



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
- 2-Pin Input Connector
- 3-Pin Input Connector Available (See PSIUU62 Series)
- UL/cUL (UL 60950-1: 2nd Edition) & TUV/GS (EN 60950-1: 2nd Edition) Safety Approvals
- 100% Burn-in Tested

DESCRIPTION

The PSIUU63 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: PSIUU63 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	Outputs under 3.3VDC		2	%
		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 Molex housing 09-52-4034 and Molex 2478 series crimp terminal			
Output Connector		Mates with Molex housing 09-52-4084 and Molex 2478 series crimp terminal			
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
PSIUU63-101	81 ~ 280 VAC (90 ~ 420VDC)	3 ~ 5 VDC	16.66 ~ 10.00 A	5%	50W
PSIUU63-102		5 ~ 6 VDC	11.00 ~ 9.16 A	5%	55W
PSIUU63-103		6 ~ 8 VDC	10.00 ~ 7.50 A	5%	60W
PSIUU63-104		8 ~ 11 VDC	7.87 ~ 5.72 A	3%	63W
PSIUU63-105		11 ~ 13 VDC	5.72 ~ 4.84 A	3%	63W
PSIUU63-105-1		11 ~ 13 VDC	4.09 ~ 3.46 A	3%	45W
PSIUU63-106		13 ~ 16 VDC	4.84 ~ 3.93 A	3%	63W
PSIUU63-107		16 ~ 21 VDC	3.93 ~ 3.00 A	3%	63W
PSIUU63-108		21 ~ 27 VDC	3.00 ~ 2.33 A	2%	63W
PSIUU63-109		27 ~ 33 VDC	2.33 ~ 1.90 A	2%	63W
PSIUU63-110		33 ~ 40 VDC	1.90 ~ 1.57 A	2%	63W
PSIUU63-111	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)	
PSIUU63-200	+3.3 VDC	1.4A	7A	6%	+12 VDC	0.6A	3A	5%	59.1W
PSIUU63-201	+5 VDC	0.7A	7A	5%	+12 VDC	0.3A	3A	5%	63W
PSIUU63-202	+5 VDC	0.7A	7A	5%	+15 VDC	0.3A	3A	5%	63W
PSIUU63-203	+5 VDC	0.7A	7A	5%	+24 VDC	0.4A	2A	5%	63W
PSIUU63-204	+3.3 VDC	1.4A	7A	6%	+5 VDC	0.5A	5A	5%	48.1W
PSIUU63-215	+5 VDC	1.4A	7A	5%	-24 VDC	0.2A	2A	5%	63W

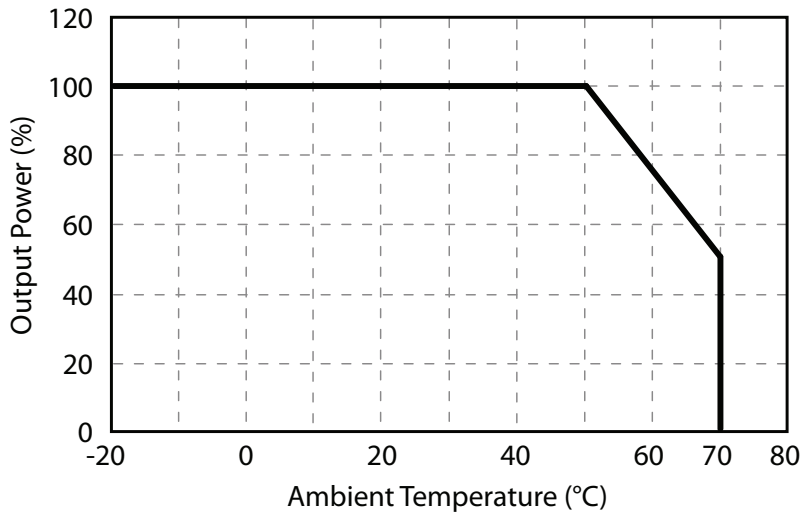
TRIPLE OUTPUT MODELS

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)	
PSIUU63-300	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU63-300-1	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU63-301	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	-5 VDC	0A	0.8A	5%	63W
PSIUU63-301-1	+5 VDC	0.6A	6A	5%	+12 VDC	0.3A	3A	5%	+5 VDC	0A	0.8A	5%	63W
PSIUU63-302	+5 VDC	0.6A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU63-302-1	+5 VDC	0.6A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU63-303	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	-15 VDC	0A	0.8A	5%	63W
PSIUU63-303-1	+5 VDC	0.6A	6A	5%	+15 VDC	0.3A	3A	5%	+15 VDC	0A	0.8A	5%	63W
PSIUU63-305	+5 VDC	1.2A	6A	5%	+24 VDC	0.4A	2A	5%	-12 VDC	0A	0.8A	5%	63W
PSIUU63-305-1	+5 VDC	1.2A	6A	5%	+24 VDC	0.4A	2A	5%	+12 VDC	0A	0.8A	5%	63W
PSIUU63-306	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	-5 VDC	0A	0.8A	5%	59.8W
PSIUU63-306-1	+3.3 VDC	1.2A	6A	6%	+12 VDC	0.6A	3A	5%	+5 VDC	0A	0.8A	5%	59.8W
PSIUU63-308	+3.3 VDC	0.5A	5A	6%	+5 VDC	0.5A	5A	5%	-12 VDC	0A	1A	5%	53.5W
PSIUU63-308-1	+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)	
PSIUU63-400	+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
PSIUU63-400-1	+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
PSIUU63-400-2	+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
PSIUU63-400-3	+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
PSIUU63-401	+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
PSIUU63-401-1	+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
PSIUU63-401-2	+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
PSIUU63-401-3	+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
PSIUU63-402	+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
PSIUU63-402-1	+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
PSIUU63-402-2	+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
PSIUU63-402-3	+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
PSIUU63-403	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	-24VDC	0A	0.8A	5%	63W
PSIUU63-403-1	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	-12 VDC	0A	0.8A	5%	+24VDC	0A	0.8A	5%	63W
PSIUU63-403-2	+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
PSIUU63-403-3	+5 VDC	1.2A	6A	5%	+12 VDC	0.6A	3A	5%	+12 VDC	0A	0.8A	5%	+24VDC	0A	0.8A	5%	63W
PSIUU63-404	+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
PSIUU63-404-1	+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
PSIUU63-404-2	+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
PSIUU63-404-3	+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

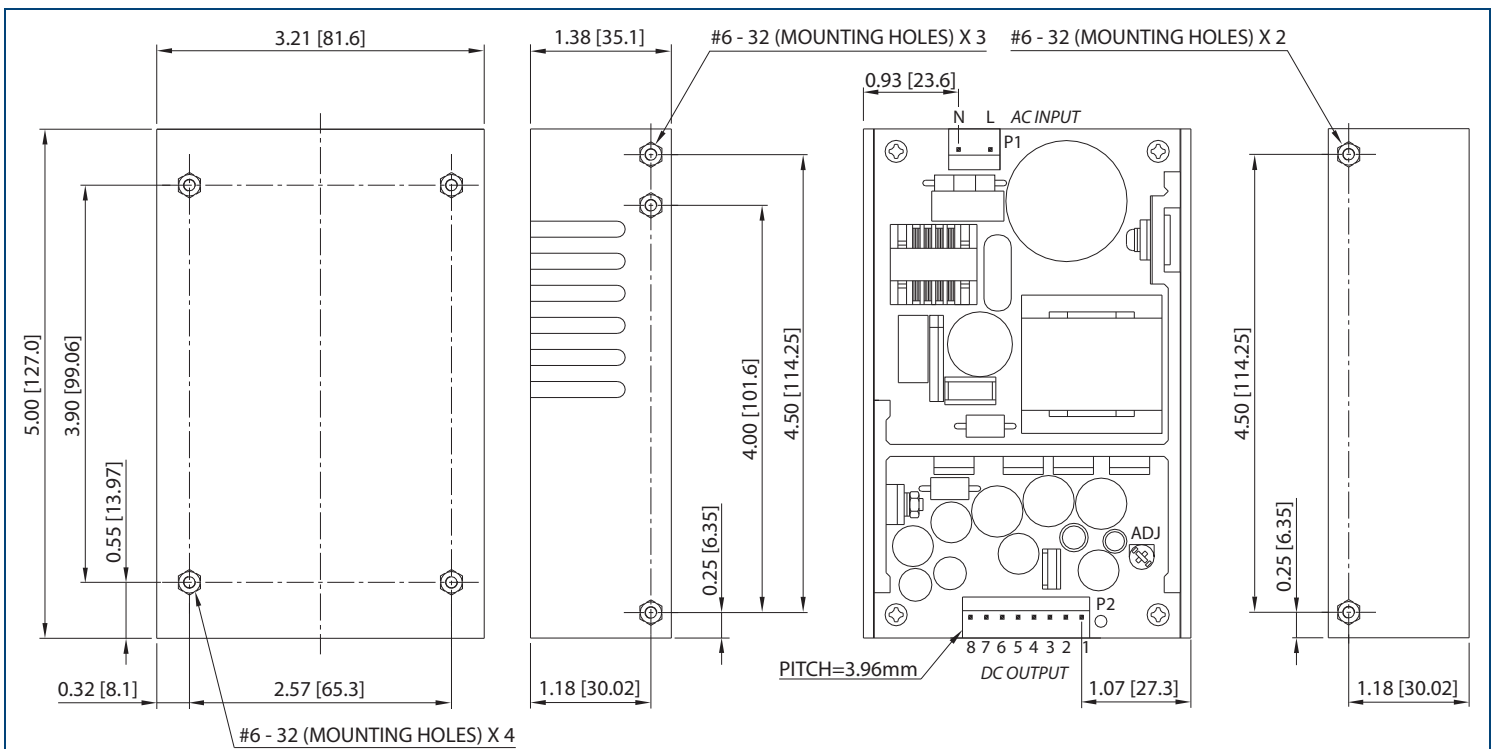
DERATING



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	6	7	8 (Optional)
PSIUU63-1XX	OUT	OUT	OUT	RTN	RTN	RTN	RTN	PFD
PSIUU63-2XX	Vo ₂	Vo ₁	Vo ₁	COM	COM	N/C	N/C	PFD
PSIUU63-215	N/C	Vo ₁	Vo ₁	COM	COM	Vo ₂	N/C	PFD
PSIUU63-3XX	Vo ₂	Vo ₁	Vo ₁	COM	COM	Vo ₃	N/C	PFD
PSIUU63-4XX	Vo ₂	Vo ₁	Vo ₁	COM	COM	Vo ₃	Vo ₄	PFD

NOTES

1. Unit: Inches [mm]
2. Tolerance: ±0.02 [±0.5]
3. Weight: 15oz (425g)
4. Input connector mates with Molex housing 09-52-4034 and Molex 2478 series crimp terminal
5. Output connector mates Molex housing 09-52-4084 and Molex 2478 series crimp terminal.
6. 3-pin input connector also available (See PSIUU62 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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