

**FEATURES**

- Single Output
- 2 Year Warranty
- 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.

<b>SPECIFICATIONS: PSSBU31 Series</b>					
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
<b>INPUT (V<sub>in</sub>)</b>					
Operating Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Input Current (Low Line)	I <sub>o</sub> = Full Load, V <sub>in</sub> = 115VAC			0.8	A
Input Current (High Line)	I <sub>o</sub> = Full Load, V <sub>in</sub> = 230VAC			0.5	A
Inrush Current (Low Line)	I <sub>o</sub> = Full Load, 25°C, Cool Start, V <sub>in</sub> = 115VAC		12	15	A
Inrush Current (High Line)	I <sub>o</sub> = Full Load, 25°C, Cool Start, V <sub>in</sub> = 230VAC		26	35	A
Safety Ground Leakage Current	I <sub>o</sub> = Full Load, V <sub>in</sub> = 240VAC		0.4	0.75	mA
Start-Up Time	I <sub>o</sub> = Full Load, V <sub>in</sub> = 100VAC			2	s
<b>OUTPUT (V<sub>o</sub>)</b>					
Output Voltage Range		See Table			
Load Regulation	V <sub>in</sub> = 230VAC		3	5	%
Line Regulation	I <sub>o</sub> = Full Load		0.5	1	%
Output Power	V <sub>in</sub> = 90 to 264VAC	0		30	W
Output Current Range		See Table			
Ripple & Noise (peak to peak)	Full Load, V <sub>in</sub> = 90VAC		0.5	1	%
Transient Response Time	I <sub>o</sub> = Full Load to Half Load, V <sub>in</sub> = 100VAC			4	ms
Hold-Up Time	I <sub>o</sub> = Full Load, V <sub>in</sub> = 110VAC	12			ms
<b>PROTECTION</b>					
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
<b>GENERAL</b>					
Efficiency	I <sub>o</sub> = Full Load, V <sub>in</sub> = 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 <sub>in</sub> = 240VAC			0.3	W
<b>ENVIRONMENTAL</b>					
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			
<b>PHYSICAL</b>					
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			
Warranty		2			Years
<b>SAFETY</b>					
EMI Requirements for CISPR-22	V <sub>in</sub> = 220VAC	B			Class
EMI Requirements for FCC PART-15	V <sub>in</sub> = 110VAC	B			Class

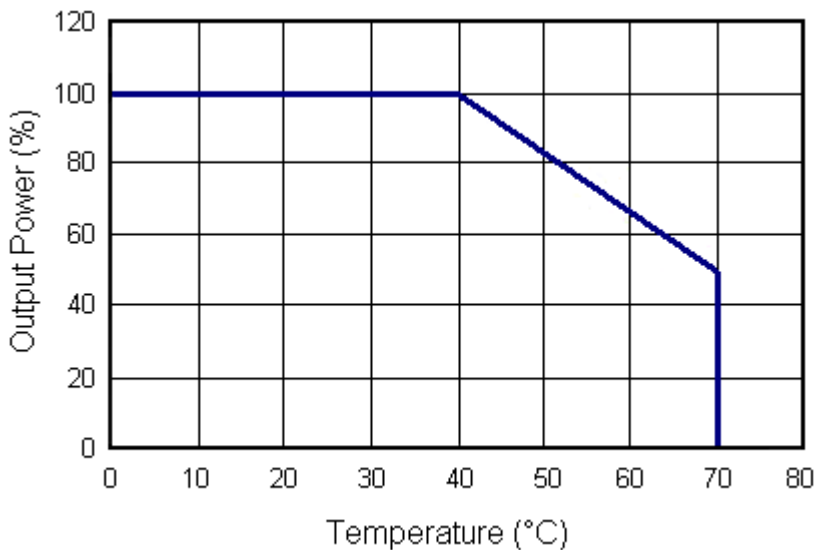
**MODEL SELECTION TABLE**

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**

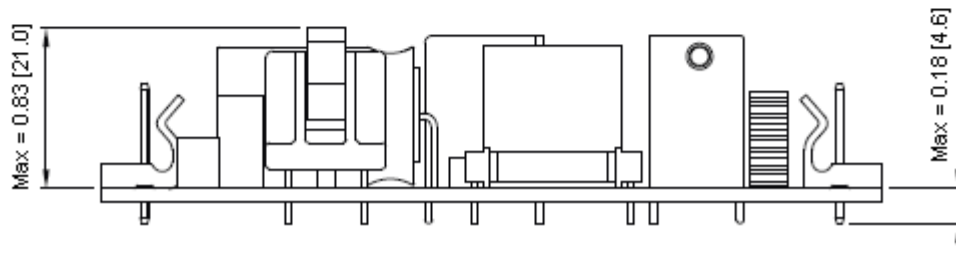
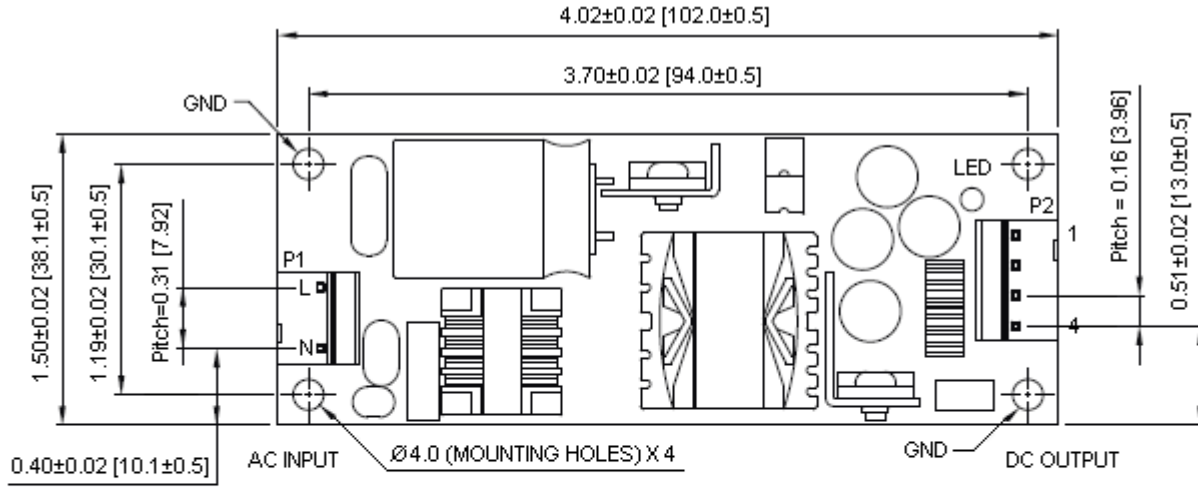
1. The output voltage is specified as a range (Ex: 40 ~ 48VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
2. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
3. Output connector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

**DERATING CURVE**



**MECHANICAL DRAWING**

Unit: inches [mm]



**NOTES:**

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