Size:
5.00 x 3.21 x 1.44 inches
127.0 x 81.6 x 36.6 mm

Weight:
1.05 lbs (475g)

FEATURES

- Class I
- RoHS Compliant
- Internal EMI Filter
- Up to 100 Watts Output Power
- Active Power Factor Correction
- Over Voltage Protection (Crowbar Design)
- Over Current Protection
- Wide Input Voltage Range: 90~260VAC
- -20°C to +70°C Operating Temperature Range
- Single Outputs Ranging from 3VDC to 50VDC
- 3-Pin Input Connector
- 2-Pin Input Connector Available (See PSIUU101 Series)
- UL/cUL(UL 60950-1: 2nd Ed.) & TUV/GS (EN 60950-1: 2nd Ed.) Safety Approvals
- Meets FCC Part-15 Class B and CISPR-22 Class B Emission Limits
- 100% Burn-in Tested

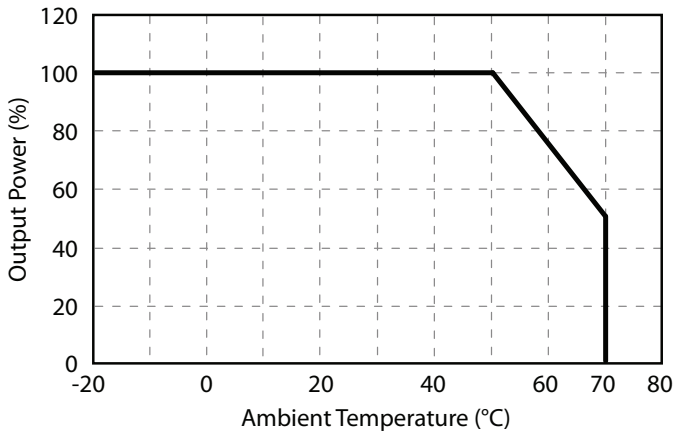
DESCRIPTION

The PSIUU100 series of Class I AC/DC switching mode power supplies provides up to 100 Watts of continuous output power in a 5.00" x 3.21" x 1.44" U-chassis package. This series has single output models ranging from 3VDC to 50VDC with a wide input voltage range of 90~260VAC. These power supplies have an internal EMI filter, active power factor correction, and over voltage and over current protection. This series also has UL/cUL (UL 60950-1: 2nd edition) and TUV/GS (EN 60950-1: 2nd edition) safety approvals and meets FCC Part-15 Class B and CISPR-22 Class B Emission limits. These units are well suited for use in industrial equipment as well as many other applications. All models are 100% burn-in tested.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Total Regulation	Output Power	No-Load Power Consumption
PSIUU100-101	90 ~ 260 VAC	3 ~ 5 VDC	18.00 ~ 10.80 A	5%	54W	6W
PSIUU100-102		5 ~ 6 VDC	14.00 ~ 11.66 A	5%	70W	6W
PSIUU100-103		6 ~ 9 VDC	13.33 ~ 8.88 A	5%	80W	6W
PSIUU100-104		9 ~ 11 VDC	11.11 ~ 9.09 A	5%	100W	6W
PSIUU100-105		11 ~ 13 VDC	9.09 ~ 7.69 A	3%	100W	6W
PSIUU100-106		13 ~ 16 VDC	7.69 ~ 6.25 A	3%	100W	6W
PSIUU100-107		16 ~ 21 VDC	6.25 ~ 4.76 A	3%	100W	6W
PSIUU100-108		21 ~ 27 VDC	4.76 ~ 3.70 A	2%	100W	6W
PSIUU100-109		27 ~ 33 VDC	3.70 ~ 3.03 A	2%	100W	6W
PSIUU100-110		33 ~ 40 VDC	3.03 ~ 2.50 A	2%	100W	6W
PSIUU100-111		40 ~ 50 VDC	2.50 ~ 2.00 A	2%	100W	6W

DERATING



Notes

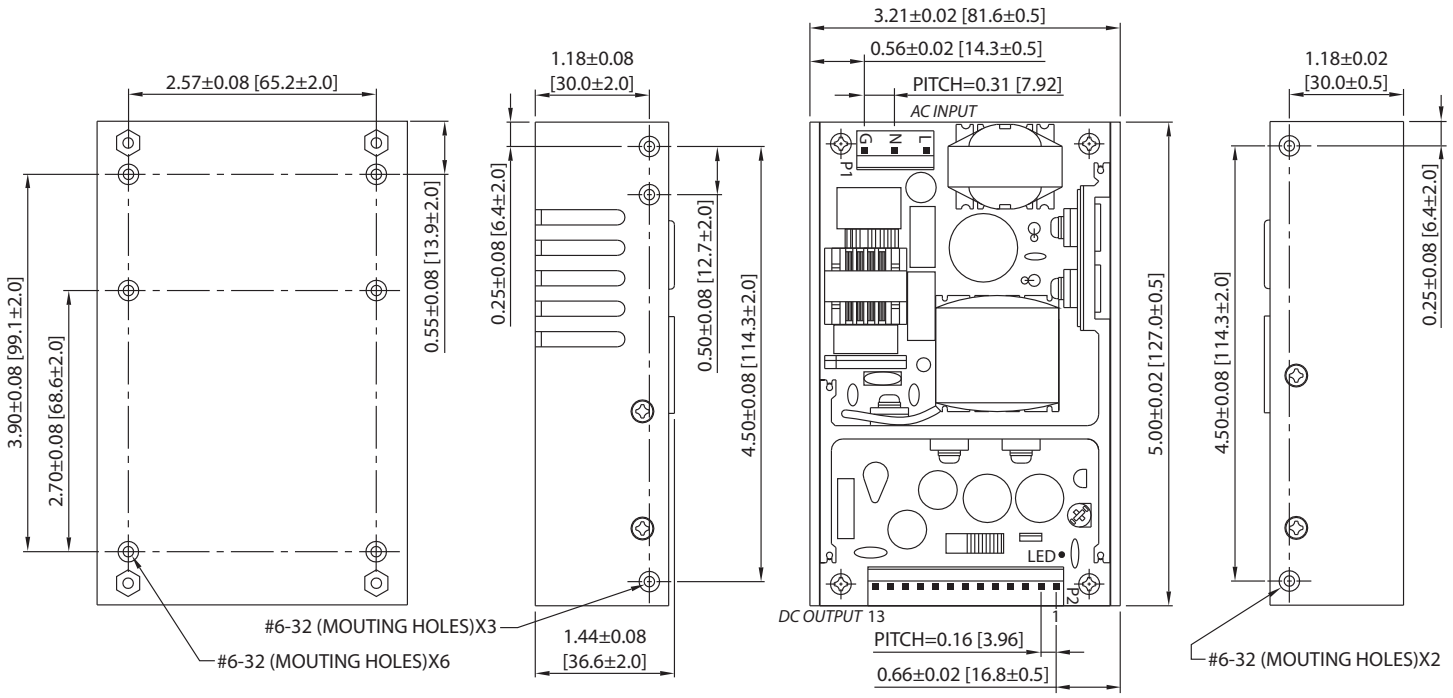
1. Operating Temperature: -20°C to + 70°C
2. Derating linearly from 100% load at 50°C to 50% load at 70°C

TECHNICAL SPECIFICATIONS: PSIUU100 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	Operating Input Voltage Range		90		260	VAC
	Safety Approvals Input Voltage Range		100		240	
Input Frequency			47		63	Hz
Input Current	Vin = 100VAC, Io = full load				2.0	A
	Vin = 240VAC, Io = full load				2.0	
Inrush Current	Vin = 115VAC, Io = full load, 25°C, cold start				50	A
	Vin = 230VAC, Io = full load, 25°C, cold start				100	
No Load Power Consumption	Vin = 230VAC, Io = no load				6	W
Power Factor Correction	Vin = 240VAC, Io = full load		0.95		1	
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation	LL to HL, full load		0.5		1	%
Load Regulation	Vin = 230VAC or 325VDC		2		5	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise (peak to peak)	Vin = 90VAC, Io = full load	Outputs under 3.3VDC			2	%
		Others			1	
Hold-up Time	Vin = 110VAC, Io = full load		16			ms
Start-up Time	Vin = 100VAC, Io = full load				3	s
Transient Response Time	Vin = 100VAC, Io = Full load to half load				4	ms
Temperature Coefficient	0~50°C		-0.04		+0.04	%/°C
PROTECTION						
Over Voltage Protection			112		132	%
Over Current Protection			110		150	%
GENERAL SPECIFICATIONS						
Efficiency	Vin = 230VAC, Io = full load		70		85	%
Dielectric Withstanding Voltage	Primary to Secondary		4242			VDC
	Primary to PE		2594			
Isolation Resistance	Test Voltage = 500VDC		50			MΩ
Leakage Current	Vin = 240VAC/60Hz				0.75	mA
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derating linearly from 100% Load at 50°C to 50% load at 70°C		-20		+70	°C
Storage Temperature			-40		+85	°C
Operating Humidity			0		95	%
Storage Humidity			0		95	%
Cooling			Free air convection			
MTBF	MIL-HDBK-217F, 25°C		100,000			hours
PHYSICAL SPECIFICATIONS						
Weight			1.05 lbs (475g)			
Dimensions (L x W x H)			5.00 x 3.21 x 1.44 inch (127.0 x 81.6 x 36.6 mm)			
Input Connector	Mates with Molex housing 09-52-4054 and Molex 2478 crimp terminal					
Output Connector	Mates with Molex housing 09-52-4134 and Molex 2478 crimp terminal					
SAFETY						
Safety Approvals	UL/cUL (UL 60950-1: 2nd edition); TUV/GS (EN 60950-1: 2nd edition)					
EMI Requirements for CISPR-22	220VAC		B			Class
EMI Requirements for FCC PART-15	110VAC		B			Class

MECHANICAL DRAWING



PIN CONNECTIONS	
PIN	DESIGNATION
1	OUT
2	OUT
3	OUT
4	OUT
5	OUT
6	OUT
7	RTN
8	RTN
9	RTN
10	RTN
11	RTN
12	RTN
13	N/C

NOTES

1. Unit: Inches [mm]
2. Weight: 1.05 lbs (475g)
3. Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal
4. Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal
5. 2-pin input connector also available (See PSIUU101 Series)
6. 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.

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