

FEATURES

- 2 Year Warranty
- Approvals: UL/TUV/CE
- Low Cost, High Reliability
- Fixed Switching Frequency
- Compact Size, Light Weight
- 100% Full Load Burn-In Tested
- 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

₀¶L₀ ♠ ∰ CBC€

SPECIFICATIONS: PSS40 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)	1.2A @ 115VAC 0.6A @ 230VAC				
Inrush Current (typical)	Cold Start 25A @ 115VAC 50A @ 230VAC				
Leakage Current	< 1mA @ 240VAC				
OUTPUT SPECIFICATIONS					
Output Voltage	See Table				
Output Power	See Table				
Voltage Tolerance (See Note 3)	PSS-40-5: ±2.0%; Other Models: ±1.0%				
Voltage Adjustment Range	See Table				
Line Regulation	±0.5%				
Load Regulation	PSS-40-5: ±1.0%; Other Models: ±0.5%				
Output Current	See Table				
Ripple & Noise (max) (See Note 2)	PSS-40-5: 75mVp-p; Other Models: 100mVp-p				
Setup, Rise Time	300ms, 50ms @ 230VAC 800ms, 50ms @ 115VAC and full load				
Hold Up Time (typical)	70ms @ 230VAC 15ms @115VAC and full load				
Temperature Coefficient	±0.03%/°C (0 ~ 50°C)				
PROTECTION					
Over Voltage Protection	115% to 135% (See Table)				
Over voltage Protection	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	75KHz				
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	314,100 hours min. @ 25°C (MIL-HDBK-217F)				
PHYSICAL SPECIFICATIONS					
Weight	450 grams				
Dimensions	129(L) x 98(W) x 38(H) mm				
SAFETY & EMC					
Safety Standards	UL1012, UL60950-1, 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				



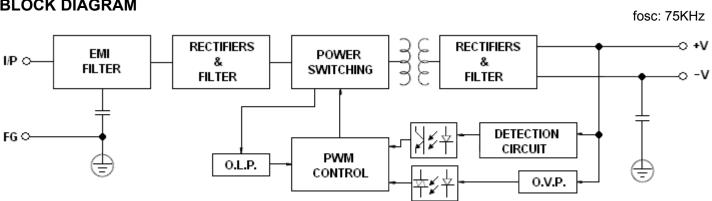


OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Voltage	Output Voltage	Voltage Adjust. Range	Output Current	Output Power	Efficiency (115 VAC)	Over Voltage Protection
PSS-40-5	85 ~ 264VAC (120 ~ 370VDC)	5 VDC	4.75 ~ 5.5V	8A	40W	72%	5.75 ~ 6.75V
PSS-40-12		12 VDC	10.8 ~ 13.2V	3.5A	42W	76%	13.8 ~ 16.2V
PSS-40-15		15 VDC	13.5 ~ 16.5V	2.8A	42W	76%	17.25 ~ 20.25V
PSS-40-24		24 VDC	21.6 ~ 26.4V	1.8A	43W	78%	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. Tolerances include 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.



DERATING CURVE STATIC CHARACTERISTICS (24V) Ta=25°C 32 350 100 Output Ripple (mVp-p) 28 300 Output Voltage (V) 80 24 250 Load (%) 20 200 60 16 150 40 12 100 20 8 50 (HORIZONTAL) -10 Ö 10 20 30 40 50 60 60 80 100 120 140 160 180 200 220 240 260 -10 ٥ 45 55 (VERTICAL) Ambient Temperature (°C) Input Voltage (V) 60Hz

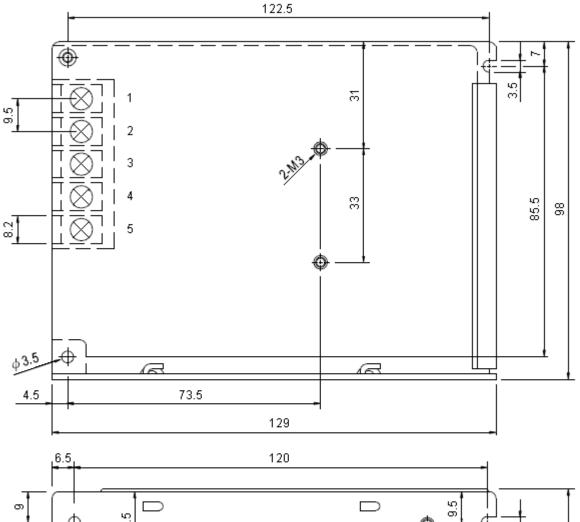
Wall Industries, Inc. 5 Watson Brook Road Exeter, NH 03833 603-778-2300 <u>www.wallindustries.com</u> Fax 603-778-9797

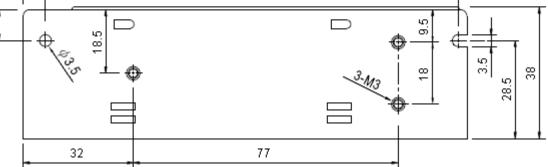
BLOCK DIAGRAM



MECHANICAL DRAWING

Unit: mm





Terminal Pin No. Assignment

•				
Pin No.	Assignment			
1	AC/L			
2	AC/N			
3	FG			
4	DC OUTPUT (-V)			
5	DC OUTPUT (+V)			

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