Size:
4.65 x 1.85 x 1.19 inches
118.0 x 47.0 x 30.3 mm

Weight: 2oz (340g)

Applications:
- POS Systems
- AV Equipment
- Industrial PCs
- Chargers
- LED Lighting Applications

FEATURES

- Class I
- RoHS2 Compliant
- 60 Watts Output Power
- Up to 88% High Efficiency
- Energy Star 2.0, Efficiency Level VI
- 90-264VAC Input Voltage Range
- Free Air Convection
- Single Outputs Ranging from 12VDC to 48 VDC
- UL 60950-1:2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013 Safety Approvals
- -40°C to +70°C Operating Temperature Range
- IEC-320-C14 AC Inlet Connector
- Optional Output Connectors Available

SAFETY

DESCRIPTION

The DTAPU60 series of AC/DC desktop power supplies provides 60 Watts of continuous output power in a 4.65 x 1.85 x 1.19 inch package. This series consists of single output models ranging from 12VDC to 48VDC with a 90~264VAC input voltage range and an IEC-320-C14 AC inlet connector. Some features include high efficiency up to 88%, -40°C to +70°C operating temperature range, and short circuit and over current protection. All units are UL 94V-1, RoHS2, and CEC & Energy Star Level VI compliant. This series also meets FCC Part-15 class B and CISPR-22 class B emission limits. All models meet new CE requirements and have UL 60950-1:2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013 safety approvals. All units have been 100% burn-in tested.

MODEL SELECTION TABLE

Model Number (1)	Input Voltage Range	Output Voltage		Output Current		Output Power	Typical Efficiency	Ripple & Noise	Total Regulation
		Min	Max	Min	Max				
DTAPU60A-105	90 ~ 264VAC	12 VDC	13 VDC	4.61 A	5.00 A	60W	87.7%	100mVp-p	5%
DTAPU60A-106		13 VDC	16 VDC	3.75 A	4.61 A	60W	87.7%	100mVp-p	5%
DTAPU60A-107		16 VDC	21 VDC	2.85 A	3.75 A	60W	87.7%	100mVp-p	5%
DTAPU60A-108		21 VDC	27 VDC	2.22 A	2.85 A	60W	88%	100mVp-p	3%
DTAPU60A-109		27 VDC	33 VDC	1.81 A	2.22 A	60W	88%	100mVp-p	3%
DTAPU60A-110		33 VDC	40 VDC	1.50 A	1.81 A	60W	88%	100mVp-p	3%
DTAPU60A-111		40 VDC	48 VDC	1.25 A	1.50 A	60W	88%	100mVp-p	3%

TECHNICAL SPECIFICATIONS: DTAPU60 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.

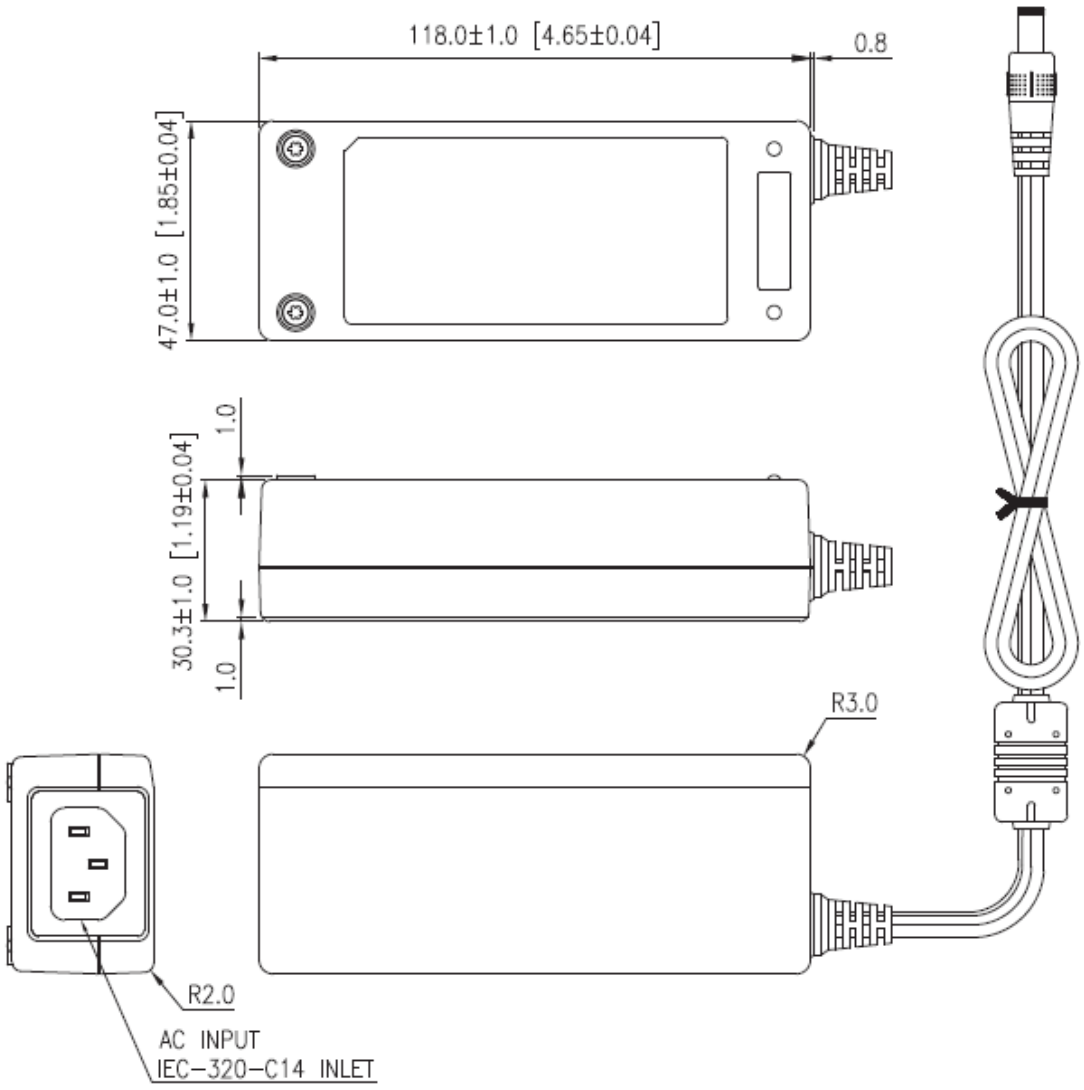
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage	Safety Approvals Input Voltage Range	100		240	VAC
	Operating Input Voltage Range	90		264	
Input Frequency		47		63	Hz
Input Current	Low Line; 100VAC, full load			1.45	A
	High Line; 240VAC, full load			1.45	
High Line Inrush Current	230VAC, full load, 25°C, cold start			105	A
No Load Power Consumption	230VAC, no load			0.5	W
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Line Regulation	Full Load, Vin=100~120VAC	0.5		1	%
Load Regulation	Vin=230VAC, 10~90% Load Change at Condition	3		5	%
Output Power				60	W
Output Current		See Table			
Ripple & Noise (20MHz BW)	90VAC, full load		100		mVp-p
Hold-up Time	100VAC, full load	10			ms
Start-up Time	100~240VAC, full load			3	s
Transient Response Time	110VAC, Full load			4	ms
Temperature Coefficient	Full Load, Vin=100~240VAC	-0.04		+0.04	%/°C
No Load Consumption			0.21		W
PROTECTION					
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Short Circuit Protection		Automatic Recovery			
GENERAL SPECIFICATIONS					
Efficiency	230 VAC, full load	87			%
Dielectric Withstanding Voltage	Primary to Secondary			4242	VDC
	Primary to PE			2652	
Isolation Resistance	Test Voltage = 500VDC	50			MΩ
Leakage Current	240VAC/60Hz			0.75	mA
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derating linearly from 100% Load at 40°C to 50% load at 70°C	-40		+70	°C
Storage Temperature	10~95%RH	-40		+85	°C
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Cooling		Free air convection			
Flammability Rating		UL94V-1			
Electro Static Discharge	Air Discharge, IEC61000-4-2			8	kV
	Contact Discharge, IEC61000-4-2			6	
Operating Altitude				2000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X, Y, Z axes			5	G
Surge Voltage	Line-Neutral			1	kV
	Line-PE & Neutral-PE			2	
MTBF	MIL-HDBK-217F, 25°C	100,000			hours
PHYSICAL SPECIFICATIONS					
Weight		12oz (340g)			
Dimensions (L x W x H)		4.65 x 1.85 x 1.19 in (118.0 x 47.0 x 30.3 mm)			
AC Inlet		IEC-320-C14			
Output Connector		Several options available			
SAFETY, EMC, & COMPLIANCE					
Safety Approvals	UL60950-1: 2nd Edition IEC 60950-1:2005/A2:2013 EN60950-1:2006/A2:2013				
Compliance		RoHS2			
CEC & Energy Star		CEC and Energy Star 2.0, Efficiency Level VI			

NOTES

1. The output voltage is specified as a range (ex: 40~48VDC); the customer must specify what they would like the output voltage set at.
2. DTAPU60A-105 need to use AWG#16/4FT output cable in order to meet all listed specifications.
   Models DTAPU60A-106~111 need to use AWG#18/4FT output cable in order to meet all listed specifications.
   The specifications will change if a different output cable is used.
3. Optional output connectors are available for this series. Please call factory for ordering details.
4. At factory, each output is checked to be within voltage accuracy in 60% rated load condition.
5. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
6. Load regulation is defined by changing ±40% of measured output load from 60% rated load
7. Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
8. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.

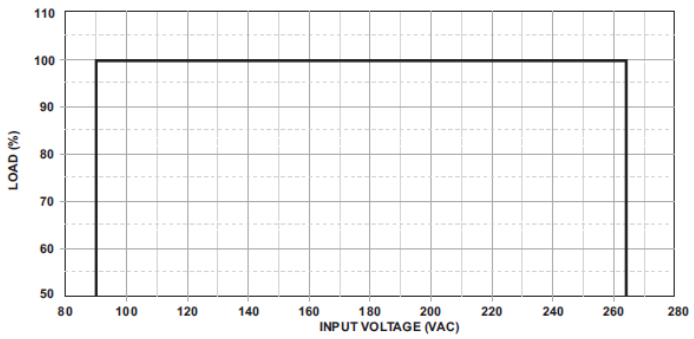
Due to advances in technology, specifications are subject to change without notice.

MECHANICAL DRAWING

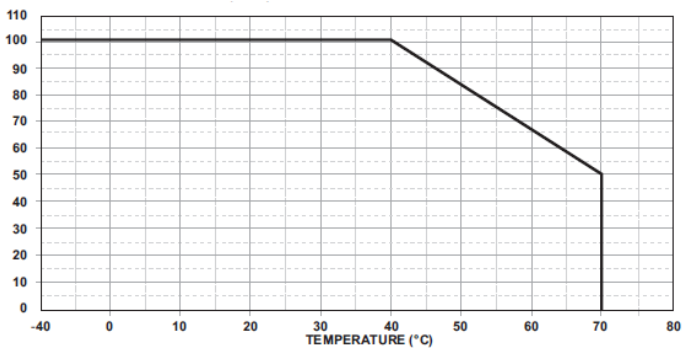


DERATING

Input Voltage Derating Curve



Temperature Derating Curve



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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