



Size:
3.98 x 2.00 x 1.00 inches
101.0 x 50.8 x 25.4 mm

APPLICATIONS

- Blood Pressure Systems
- Portable Medical Devices
- ECG Machines

FEATURES

- RoHS Compliant
- Class I
- 60 Watts Output Power
- Single Outputs
- Up to 89% High Efficiency
- Free Air Convection Cooling
- 100% Burn-in Tested
- Open Frame Design
- 90-264VAC Input Voltage Range
- Over Current and Over Voltage Protection
- < 0.5W No Load Power Consumption
- ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition)
- Input to Output: 2MOPP

DESCRIPTION

The PSMHBU60 series of class I medical AC/DC switching power supplies provides 60 Watts of continuous output power in a 3.98" x 2.00" x 1.00" open frame package. This series consists of single output models with a wide input voltage range of 90~264VAC. Some features include high efficiency up to 89%, 2MOPP insulation, < 0.5W no load power consumption, and over current and over voltage protection. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission limits. This series also has ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition) and EN 60601-1:2006 (TUV/T-mark 3rd edition) medical approvals. All models are RoHS compliant and have been 100% burn-in tested.

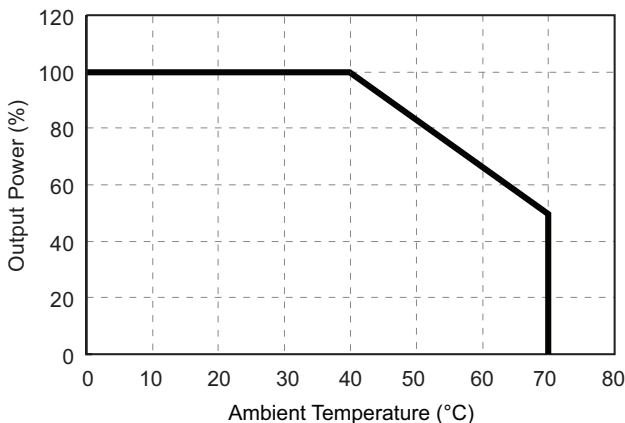
MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage ⁽¹⁾	Output Current	Total Regulation	Output Power
PSMHBU60-105	100~240 VAC	12 ~ 13 VDC	5.00 ~ 4.61 A	5%	60W
PSMHBU60-106		13 ~ 16 VDC	4.61 ~ 3.75 A	5%	60W
PSMHBU60-107		16 ~ 21 VDC	3.75 ~ 2.85 A	5%	60W
PSMHBU60-108		21 ~ 27 VDC	2.85 ~ 2.22 A	3%	60W
PSMHBU60-109		27 ~ 33 VDC	2.22 ~ 1.81 A	3%	60W
PSMHBU60-110		33 ~ 40 VDC	1.81 ~ 1.50 A	3%	60W

NOTES

1. The output voltage is specified as a range (ex: 33~40VDC); the customer must specify what they would like the output voltage set at.
2. Recommended to be used on metal chassis.

DERATING



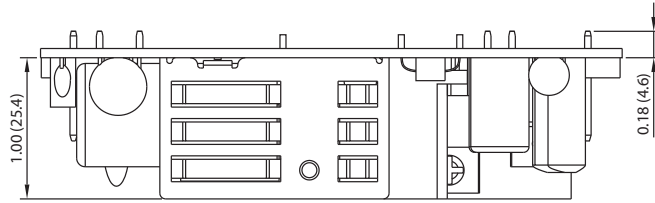
SPECIFICATIONS: PSMHBU60 SERIES

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.

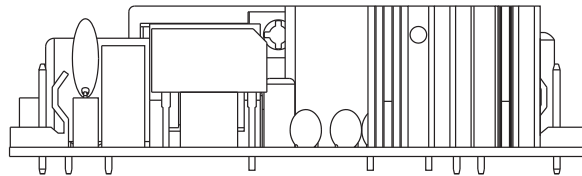
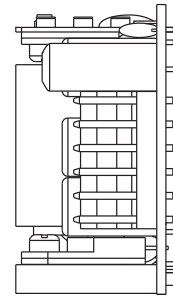
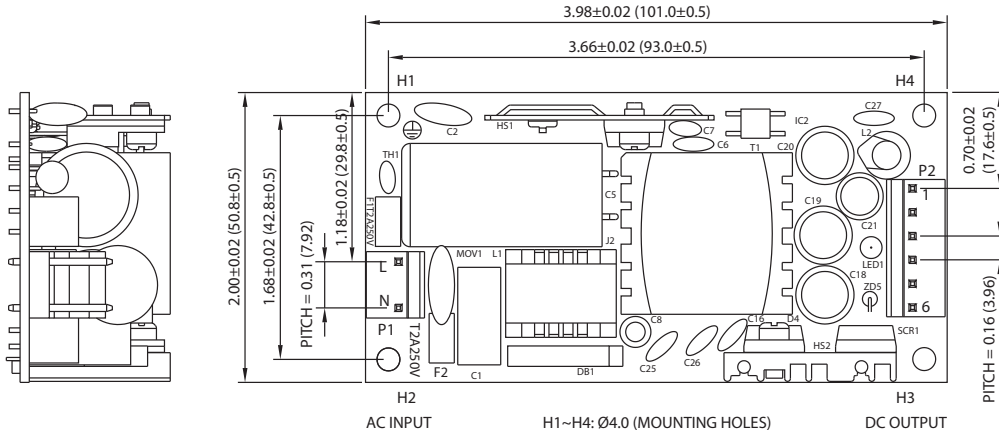
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage	Safety Approvals Input Voltage Range	100		240	VAC
	Operating Input Voltage Range	90		264	
Input Frequency		47		63	Hz
Input Current	100VAC, full load		1.62		A
	240VAC, full load		0.72		
Inrush Current	100VAC, full load, 25°C, cold start			31	A
	230VAC, full load, 25°C, cold start			62	
No Load Power Consumption	230VAC, no load			0.5	W
OUTPUT SPECIFICATIONS					
Output Voltage			See Table		
Line Regulation	LL to HL, full load			1	%
Load Regulation	230VAC			5	%
Output Power				60	W
Output Current			See Table		
Ripple & Noise (peak to peak)	90VAC, full load			1	%
Hold-up Time	110VAC, full load	12			ms
Start-up Time	100VAC, full load	0.3		2	s
Transient Response Time	100VAC, 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	230 VAC, full load	78.4		89	%
Dielectric Withstanding Voltage	Primary to Secondary (2MOPP Insulation)	6492			VDC
	Primary to PE	2121			
Isolation Resistance	Test Voltage = 500VDC	50			MΩ
Leakage Current	240VAC/60Hz			0.25	mA
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derating linearly from 100% Load at 40°C to 50% load at 70°C	0		+70	°C
Storage Temperature		-40		+85	°C
Operating Humidity		0		95	%
Storage Humidity		0		95	%
Operating Altitude			Up to 3000m		
Cooling			Free air convection		
MTBF	MIL-HDBK-217F, 25°C	100,000			hours
PHYSICAL SPECIFICATIONS					
Weight			4.9oz (140g)		
Dimensions (L x W x H)			3.98 x 2.00 x 1.00 inches (101.0 x 50.8 x 25.4 mm)		
Input Connector		Mates with Molex housing 09-50-3031/35977-0300 and Molex 2478/35922 series crimp terminal			
Output Connector		Mates with Molex housing 09-50-3061/35977-0600 and Molex 2478/35922 series crimp terminal			
SAFETY & EMC					
Safety Approvals		ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition); EN 60601-1:2006 (TUV/T-mark 3rd edition); CE			
EMI Requirements for CISPR-11	220VAC	B			Class
EMI Requirements for FCC PART-18	110VAC	B			Class

MECHANICAL DRAWING

Unit: inches (mm)



PIN CONNECTIONS	
PIN	ASSIGNMENT
1	OUT
2	OUT
3	OUT
4	RTN
5	RTN
6	RTN



NOTES:

1. All dimensions are for reference only
2. Weight: Approximately 4.9oz (140g)
3. Input Connector: Mates with Molex housing 09-50-3031/35977-0300 and Molex 2478/35922 series crimp terminal
4. Output Connector: Mates with Molex housing 09-50-3061/35977-0600 and Molex 2478/35922 series crimp terminal

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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