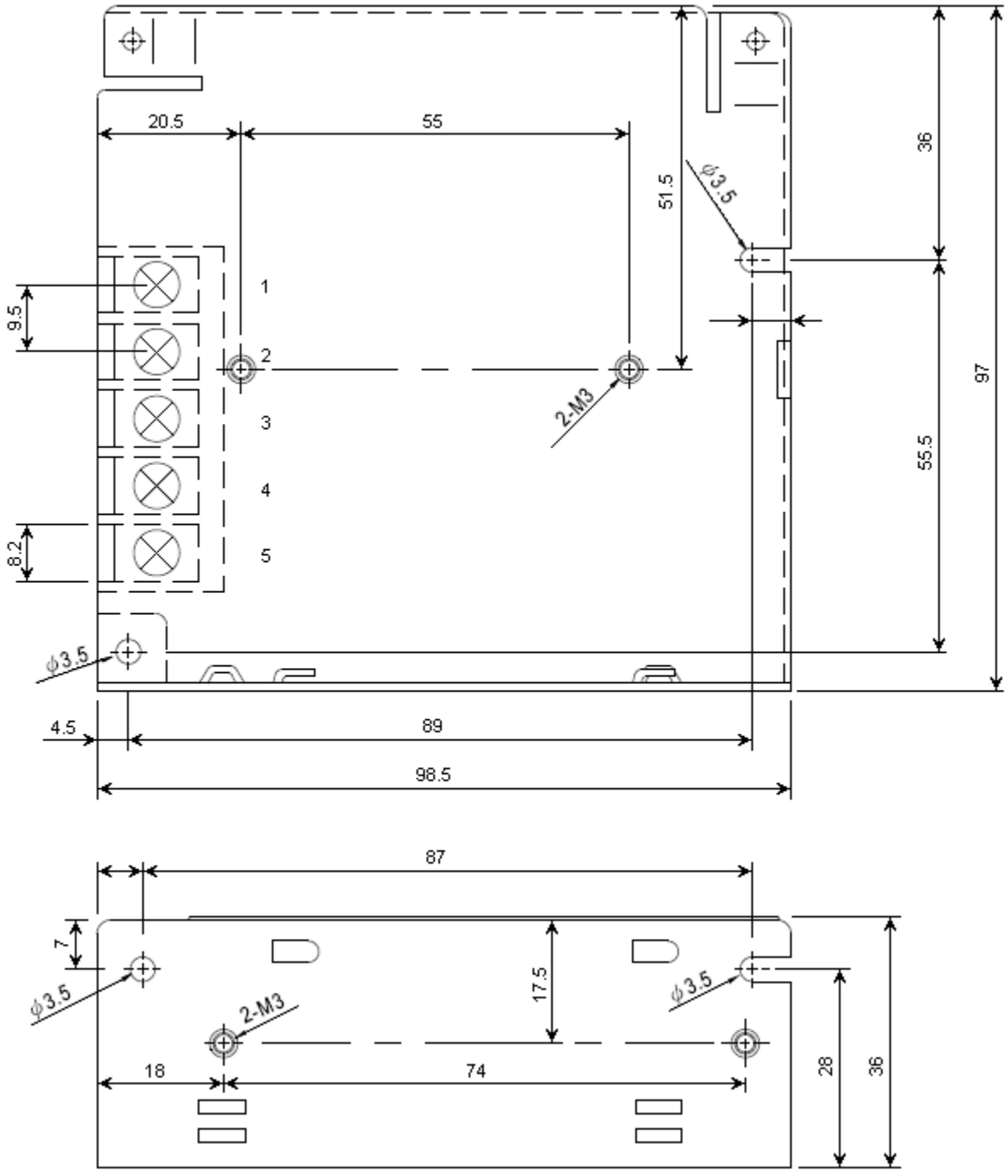
STATIC CHARACTERISTICS (24V)



Wall Industries, Inc. 5 Watson Brook Road Exeter, NH 03833
603-778-2300 www.wallindustries.com Fax 603-778-9797

MECHANICAL DRAWING

Unit: mm



Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC OUTPUT (-V)	3	FG
2	DC OUTPUT (+V)	4,5	AC Input