

**FEATURES**

- 100% Burn In
- Class I Insulation
- Internal EMI Filter
- Power Factor Correction
- Power Fail Detect (Optional)
- Wide Input Voltage Range: 90~264VAC
- Over Voltage Protection (Crowbar Design)
- Output Voltages Available from 3VDC thru 50VDC
- Input Surge Current, Over Voltage, and Over Load Protection



**DESCRIPTION**

The PSSBU120 series of AC/DC switching mode power supplies provides 120 Watts of continuous output power in a compact, open frame constructed design. This series has a universal input range with single, dual, or triple outputs. These units are ideally suited for use in CRT terminals, disc drive systems, microprocessor based systems, portable equipment, and many other applications. All models meet FCC Part-15 class B and CISPR-22 class B emission limits. These supplies also comply with UL/cUL (UL 60950), TUV/GS (EN 60950), and new CE requirements. All units are 100% burn-in tested.

<b>SPECIFICATIONS: PSSBU120 Series</b>					
<p style="color: red;">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.</p>					
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			1.7	A
Input Current (High Line)	I <sub>o</sub> = Full Load, V <sub>in</sub> = 230VAC			1.0	A
Inrush Current (Low Line)	I <sub>o</sub> = Full Load, 25°C, Cool Start, V <sub>in</sub> = 115VAC		16	20	A
Inrush Current (High Line)	I <sub>o</sub> = Full Load, 25°C, Cool Start, V <sub>in</sub> = 230VAC		46	51	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	0.3	1	2	s
<b>OUTPUT (V<sub>o</sub>)</b>					
Output Voltage Range		See Rating Chart			
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			120	W
Output Current Range		See Rating Chart			
*Ripple & Noise (peak to peak)	Full Load, V <sub>in</sub> = 90VAC		0.5	1	%
Transient Response	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	16			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	70	80	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
Power Factor Correction	I <sub>o</sub> = Full Load, V <sub>in</sub> = 90~260VAC	0.95	0.97	1.0	
<b>ENVIRONMENTAL</b>					
Operating Temperature	Derate linearly from 100% Load at 50°C to 50% load at 70°C	0		+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 350 ~ 428 grams			
Dimensions (L x W x H)		5.0 x 3.0 x 1.32 inches 127 x 76.2 x 33.6 mm			
<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
Safety	EN60950:A2				

\*Note: The Ripple & Noise for output voltages under 3.3VDC is 2% max.  
Due to advances in technology, specifications are subject to change without notice.

**MODEL SELECTION TABLES**

**SINGLE OUTPUT MODELS**

Model Number	Preset Voltage	Output Voltage Range	Output Current Range	Total Regulation	Max Output Power
PSSBU120-101	3 VDC	3 ~ 5 VDC	22.00 ~ 20.00A	5%	100W
PSSBU120-102	5 VDC	5 ~ 6 VDC	22.00 ~ 18.33A	5%	110W
PSSBU120-103	6 VDC	6 ~ 9 VDC	19.16 ~ 12.77A	5%	115W
PSSBU120-104	9 VDC	9 ~ 11 VDC	13.33 ~ 10.90A	4%	120W
PSSBU120-105	11 VDC	11 ~ 13 VDC	10.90 ~ 9.23A	3%	120W
PSSBU120-106	13 VDC	13 ~ 16 VDC	9.23 ~ 7.50A	3%	120W
PSSBU120-107	16 VDC	16 ~ 21 VDC	7.50 ~ 5.71A	3%	120W
PSSBU120-108	21 VDC	21 ~ 27 VDC	5.71 ~ 4.44A	2%	120W
PSSBU120-109	27 VDC	27 ~ 33 VDC	4.44 ~ 3.63A	2%	120W
PSSBU120-110	33 VDC	33 ~ 40 VDC	3.63 ~ 3.00A	2%	120W
PSSBU120-111	40 VDC	40 ~ 50 VDC	3.00 ~ 2.40A	2%	120W

**DUAL OUTPUT MODELS**

Model Number	Output #1				Output #2 (*Output #3 for PSSBU120-215 & 219)				Maximum Output Power
	Vo (nom)	Io (min)	Io (max)	Reg (max)	Vo (nom)	Io (min)	Io (max)	Reg (max)	
PSSBU120-200	+3.3 VDC	1.5A	15A	5%	+12 VDC	0.6A	6A	5%	120W
PSSBU120-201	+5 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	120W
PSSBU120-202	+5 VDC	1.5A	15A	5%	+15 VDC	0.6A	6A	5%	120W
PSSBU120-203	+5 VDC	1.5A	15A	5%	+24 VDC	0.4A	3.5A	5%	120W
PSSBU120-204	+3.3 VDC	1.5A	15A	5%	+5 VDC	0.8A	6A	5%	79.5W
*PSSBU120-215	+5 VDC	1.5A	15A	5%	-24 VDC	0.2A	2A	5%	120W
*PSSBU120-219	+28 VDC	0.4A	3.92A	5%	+5 VDC	0A	2A	5%	120W

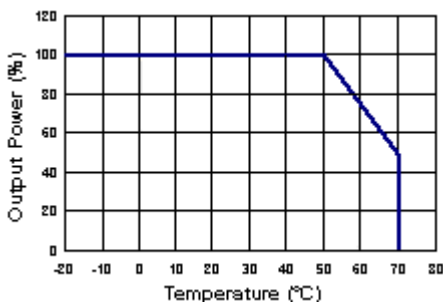
**TRIPLE OUTPUT MODELS**

Model Number	Output #1				Output #2				Output #3				Output Power
	Vo(nom)	Io(min)	Io(max)	Reg(max)	Vo(nom)	Io(min)	Io(max)	Reg(max)	Vo(nom)	Io(min)	Io(max)	Reg(max)	
PSSBU120-300	+3.3 VDC	1.5A	15A	5%	+12 VDC	0.6A	6A	5%	-12 VDC	0A	0.8A	5%	120W
PSSBU120-300-1	+3.3 VDC	1.5A	15A	5%	+12 VDC	0.6A	6A	5%	+12 VDC	0A	0.8A	5%	120W
PSSBU120-301	+5 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	-5 VDC	0A	0.8A	5%	120W
PSSBU120-301-1	+5 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	+5 VDC	0A	0.8A	5%	120W
PSSBU120-302	+5 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	-12 VDC	0A	0.8A	5%	120W
PSSBU120-302-1	+5 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	+12 VDC	0A	0.8A	5%	120W
PSSBU120-303	+5 VDC	1.5A	15A	5%	+15 VDC	1.0A	6A	5%	-15 VDC	0A	0.8A	5%	120W
PSSBU120-303-1	+5 VDC	1.5A	15A	5%	+15 VDC	1.0A	6A	5%	+15 VDC	0A	0.8A	5%	120W
PSSBU120-304	+5 VDC	1.5A	15A	5%	+24 VDC	0.45A	3.5A	5%	-24 VDC	0.25A	0.8A	5%	120W
PSSBU120-304-1	+5 VDC	1.5A	15A	5%	+24 VDC	0.45A	3.5A	5%	+24 VDC	0.25A	0.8A	5%	120W
PSSBU120-305	+5 VDC	1.5A	15A	5%	+24 VDC	0.4A	3.5A	5%	-12 VDC	0A	0.8A	5%	120W
PSSBU120-305-1	+5 VDC	1.5A	15A	5%	+24 VDC	0.4A	3.5A	5%	+12 VDC	0A	0.8A	5%	120W
PSSBU120-306	+3.3 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	-5 VDC	0A	0.8A	5%	120W
PSSBU120-306-1	+3.3 VDC	1.5A	15A	5%	+12 VDC	0.8A	6A	5%	+5 VDC	0A	0.8A	5%	120W
PSSBU120-307	+5 VDC	1.5A	15A	5%	+10 VDC	0.6A	6A	5%	-10 VDC	0A	1.0A	5%	120W
PSSBU120-307-1	+5 VDC	1.5A	15A	5%	+10 VDC	0.6A	6A	5%	+10 VDC	0A	1.0A	5%	120W
PSSBU120-308	+3.3 VDC	1.5A	15A	5%	+5 VDC	0.8A	6A	5%	-12 VDC	0A	1.0A	5%	91.5W
PSSBU120-308-1	+3.3 VDC	1.5A	15A	5%	+5 VDC	0.8A	6A	5%	+12 VDC	0A	1.0A	5%	91.5W

**NOTES**

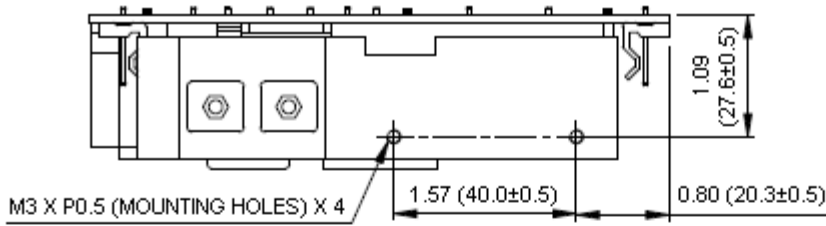
1. On single output models the output voltage is specified as a range (Ex: 40 ~ 50VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
2. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
3. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.

**DERATING CURVE**



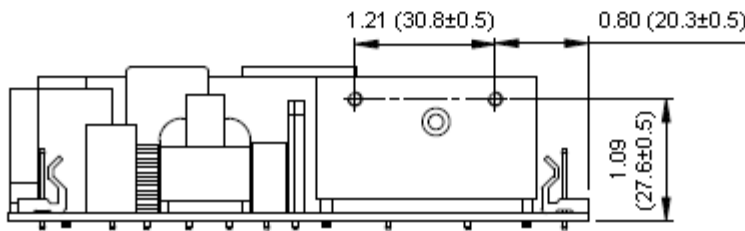
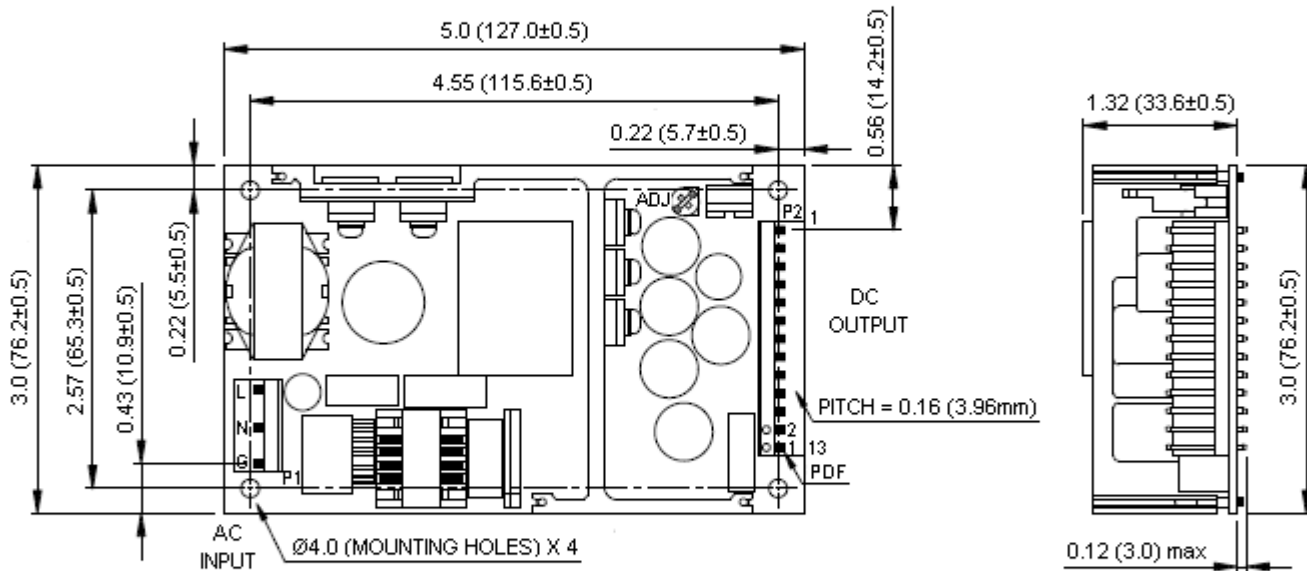
**MECHANICAL DRAWING**

Unit: inches (mm)



**NOTES:**

1. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
2. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.



PIN CONNECTIONS													
MODEL \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13 (optional)
PSSBU120-1XX-13PIN	OUT	OUT	OUT	OUT	OUT	OUT	RTN	RTN	RTN	RTN	RTN	RTN	PFD
PSSBU120-219-13PIN	N/C	N/C	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	PFD
PSSBU120-215-13PIN	N/C	N/C	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	PFD
PSSBU120-2XX-13PIN	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	N/C	COM	COM	PFD
PSSBU120-3XX-13PIN	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	PFD

Note: Vo1: Output#1    Vo2: Output#2    Vo3: Output#3