



Size:
5.00 x 3.21 x 1.38 inches
127.0 x 81.6 x 35.1 mm

Weight:
15oz (425g)

FEATURES

- Class I
- Single to Quad Outputs
- RoHS Compliant
- Internal EMI Filter
- Up to 63 Watts Output Power
- Power Fail Detect (Optional)
- Over Voltage and Over Current Protection
- Wide Input Voltage Range: 81~280VAC (90~420VDC)
- -20°C to +70°C Operating Temperature Range
- 3-Pin Screw Terminal Input Connector
- 2-Pin Screw Terminal Input Connector Available (See PSIUU61 Series)
- UL/cUL (UL 60950-1: 2nd Edition) & TUV/GS (EN 60950-1: 2nd Edition) Safety Approvals
- 100% Burn-in Tested

DESCRIPTION

The PSIUU60 series of Class I AC/DC switching mode power supplies provides up to 63 Watts of continuous output power in a 5.00" x 3.21" x 1.38" U-chassis package. This series has single, dual, triple, and quad output models with a wide input voltage range of 81~280VAC (90~420VDC). These power supplies have an internal EMI filter and are protected against over voltage and over current conditions. This series also has UL/cUL (UL 60950-1: 2nd edition) and TUV/GS (EN 60950-1: 2nd edition) safety approvals. These units are well suited for use in industrial equipment as well as many other applications. All models are 100% burn-in tested.

TECHNICAL SPECIFICATIONS: PSIUU60 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	Universal Input Voltage Range		90		264	VAC
			106		250	VDC
	Operating Input Voltage Range		81		280	VAC
			90		420	VDC
Input Frequency			47		63	Hz
Input Current	Vin = 100VAC or 160VDC, Io = full load			1.6		A
	Vin = 240VAC or 325VDC, Io = full load			0.8		
Inrush Current	Vin = 115VAC or 160VDC, Io = full load, 25°C, cold start				35	A
	Vin = 230VAC or 325VDC, Io = full load, 25°C, cold start				70	
No Load Power Consumption	Vin = 230VAC, Io = no load				2	W
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation	LL to HL, full load		0.5		1	%
Load Regulation	Vin = 230VAC or 325VDC		5		6	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise (peak to peak)	Vin = 85VAC or 100VDC, Io = full load				2	%
	Outputs under 3.3VDC Others				1	
Hold-up Time	Vin = 110VAC or 160VDC, Io = full load		16			ms
Start-up Time	Vin = 100VAC or 140VDC, Io = full load				2	s
Transient Response Time	Vin = 100VAC or 140VDC, Io = Full load to half load				5	ms
Temperature Coefficient	0~50°C		-0.05		+0.05	%/°C
PROTECTION						
Over Voltage Protection			112		132	%
Over Current Protection			110		150	%
GENERAL SPECIFICATIONS						
Efficiency	Vin = 230VAC or 325VDC, Io = full load		70		88	%
Dielectric Withstanding Voltage	Primary to Secondary		4242			VDC
	Primary to PE		2414			
Isolation Resistance	Test Voltage = 500VDC		50			MΩ
Leakage Current	Vin = 240VAC/60Hz				0.45	mA
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derating linearly from 100% Load at 50°C to 50% load at 70°C		-20		+70	°C
Storage Temperature			-40		+85	°C
Operating Humidity			0		95	%
Storage Humidity			0		95	%
Cooling			Free air convection			
MTBF	MIL-HDBK-217F, 25°C		100,000			hours
PHYSICAL SPECIFICATIONS						
Weight			15oz (425g)			
Dimensions (L x W x H)			5.00 x 3.21 x 1.38 inches (127.0 x 81.6 x 35.1 mm)			
Input Connector			Mates with screw terminal DINKLE#ESK750V-03P (10-24AWG)			
Output Connector			Mates with screw terminal DINKLE#ESK750V-05P (10-24AWG)			
SAFETY						
Safety Approvals			UL/cUL (UL 60950-1: 2nd edition); TUV/GS (EN 60950-1: 2nd edition)			

MODEL SELECTION TABLE
SINGLE OUTPUT MODELS

Model Number	Input Voltage Range	Output Voltage	Output Current	Total Regulation	Output Power
PSIUU60-101	81 ~ 280 VAC (90 ~ 420VDC)	3 ~ 5 VDC	16.66 ~ 10.00 A	5%	50W
PSIUU60-102		5 ~ 6 VDC	11.00 ~ 9.16 A	5%	55W
PSIUU60-103		6 ~ 8 VDC	10.00 ~ 7.50 A	5%	60W
PSIUU60-104		8 ~ 11 VDC	7.87 ~ 5.72 A	3%	63W
PSIUU60-105		11 ~ 13 VDC	5.72 ~ 4.84 A	3%	63W
PSIUU60-105-1		11 ~ 13 VDC	4.09 ~ 3.46 A	3%	45W
PSIUU60-106		13 ~ 16 VDC	4.84 ~ 3.93 A	3%	63W
PSIUU60-107		16 ~ 21 VDC	3.93 ~ 3.00 A	3%	63W
PSIUU60-108		21 ~ 27 VDC	3.00 ~ 2.33 A	2%	63W
PSIUU60-109		27 ~ 33 VDC	2.33 ~ 1.90 A	2%	63W
PSIUU60-110		33 ~ 40 VDC	1.90 ~ 1.57 A	2%	63W
PSIUU60-111		40 ~ 48 VDC	1.57 ~ 1.31 A	2%	63W

DUAL OUTPUT MODELS

Model Number	Output #1				Output #2				Output Power
	Vo (nom)	Io (min)	Io (max)	Reg (max)	Vo (nom)	Io (min)	Io (max)	Reg (max)	
PSIUU60-200	+3.3 VDC	1.4A	7A	6%	+12 VDC	0.6A	3A	5%	59.1W
PSIUU60-201	+5 VDC	0.7A	7A	5%	+12 VDC	0.3A	3A	5%	63W
PSIUU60-202	+5 VDC	0.7A	7A	5%	+15 VDC	0.3A	3A	5%	63W
PSIUU60-203	+5 VDC	0.7A	7A	5%	+24 VDC	0.4A	2A	5%	63W
PSIUU60-204	+3.3 VDC	1.4A	7A	6%	+5 VDC	0.5A	5A	5%	48.1W
PSIUU60-215	+5 VDC	1.4A	7A	5%	-24 VDC	0.2A	2A	5%	63W

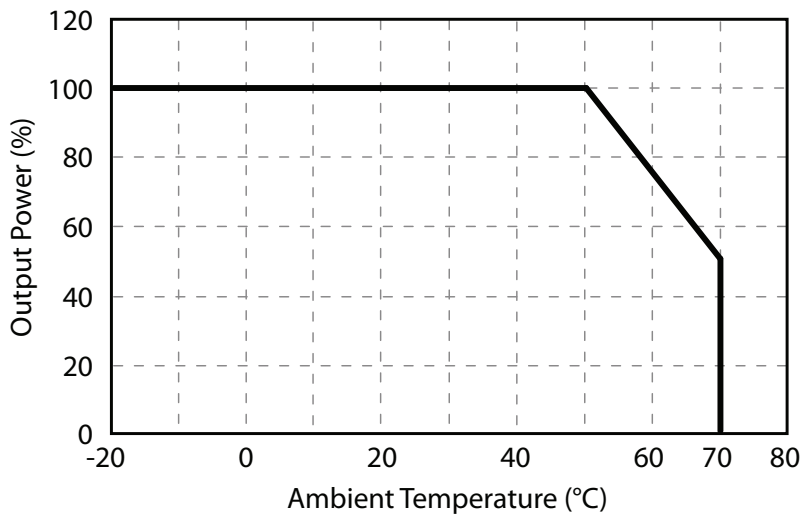
TRIPLE OUTPUT MODELS

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)	
PSIUU60-300	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU60-300-1	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU60-301	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-301-1	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU60-302	+5 VDC	0.6A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU60-302-1	+5 VDC	0.6A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU60-303	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	-15 VDC	0A	0.8A	5%	63W
PSIUU60-303-1	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	+15 VDC	0A	0.8A	5%	63W
PSIUU60-305	+5 VDC	1.2A	6A	5%	+24 VDC	0.4A	2A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU60-305-1	+5 VDC	1.2A	6A	5%	+24 VDC	0.4A	2A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU60-306	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	-5 VDC	0A	0.8A	5%	59.8W
PSIUU60-306-1	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	+5 VDC	0A	0.8A	5%	59.8W
PSIUU60-308	+3.3 VDC	0.5A	5A	6%	+5 VDC	0.5A	5A	5%	-12 VDC	0A	1A	5%	53.5W
PSIUU60-308-1	+3.3 VDC	0.5A	5A	6%	+5 VDC	0.5A	5A	5%	+12 VDC	0A	1A	5%	53.5W

QUAD OUTPUT MODELS

Model Number	Output #1				Output #2				Output #3				Output #4				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)	Vo(nom)	Io(min)	Io(max)	Reg(max)	
PSIUU60-400	+3.3VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-400-1	+3.3VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU60-400-2	+3.3VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-400-3	+3.3VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU60-401	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	-12 VDC	0A	0.8A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-401-1	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	-12 VDC	0A	0.8A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU60-401-2	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	+12 VDC	0A	0.8A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-401-3	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	+12 VDC	0A	0.8A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU60-402	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU60-402-1	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU60-402-2	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU60-402-3	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU60-403	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	-24VDC	0A	0.8A	5%	63W
PSIUU60-403-1	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	+24VDC	0A	0.8A	5%	63W
PSIUU60-403-2	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	-24 VDC	0A	0.8A	5%	63W
PSIUU60-403-3	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	+24VDC	0A	0.8A	5%	63W
PSIUU60-404	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	-15 VDC	0A	0.8A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-404-1	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	-15 VDC	0A	0.8A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU60-404-2	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	+15 VDC	0A	0.8A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU60-404-3	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	+15 VDC	0A	0.8A	5%	+5 VDC	0A	0.8A	5%	63W

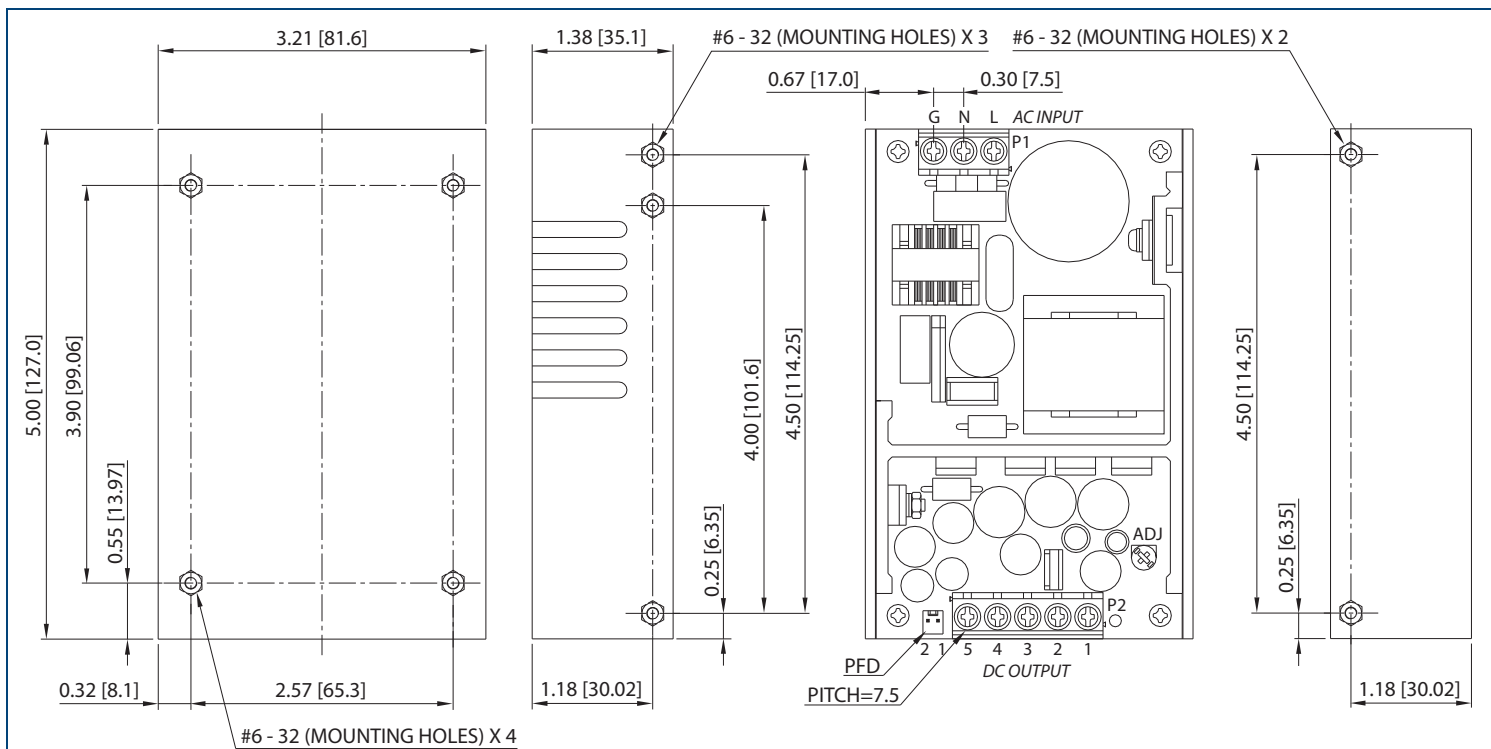
DERATING



Notes

1. Operating Temperature: -20°C to + 70°C
2. Derating linearly from 100% load at 50°C to 50% load at 70°C

MECHANICAL DRAWING



PIN CONNECTIONS					
MODEL \ PIN	1	2	3	4	5
PSIUU60-1XX	OUT	OUT	RTN	RTN	RTN
PSIUU60-2XX	Vo ₂	Vo ₁	COM	N/C	N/C
PSIUU60-215	N/C	Vo ₁	COM	Vo ₂	N/C
PSIUU60-3XX	Vo ₂	Vo ₁	COM	Vo ₃	N/C
PSIUU60-4XX	Vo ₂	Vo ₁	COM	Vo ₃	Vo ₄

PFD (Optional)	
1	2
OUT	RTN
OUT	RTN
OUT	RTN
OUT	RTN
OUT	RTN

NOTES

1. Unit: Inches [mm]
2. Tolerance: ±0.02 [±0.5]
3. Weight: 15oz (425g)
4. Input connector mates with screw terminal DINKLE#ESK750V-03P (10-24AWG)
5. Output connector mates with screw terminal DINKLE#ESK750V-05P (10-24AWG)
6. 2-pin screw terminal input connector also available (See PSUU61 Series)
7. All dimensions are for reference only

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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