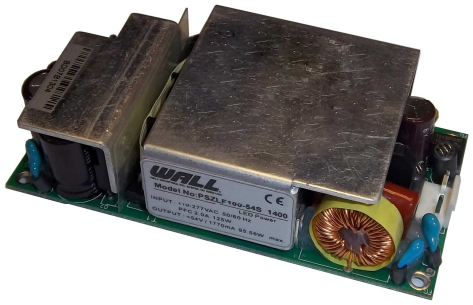


Size:
4.12 x 2.07 x 1.06 inches
104.7 x 52.6 x 27.0 mm

RoHS COMPLIANT

FEATURES

- RoHS Compliant
- 96 Watts Output Power
- Double Layered PCB
- Single Outputs
- PFC Function, PF > 0.9
- Up to 90% High Efficiency
- Free Air Convection Cooling
- -30°C~+70°C Operating Temperature Range
- Open Frame LED Power Supply
- 90-295VAC Input Voltage Range
- Constant Current and Constant Voltage (CC & CV) Modes
- Short Circuit, Over Load, and Over Voltage Protection
- UL8750, IEC/EN 61347-2-13, and IEC/EN 61347-1 Safety Approvals (Pending)

DESCRIPTION

The PSZLF100 series of AC/DC switching power supplies provides 96 Watts of output power in an ultra compact 4.12" x 2.07" x 1.06" open frame package. This series consists of single output models with an input voltage range of 90-295VAC. Some features include up to 90% high efficiency, power factor > 0.9, and short circuit, over load, and over voltage protection. The PSZLF100 series has both constant current (CC) and constant voltage (CV) modes available and is suitable for LED lighting applications. This series is also RoHS compliant and has UL8750, IEC/EN 61347-2-13, and IEC/EN 61347-1 safety approvals (pending)

MODEL SELECTION TABLE

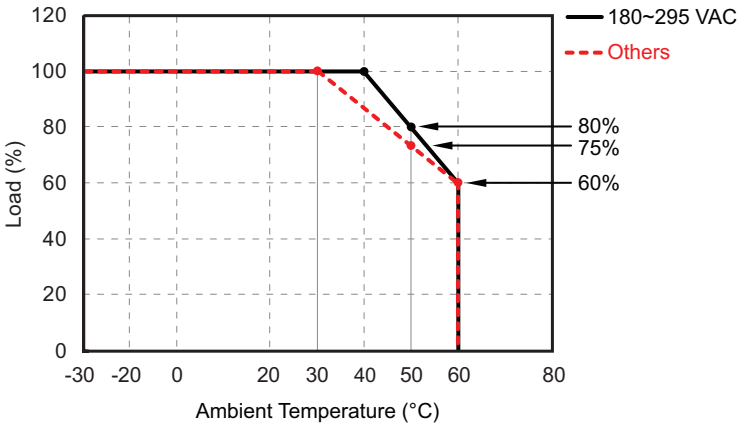
Model Number	Input Voltage Range	Output Voltage [2]	Output Current		Output Power	Ripple & Noise [1]	Efficiency
			Min	Max			
PSZLF100-24S	90 ~ 295 VAC	24 VDC (15.6~24 VDC)	2.6 A	3.5 A (2.6~4.0 A)	96 W	2.7Vp-p	89%
PSZLF100-36S		36 VDC (23.4~36 VDC)	1.72 A	2.1 A (1.72~2.65 A)	96 W	5Vp-p	90%
PSZLF100-48S		48 VDC (36~48 VDC)	1.3 A	1.75 A (1.3~2.0 A)	96 W	5Vp-p	89%
PSZLF100-54S		54 VDC (35.1~54 VDC)	1.15 A	1.4 A (1.15~1.77 A)	95.58 W	5Vp-p	90%

NOTES

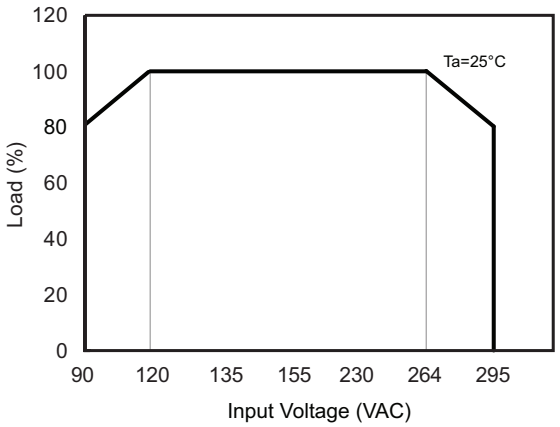
1. Measured at 20MHz BW and with 0.1µF and 47µF capacitors in parallel.
2. Input Voltage = 115VAC or 230VAC. This is suitable operation region for LED related applications but please reconfirm special electrical requirements for some specific system designs.

DERATING

Load vs Ambient Temperature



Load vs Input Voltage



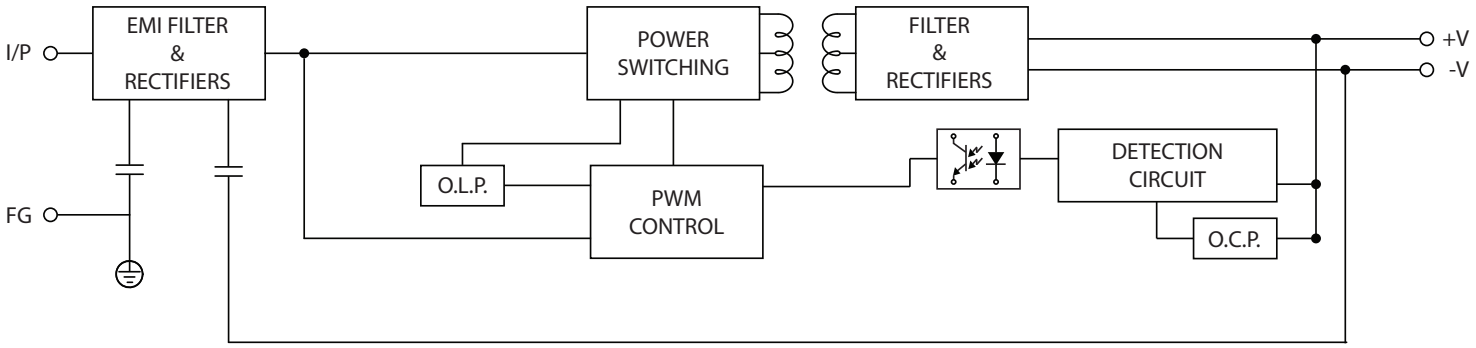
Note: If the output is not connected to LEDs, the input voltage must be greater than 180VAC

SPECIFICATIONS: PSZLF100 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.

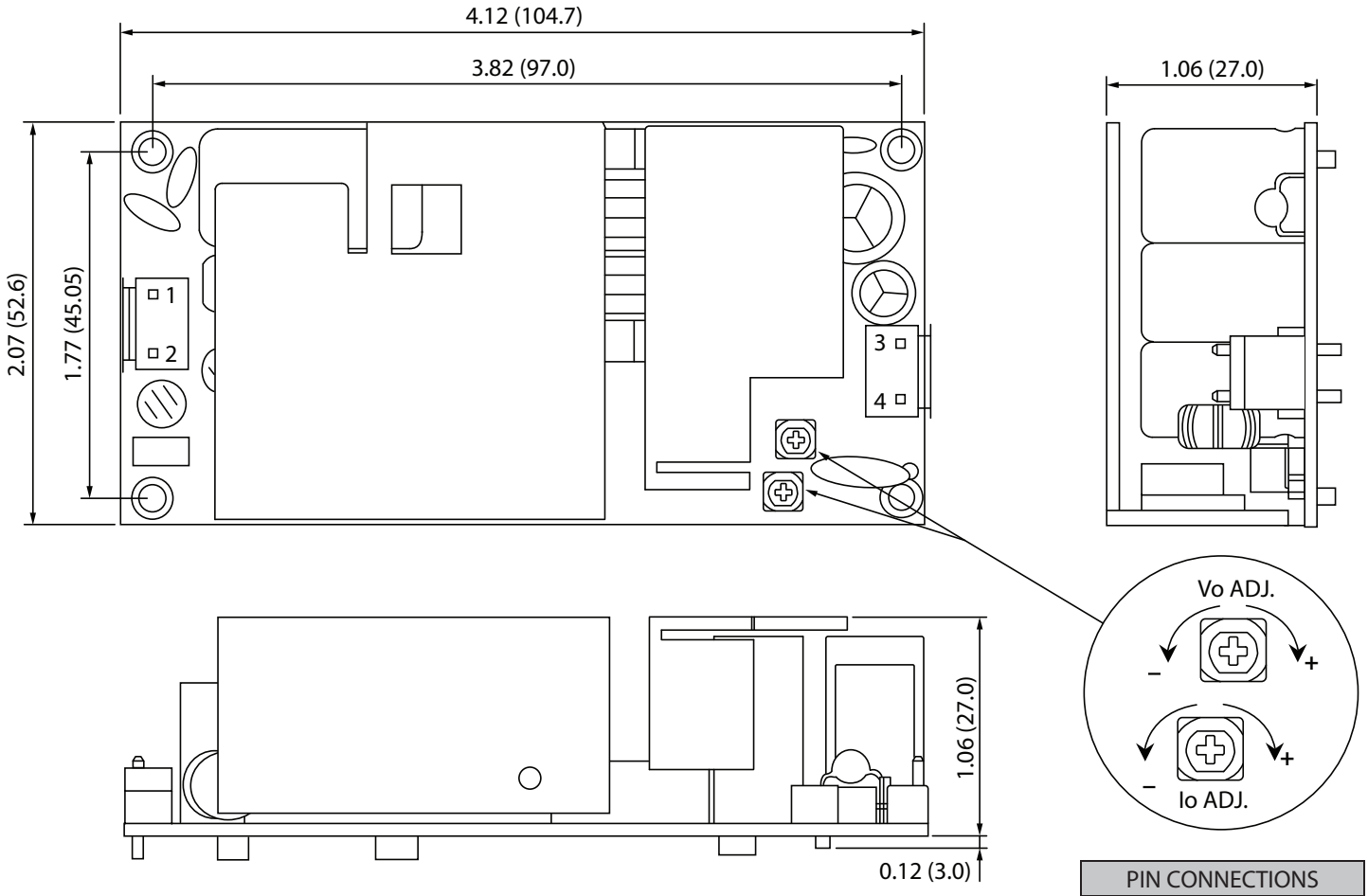
SPECIFICATION		TEST CONDITIONS		Min	Typ	Max	Unit
INPUT SPECIFICATIONS							
Input Voltage		AC input voltage range		90		295	VAC
Input Frequency					50/60		Hz
Input Current		At 115 VAC and full load			1.4		A
		At 230 VAC and full load			0.7		
Inrush Current		At 230VAC				60	A
Power Factor		At 115/230 VAC and full load		0.9			
OUTPUT SPECIFICATIONS							
Output Voltage					See Table		
Voltage Adjustment Setup (CV Mode)		PSZLF100-24S		22		26.5	VDC
		PSZLF100-36S		33		39.5	
		PSZLF100-48S		44		51.5	
		PSZLF100-54S		49		55	
Constant Current Operation Voltage (CC Mode)		PSZLF100-24S	See Note 1	15.6		24	VDC
		PSZLF100-36S		23.4		36	
		PSZLF100-48S		31.2		48	
		PSZLF100-54S		35.1		54	
Voltage Tolerance				-10		+10	%
Preset Current (CC Mode)		PSZLF100-24S	At 230 VAC		3.5		A
		PSZLF100-36S			2.1		
		PSZLF100-48S			1.75		
		PSZLF100-54S			1.4		
Current Adjustment Range (CC Mode)		PSZLF100-24S		2.6		4.0	A
		PSZLF100-36S		1.72		2.65	
		PSZLF100-48S		1.3		2.0	
		PSZLF100-54S		1.15		1.77	
Minimum Load					See Table		
Line Regulation		110~240VAC			±4		%
Load Regulation		Min load to max load			±5		%
Output Power					See Table		
Ripple & Noise					See Table		
Temperature Coefficient		0~50°C		-0.02		+0.02	%/°C
PROTECTION							
Short Circuit Protection					auto-recovery		
Over Voltage Protection					Zener diode clamp		
Over Current Protection					auto-recovery		
GENERAL SPECIFICATIONS							
Efficiency		At 230 VAC and full load			See Table		
Isolation Voltage	Input to Output			3750			VAC
	Input to FG			1880			
	Output to FG			500			
Leakage Current		At 240 VAC				0.7	mA
ENVIRONMENTAL SPECIFICATIONS							
Operating Temperature		With derating (see derating curve)		-30		+70	°C
Storage Temperature				-40		+85	°C
Humidity						95	% RH
Cooling					Free air convection		
MTBF		25°C (MIL-HDBK-217F)		450,000			hours
PHYSICAL SPECIFICATIONS							
Weight					6.88oz (195g)		
Dimensions (L x W x H)					4.12 x 2.07 x 1.06 inches (104.7 x 52.6 x 27.0 mm)		
SAFETY & EMC							
Safety Approvals					UL8750, IEC / EN 61347-2-13, IEC / EN 61347-1 (pending)		
EMI (Conducted and Radiated Emissions)					EN 55015 (pending)		
EMS (Noise Immunity)					EN61547 (pending)		
Harmonic Current					EN61000-3-2 (at full load), EN 61000-3-3 (pending)		
Surge					2KV (L-N), 4KV (L N – FG)		

BLOCK DIAGRAM



MECHANICAL DRAWING

Unit: inches (mm)



PIN CONNECTIONS	
Pin	Assignment
1	AC IN (N)
2	AC IN (L)
3	+DC OUT
4	-DC OUT

NOTES:

1. Tolerance: ±0.04" (±1mm)
2. Weight: 6.88oz (195g)
3. All dimensions are for reference only

COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

Phone: ☎(603)778-2300
Toll Free: ☎(888)597-9255
Fax: ☎(603)778-9797
E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive
Exeter, NH 03833