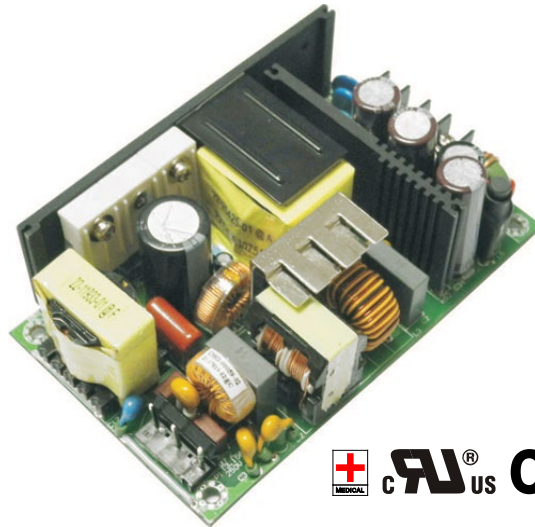


Wall Industries, Inc.

PSMBU153 SERIES

90~260VAC Input Voltage Range
Active Power Factor Correction, Single Outputs
UL/cUL 3rd Edition Medical Approvals
150 Watt AC/DC Switching Power Supplies



FEATURES

- Class I
- RoHS Compliant
- Active Power Factor Correction
- 5" x 3" x 1.44" Open Frame Package
- 12VDC and 24VDC Single Outputs
- 100% Burn-in Tested
- 150 Watts Output Power
- Wide Input Voltage Range: 90~260VAC, 47~63Hz
- Over Voltage and Over Current Protection
- Meets FCC Part-18 Class B and CISPR-11 EN55011 Class B Emission Limits
- ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition) and EN 60601-1:2006 (TUV/T-mark 3rd edition) Approvals
- Input to Output: 2MOPP

DESCRIPTION

The PSMBU153 series of Class I medical AC/DC switching power supplies provides 150 Watts of continuous output power in a compact 5" x 3" x 1.44" open frame package. This series consists of 12VDC and 24VDC single output models with a wide input voltage range of 90~260VAC. These power supplies have active power factor correction 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) safety approvals and also meets new CE requirements. All models are RoHS compliant and have been 100% burn-in tested.

SPECIFICATIONS: PSMBU153 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	Nom	Max	Unit
INPUT SPECIFICATIONS						
Input Voltage Range	Safety Approvals Input Voltage Range		100		240	VAC
	Operating Input Voltage Range		90		260	
Input Frequency			47		63	Hz
Input Current	Low Line	Io = Full Load, Vin = 100VAC	1.74		1.76	A
	High Line	Io = Full Load, Vin = 240VAC	0.71		0.73	
Inrush Current	Low Line	Io = Full Load, 25°C, Cold Start, Vin = 115VAC			50	A
	High Line	Io = Full Load, 25°C, Cold Start, Vin = 230VAC			100	
Power Factor Correction (PFC)	Io = Full Load, Vin = 240VAC		0.95		1.0	
No Load Power Consumption	Io = No Load, Vin = 230VAC				1.2	W
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Load Regulation	Vin = 230VAC		3		5	%
Line Regulation	Io = Full Load		0.5		1	%
Output Power	Vin = 90~260VAC				150	W
Output Current			See Table			
Ripple & Noise (peak to peak)	Full Load, Vin = 90VAC				1	%
Transient Response Time	Io = Full Load to Half Load, Vin = 100VAC				4	ms
Hold-Up Time	Io = Full Load, Vin = 110VAC		20			ms
Start-Up Time	Io = Full Load, Vin = 100VAC				2	s
Temperature Coefficient			-0.04		+0.04	%/°C
PROTECTION						
Over Voltage Protection			112		132	%
Over Current Protection			110		150	%
GENERAL SPECIFICATIONS						
Efficiency	Io = Full Load, Vin = 230VAC		84		89	%
Dielectric Withstanding Voltage	Primary to Secondary		6990			VDC
	Primary to PE		2121			
Isolation Resistance	Test Voltage = 500VDC		50			MΩ
Safety Ground Leakage Current	Vin = 240VAC/60Hz				0.25	mA
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derating linearly from 100% Load at 50°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					3000	m
MTBF	Operating Temperature at 25°C, calculated per MIL-HDBK-217F		100,000			hours
PHYSICAL SPECIFICATIONS						
Weight			Approx. 14.8oz (420g)			
Dimensions (L x W x H)			5.00 x 3.00 x 1.44 inches (127.0 x 76.2 x 36.6 mm)			
Input Connector			Mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal			
Output Connector			Mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal or DINKLE#DT-2GN-B01W-04P and DINKLE#ESK750V-04P			
SAFETY & EMI						
EMI Requirements for CISPR-11	Vin = 220VAC		B			Class
EMI Requirements for FCC PART-18	Vin = 110VAC		B			Class
Safety Approvals			ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3 rd edition) ⁽¹⁾ ; EN 60601-1:2006 (TUV/T-mark 3 rd edition); CE			

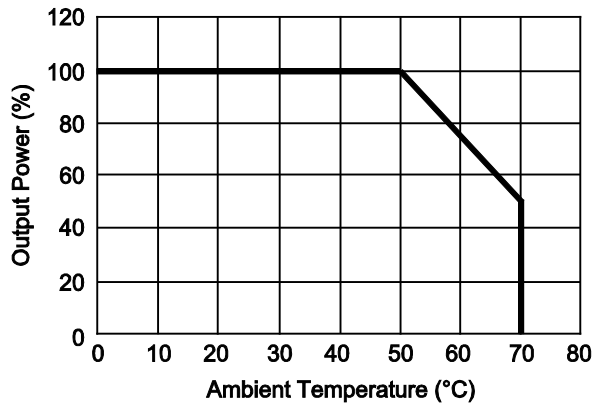
NOTES

- This product is Listed to applicable standards and requirements by UL.
**Due to advances in technology, specifications subject to change without notice.*

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Total Regulation	Max. Output Power
PSMBU153-105	90 ~ 260VAC	12 VDC	12.5 A	5%	150W
PSMBU153-108	90 ~ 260VAC	24 VDC	6.25 A	3%	150W

DERATING CURVE

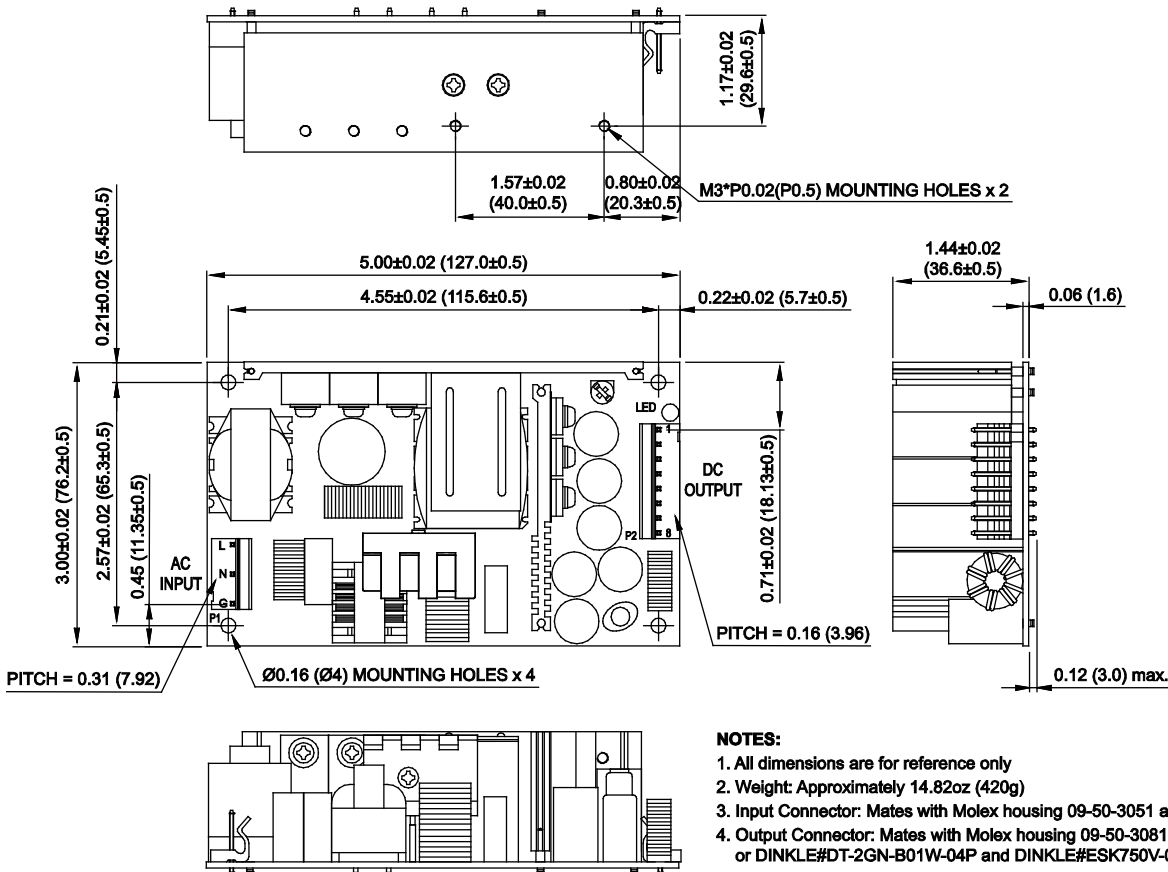


NOTES:

- Operating Temperature: 0°C to +70°C
- Derating linearly from 100% load at 50°C to 50% load at 70°C

MECHANICAL DRAWING

Unit: inches (mm)





Wall Industries, Inc.

Rev. B

PSMBU153 Series
150 Watt, Open Frame
Single Outputs, Active PFC
Medical AC/DC Power Supplies

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.

Contact **Wall Industries** for further information:

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