Size: 5in x 3in x 1.18in (127mm x 76.3mm x 30mm)

FEATURES

- Wide Input Voltage Range: 90~260VAC, 47~63Hz
- Class I
- Active Power Factor Correction
- Single Outputs
- RoHS Compliant
- 100% Burn-in Tested
- Internal EMI Filter
- Short Circuit, Over Voltage, and Over Load Protection
- Meets FCC Part-15 Class B and CISPR-22 Class B Emission Limits
- Complies with UL/c-UL, TUV/Bauart, and CE Markings
- UL 60950-1:2nd Edition, CSA C22.2 No.60950-1-07, IEC60950-1:2005/A2:2013, EN 60950-1:2006/A2:2013 Approvals

DESCRIPTION

The PSSBU100 series of Class I AC/DC switching mode power supplies provides up to 100 Watts of continuous output power in a compact 5” x 3” x 1.18” open frame package. This series has single output models with a wide input voltage range of 90~260VAC. These power supplies have active power factor correction, an internal EMI filter, and input surge voltage, over load, and over voltage protection. All models meet FCC Part-15 Class B and CISPR-22 Class B Emission Limits. This series also has UL 60950-1:2nd Edition, CSA C22.2 No.60950-1-07, IEC60950-1:2005/A2:2013, EN 60950-1:2006/A2:2013 safety approvals and meets new CE requirements. All models are RoHS compliant and have been 100% burn-in tested.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage(1)	Output Current		Ripple & Noise	Total Regulation	Output Power	Efficiency
			Min Load	Max Load				
PSSBU100-101	90~260VAC	3~5VDC	10.80A	18A	50mVp-p	±7%	54W	70%
PSSBU100-102		5~6VDC	11.66A	14A	60mVp-p	±5%	70W	74%
PSSBU100-103		6~9VDC	8.88A	13.33A	90mVp-p	±5%	80W	78%
PSSBU100-104		9~11VDC	9.09A	11.11A	110mVp-p	±5%	100W	78%
PSSBU100-105		11~13VDC	7.69A	9.09A	130mVp-p	±3%	100W	80%
PSSBU100-106		13~16VDC	6.25A	7.69A	160mVp-p	±3%	100W	80%
PSSBU100-107		16~21VDC	4.76A	6.25A	240mVp-p	±3%	100W	80%
PSSBU100-108		21~27VDC	3.70A	4.76A	300mVp-p	±2%	100W	80%
PSSBU100-109		27~33VDC	3.03A	3.70A	300mVp-p	±2%	100W	80%
PSSBU100-110		33~40VDC	2.50A	3.03A	300mVp-p	±2%	100W	80%
PSSBU100-111		40~50VDC	2.00A	2.50A	300mVp-p	±2%	100W	82%

SPECIFICATIONS

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 Range	Safety Approval	100		240	VAC
	Operate Voltage Range	90		260	
Input Frequency		47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC		2.0		A
	High Line, Full Load, Vin=240VAC		0.83		
Inrush Current	Low Line, Full Load, 25ºC, Cool Start, Vin=100VAC			50	A
	High Line, Full Load, 25ºC, Cool Start, Vin=240VAC			120	
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
Power Factor Correction	Io=Full Load, Vin=240VAC	0.95		1	
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Line Regulation[4]	Full Load, Vin=100~120VAC	0.5		1	%
Load Regulation[5]	Vin=230VAC, 10~90% Load Change at Condition	2		5	%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise[6]		See Table			
Transient Response Time	Full Load, Vin=110VAC			4	mS
Start-Up Time	Full Load, Vin=100~240VAC			3	S
Hold-Up Time[7]	Full Load, Vin=100VAC		16		mS
No Load Consumption			5		W
Temperature Coefficient	Full Load, Vin=100~240VAC			3	S
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Over Voltage Protection	Crowbar Mode	112		132	%
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derate linearly from 100% load at 50ºC to 50% load at 70ºC	0		70	ºC
Storage Temperature	10~95%RH	-40		85	ºC
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Operating Altitude	All Conditions			2000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X, Y, Z axes			5	G
MTBF	Operating temperature at 25ºC, per MIL-HDBK-217F	100,000			Hours
GENERAL SPECIFICATIONS					
Efficiency	Full Load, Vin=230VAC				
Dielectric Withstanding Voltage	Primary to Secondary			4242	VDC
	Primary to PE			2121	
Surge Voltage	Line-Neutral			1	kV
	Neutral-PE			2	
PHYSICAL SPECIFICATIONS					
Weight		12.17oz (345g)			
Dimensions (L x W x H)		5in x 3in x 1.18in (127mm x 76.3mm x 30mm)			
Cooling		Free Air Convection			
Flammability Rating		UL94V-1			
SAFETY CHARACTERISTICS					
Safety Approvals	UL60950-1:2nd Edition[8] CSA C22.2 No.60950-1-07 IEC60950-1:2005/A2:2013 EN60950-1:2006/A2:2013				
EMC Emission	Compliance to EN55022 (CISPR)				Class B
Protection Class					Class I
Electro Static Discharge	IEC61000-4-2 Air Discharge			8	kV
	IEC61000-4-2 Contact Discharge			4	

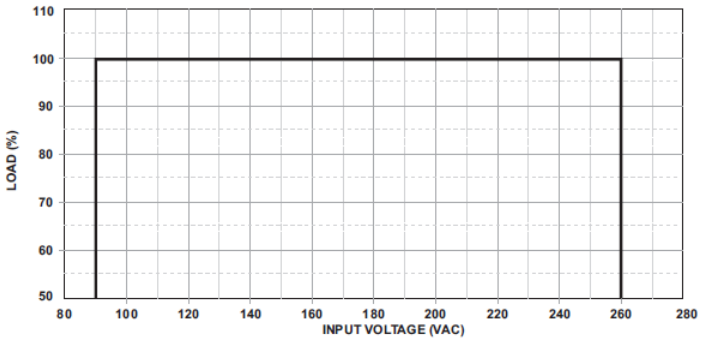
NOTES

1. Factory setting; cannot be adjusted.
2. Output can provide up to peak load when power supply starts up. Staying in more than rated load continuously is prohibited.
3. Each output is checked to be within voltage accuracy in 60% rated load condition at factory.
4. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
5. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
6. Ripple & Noise is measured by using is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at a rated load and nominal line.
7. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
8. This product is Listed to applicable standards and requirements by UL.

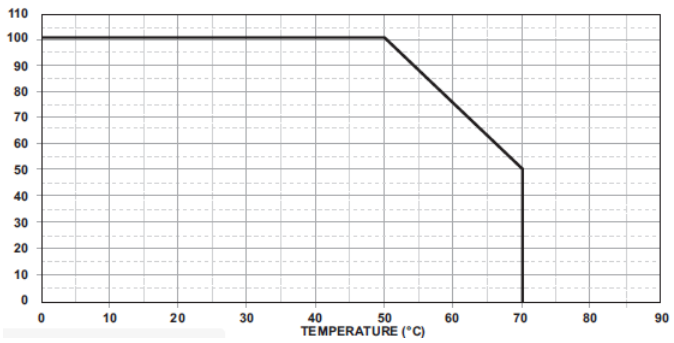
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

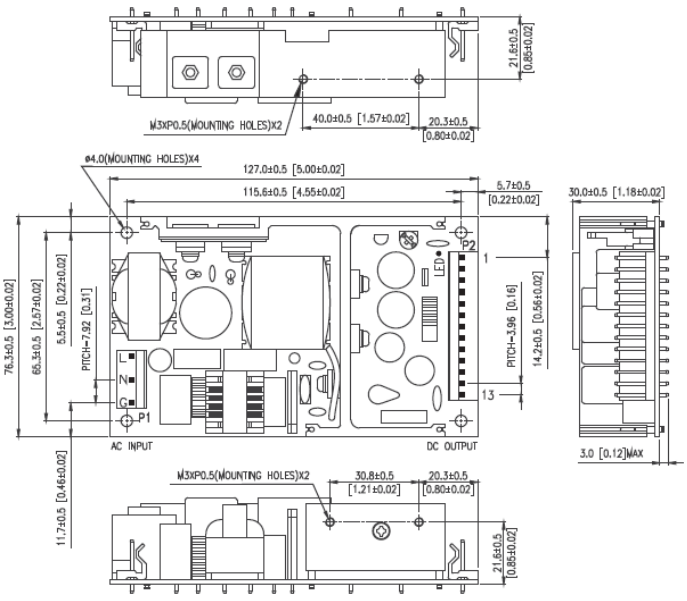
Input Voltage Derating Curve



Temperature Derating Curve



MECHANICAL DRAWINGS



Notes:
1. Dimensions are shown in mm.
2. Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal.
3. Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal.

PIN CHART

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

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: 2015 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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