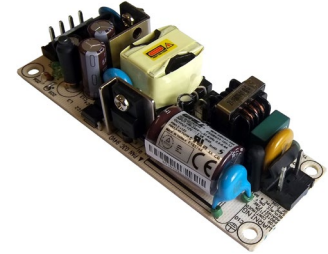


FEATURES

- Single Output
- RoHS Compliant
- Class I Insulation
- Output Voltages Available from 5VDC to 48VDC
- Wide Input Voltage Range: 90~264VAC, 47~63Hz
- Input Surge Current, Over Voltage, and Over Load Protection



DESCRIPTION

The PSSBU31 series of AC/DC switching mode power supplies provides 30 Watts of continuous output power in a compact, open frame constructed design. This series has single output supplies with a universal input range of 90~264VAC. These units are ideally suited for use in portable equipment as well as many other applications. All models meet CISPR-22 class B emission limits and comply with new CE requirements. All models are input surge current, output voltage, and over load protected. All units are also 100% burn-in tested.

SPECIFICATIONS: PSSBU31 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 (V_{in})					
Operating Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Input Current (Low Line)	I _o = Full Load, V _{in} = 115VAC			0.8	A
Input Current (High Line)	I _o = Full Load, V _{in} = 230VAC			0.5	A
Inrush Current (Low Line)	I _o = Full Load, 25°C, Cool Start, V _{in} = 115VAC		12	15	A
Inrush Current (High Line)	I _o = Full Load, 25°C, Cool Start, V _{in} = 230VAC		26	35	A
Safety Ground Leakage Current	I _o = Full Load, V _{in} = 240VAC		0.4	0.75	mA
Start-Up Time	I _o = Full Load, V _{in} = 100VAC			2	s
OUTPUT (V_o)					
Output Voltage Range		See Table			
Load Regulation	V _{in} = 230VAC		3	5	%
Line Regulation	I _o = Full Load		0.5	1	%
Output Power	V _{in} = 90 to 264VAC	0		30	W
Output Current Range		See Table			
Ripple & Noise (peak to peak)	Full Load, V _{in} = 90VAC		0.5	1	%
Transient Response Time	I _o = Full Load to Half Load, V _{in} = 100VAC			4	ms
Hold-Up Time	I _o = Full Load, V _{in} = 110VAC	12			ms
PROTECTION					
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
GENERAL					
Efficiency	I _o = Full Load, V _{in} = 230VAC	78	84	88	%
Dielectric Withstanding Voltage For Primary to Secondary	Primary to Secondary	4242			VDC
Dielectric Withstanding Voltage For Primary to Ground	Primary to Ground	2121			VDC
Isolation Resistance	Test Voltage = 500VDC	50			MΩ
No Load Power Consumption	No Load, V _{in} = 240VAC			0.3	W
ENVIRONMENTAL					
Operating Temperature	Derate linearly from 100% Load at 40°C to 50% load at 70°C	0	40	+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity		5		95	%
Temperature Coefficient	All Outputs	-0.04		+0.04	%/°C
MTBF	Operating temperature at 25°C, calculated per MIL-HDBK-217F	100,000 hours			
PHYSICAL					
Weight		Approximately 3oz (85g)			
Dimensions (L x W x H)		4.02 x 1.50 x 0.83 inches 102.0 x 38.1 x 21.0 mm			
SAFETY					
EMI Requirements for CISPR-22	V _{in} = 220VAC	B			Class
EMI Requirements for FCC PART-15	V _{in} = 110VAC	B			Class

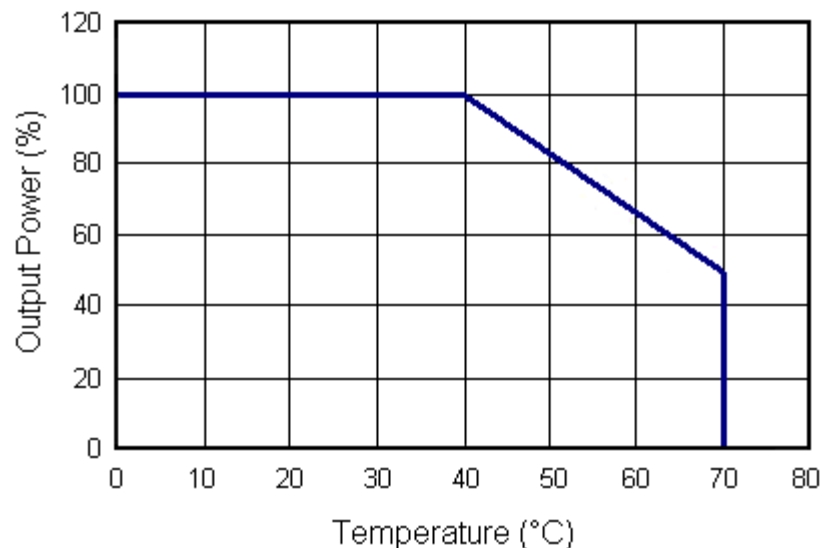
MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage Range	Preset Voltage	Output Current Range	Total Regulation	Maximum Output Power
PSSBU31-102	90 ~ 264VAC	5 ~ 6 VDC	5 VDC	4.00 ~ 3.33A	5%	20W
PSSBU31-103	90 ~ 264VAC	6 ~ 8 VDC	6 VDC	3.83 ~ 2.87A	5%	23W
PSSBU31-104	90 ~ 264VAC	8 ~ 11 VDC	8 VDC	3.38 ~ 2.45A	5%	27W
PSSBU31-105	90 ~ 264VAC	11 ~ 13 VDC	11 VDC	2.73 ~ 2.30A	5%	30W
PSSBU31-106	90 ~ 264VAC	13 ~ 16 VDC	13 VDC	2.30 ~ 1.88A	5%	30W
PSSBU31-107	90 ~ 264VAC	16 ~ 21 VDC	16 VDC	1.88 ~ 1.43A	5%	30W
PSSBU31-108	90 ~ 264VAC	21 ~ 27 VDC	21 VDC	1.43 ~ 1.11A	3%	30W
PSSBU31-109	90 ~ 264VAC	27 ~ 33 VDC	27 VDC	1.11 ~ 0.91A	3%	30W
PSSBU31-110	90 ~ 264VAC	33 ~ 40 VDC	33 VDC	0.91 ~ 0.75A	3%	30W
PSSBU31-111	90 ~ 264VAC	40 ~ 48 VDC	40 VDC	0.75 ~ 0.62A	3%	30W

NOTES

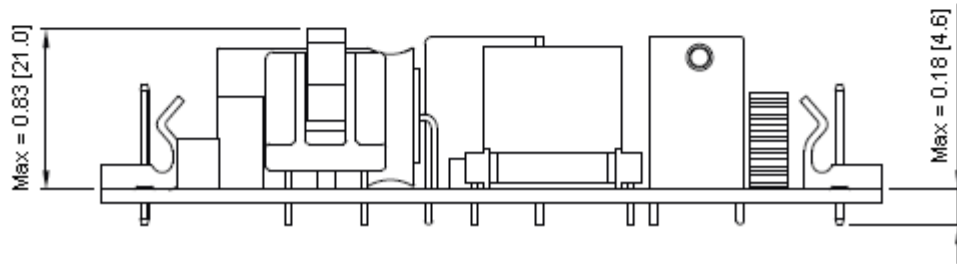
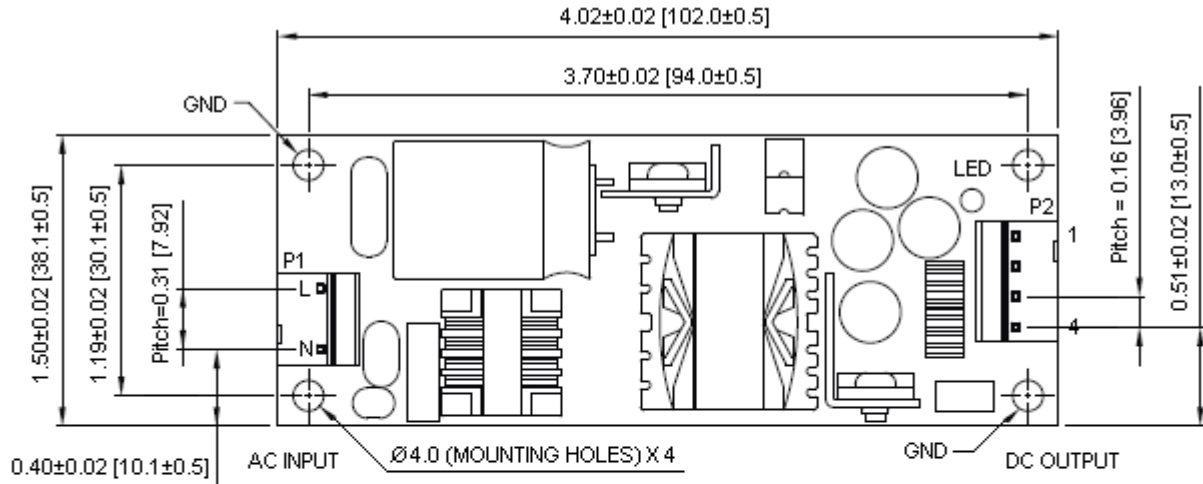
1. The output voltage is specified as a range (Ex: 40 ~ 48VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
2. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
3. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal.

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

DERATING CURVE

MECHANICAL DRAWING

Unit: inches [mm]



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

NOTES:

1. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
2. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal.



Wall Industries, Inc.

Rev C

PSSBU31 Series
Open Frame
30 Watt, Single Output
AC/DC Switching Power Supply

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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