

Wall Industries, Inc.

PSALF240 SERIES

90~264VAC or 120~370VDC Input (H Type up to 277VAC)
Single Outputs, Built-in Active PFC Function
With Constant Current and Constant Voltage
240 Watt AC/DC LED Switching Power Supplies



FEATURES

- Single Outputs
- RoHS Compliant
- Built-in Active PFC Function, PF > 0.97
- Up to 240 Watts Maximum Output Power
- UL60950-1 and CE Safety Approvals
- Free Air Convection
- LED Power Applications
- 90~264VAC or 120~370VDC Input (H Type up to 277VAC)
- Over Voltage, Over Power, Over Temperature, and Short Circuit Protection
- With Constant Current and Constant Voltage
- Output Voltage and Constant Current Level can be Adjusted through Internal Potentiometer
- IP65 Design for Indoor or Outdoor LED Installations

DESCRIPTION

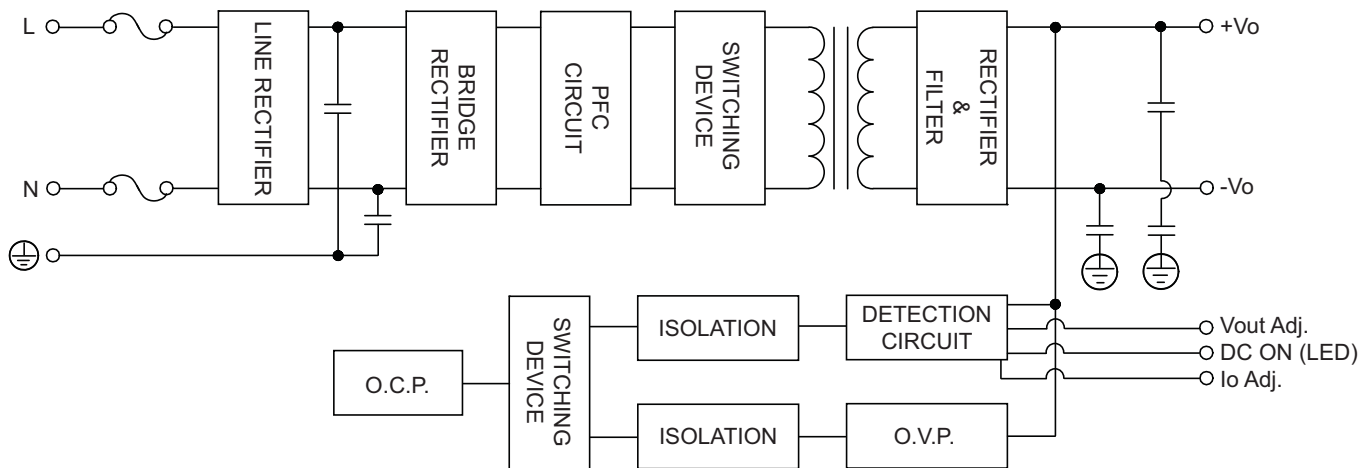
The PSALF240 series of AC/DC LED switching power supplies offers up to 240 Watts of output power in a 8.35" x 2.76" x 1.50" case. This series consists of 12V, 24V, 28V, 36V, and 48VDC single output models with a 90~264VAC (up to 277VAC for "H" type) or 120~370VDC input voltage range. These supplies also have a power factor greater than 0.97 at 115VAC and are protected against short circuit, over power, over voltage, and over temperature conditions. The PSALF240 series has an IP65 design making it ideal for indoor or outdoor LED installations. These supplies are RoHS compliant and have UL60950-1 and CE safety approvals.

SPECIFICATIONS: PSALF240 SERIES						
<p>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.</p>						
SPECIFICATION	TEST CONDITIONS		Min	Typ	Max	Unit
INPUT SPECIFICATIONS						
Input Voltage	AC input voltage range		90		264	VAC
	AC Input voltage range ("H" type)		90		277	VAC
	DC input voltage range		120		370	VDC
Input Frequency			47		63	Hz
Input Current	115VAC	Full load			3	A
	230VAC				1.5	
Inrush Current	115VAC	< 2ms			30	A
	230VAC				60	
Power Factor	115VAC	Full load	0.97			
	230VAC		0.93			
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Constant Current Range			See Table			
Voltage Adjustment Range			-5		+5	%
Voltage Accuracy			-2		+2	%
Output Current (Convection)			See Table			
Current Adjustment Range			See Table			
Line Regulation	LL to HL		-1		+1	%
Load Regulation	No load to full load		-1		+1	%
Output Power			See Table			
Minimum Load			0			A
Max Capacitive Load			470µF - 23,000µF depending on model			
Hold-Up Time			8			ms
Temperature Coefficient	0 ~ 50°C		-0.02		+0.02	°C
PROTECTION						
Short Circuit Protection			auto-recovery			
Over Voltage Protection			auto-recovery			
Over Power Protection			auto-recovery			
Over Temperature Protection			auto-recovery			
GENERAL SPECIFICATIONS						
Efficiency			See Table			
Switching Frequency				80		KHz
Isolation Voltage	Input to output		3000			VAC
	Input to FG		1500			
	Output to FG		500			
Leakage Current					0.5	mA
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	With derating (see derating curve)		-25		+70	°C
Storage Temperature			-40		+85	°C
Humidity					95	%
Vibration			10~500Hz, 5G 10min/1cycle, 60 min. each along X, Y, Z axes			
Cooling			Free air convection			
MTBF	MIL-HDBK-217F and 25°C		> 100,000 hours			
PHYSICAL SPECIFICATIONS						
Weight			2.23lbs (1010g)			
Dimensions (L x W x H)			8.35 x 2.76 x 1.50 inches (212.2 x 70.0 x 38.0 mm)			
SAFETY & EMC						
Safety Approvals			UL60950-1, CE			
EMC	EMI (Conducted and Radiated Emissions)		EN 55022			
	EMS (Noise Immunity)		EN 55024 (Surge 4KV)			

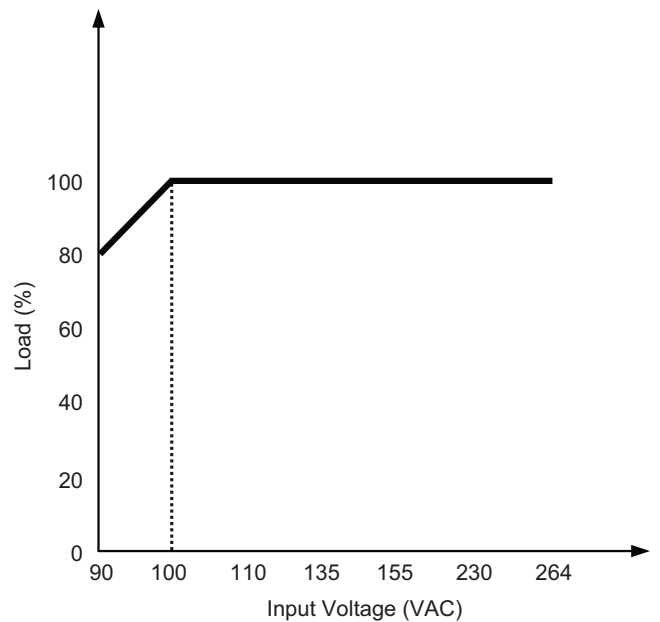
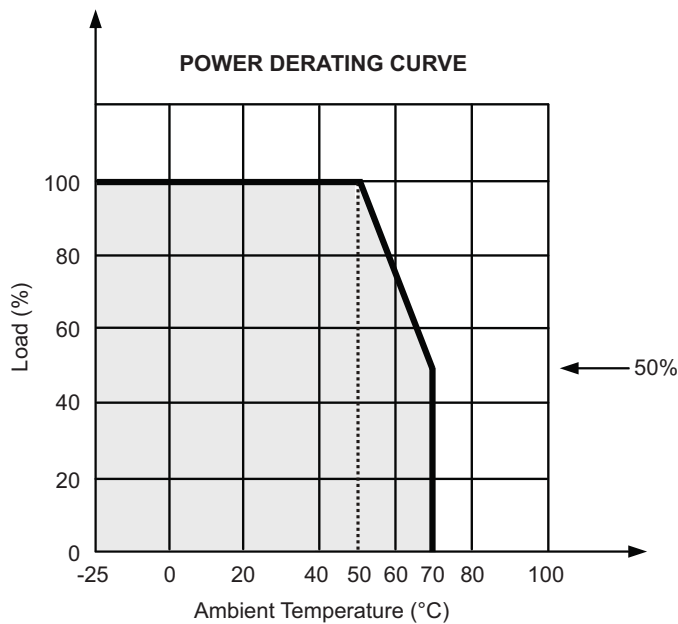
MODEL SELECTION TABLE

Model Number	Input Voltage	Output Voltage	Constant Current Range	Output Current	Current Adjustment Range	Output Power	Efficiency
PSALF240-12S	90~264 VAC or 120~370 VDC	12 VDC	6 ~ 12 VDC	16A	8 ~ 16 A	192W	90%
PSALF240-24S		24 VDC	12 ~ 24 VDC	10A	5 ~ 10 A	240W	90%
PSALF240-28S		28 VDC	14 ~ 28 VDC	8.57A	4.28 ~ 8.57 A	240W	90%
PSALF240-36S		36 VDC	18 ~ 36 VDC	6.66A	3.33 ~ 6.66 A	240W	92%
PSALF240-48S		48 VDC	24 ~ 48 VDC	5A	2.5 ~ 5 A	240W	93%

BLOCK DIAGRAM

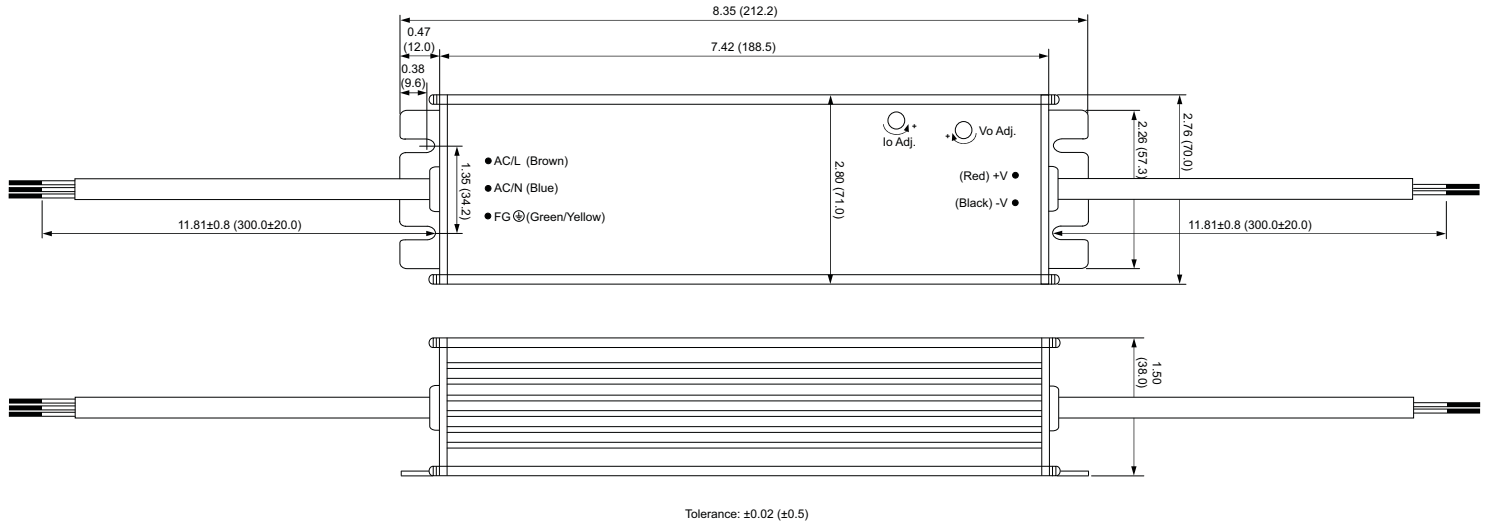


CHARACTERISTICS



MECHANICAL DRAWING

Unit: inches (mm)



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:

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