



Economy Version



Size: 4.65in x 1.85in x 1.19in (118.0mm x 47.0mm x 30.3mm)

OPTIONS

- Output Connectors
- Output Voltage

FEATURES

- Wide Operating Input Voltage 90~264VAC, 47-63Hz
- IEC-320-C14 Input Inlet
- Optional Output Connectors Available
- Single Output
- Level VI Compliant
- RoHS Compliant
- 1 Year Warranty
- Class I
- Useful in Variety of Applications
- Over Current and Short Circuit Protection
- UL/c-UL (UL 60950-1:2nd Edition) and TUV/GS (EN 60950-1:2nd Edition)
- High Efficiency of 88%
- Cooling by Free Air Convection

APPLICATIONS

- POS System
- AV Equipment
- Industrial PC
- Note PC
- Charger
- LED Lighting

DESCRIPTION

The DTEPU60A series of AC DC desktop power supplies offers up to 60 watts of output power in a 4.65" x 1.85" x 1.19" package. This series offers single output models with output voltages ranging from 12~48VDC and a wide input voltage range of 90~264VAC. Each model is both Energy Efficiency Level VI and RoHS compliant and has high efficiency of 88%. Each model is also protected against over current and short circuit conditions and has UL/c-UL (UL 60950-1:2nd Edition) and TUV/GS (EN60950-1:2nd Edition) safety approvals.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise ⁽⁶⁾	Total Regulation	Output Power	Efficiency ⁽⁸⁾
DTEPU60A-105	90~264VAC	12~13VDC	4.61~5.00A	100mVp-p	±5%	60W	88%
DTEPU60A-106		13~16VDC	3.75~4.61A		±5%	60W	
DTEPU60A-107		16~21VDC	2.85~3.75A		±5%	60W	
DTEPU60A-108		21~27VDC	2.22~2.85A		±3%	60W	
DTEPU60A-109		27~33VDC	1.81~2.22A		±3%	60W	
DTEPU60A-110		33~40VDC	1.50~1.81A		±2%	60W	
DTEPU60A-111		40~48VDC	1.25~1.50A		±2%	60W	

SPECIFICATIONS						
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 Range	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		264	
Input Frequency			47		63	Hz
Input Current	Low Line	Io=Full Load, Vin=100VAC			1.3	A
	High Line	Io=Full Load, Vin=240VAC			0.75	
Inrush Current	Low Line	Io=Full Load, 25°C, Cool Start, Vin=100VAC	50		55	A
	High Line	Io=Full Load, 25°C, Cool Start, Vin=240VAC	100		110	
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation ⁽⁴⁾	Io=Full Load Vin=100~120VAC		0.5		1	%
Load Regulation ⁽⁵⁾	Vin=230VAC, 10~90% Load Change at Condition		4		5	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise (20MHz BW) ⁽⁶⁾	Full Load, Vin=90VAC			100		mVp-p
Transient Response Time	Io=Full Load, Vin=100VAC				4	mS
Start-Up Time	Io=Full Load, Vin=100~240VAC				3	S
Hold-Up Time	Io=Full Load, Vin=100VAC		10			mS
Temperature Coefficient	Full Load, Vin=100~240VAC				±0.04	%/°C
No Load Power Consumption	No Load, Vin=230VAC				0.21	W
PROTECTION						
Over Load Protection	Recovers automatically after fault condition is removed		110		150	%
Short Circuit Protection	Automatic Recovery					
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derate linearly from 100% load at 40°C		0		70	°C
Storage Temperature	10~95%RH		-40		85	°C
Operating Humidity	Non-Condensing		0		95	%
Storage Humidity			0		95	%
Electro Static Discharge	Air Discharge, IEC61000-4-2				8	kV
	Contact Discharge, IEC61000-4-2				6	
Operating Altitude (Elevation)	All Conditions				3000	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	
Cooling			Free Air Convection			
Flammability Rating			UL94V-1			
MTBF	Operating Temperature at 25°C, calculated per MIL-HDBK-217F		100,000			Hours
GENERAL SPECIFICATIONS						
Efficiency ⁽⁸⁾	Io=Full Load, Vin=230VAC			88		%
Safety Ground Leakage Current	Vin=240VAC/60Hz				0.75	mA
Dielectric Withstanding Voltage	Primary to Secondary				4242	VDC
	Primary to PE				2652	
Isolation Resistance	Test Voltage=500VDC		50			MΩ
PHYSICAL SPECIFICATIONS						
Weight			11.99oz (340g)			
Dimensions (L x W x H)			4.65in x 1.85in x 1.19in (118mm x 47mm x 30.3mm)			
SAFETY & EMC CHARACTERISTICS						
Safety Approvals	UL/c-UL (UL 60950-1: 2 nd Edition) ⁽⁹⁾ TUV/GS (EN 60950-1: 2 nd Edition)					
EMC Emission	Compliance to EN55022 (CISPR22)					Class B
Protection Classes			Class I			

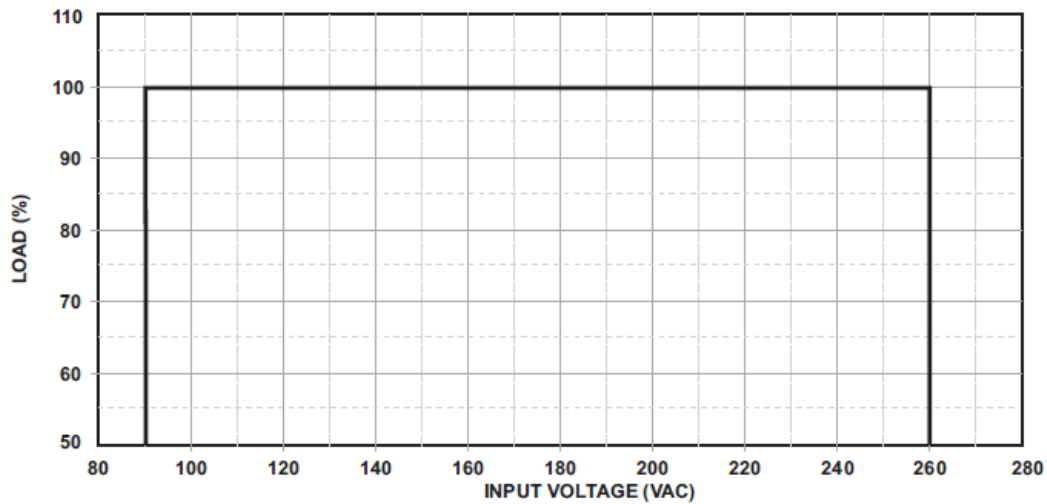
NOTES

- (1) DTEPU60A-105~110 are required to use AWG#18/4FT output cable.
DTEPU60A-111 is required to use AWG#20/4FT output cable.
The electrical characteristics will be changed by modified output cable.
- (2) Output can provide up to peak load when the power supply starts up. Staying in more than rated load continually is not allowed.
- (3) Each output is checked to be within voltage accuracy in 60% rated load condition.
- (4) Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- (5) Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load.
- (6) Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with 0.47 μ F capacitor at rated load and nominal line.
- (7) Hold up time is measured from 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.
- (8) Efficiency is measured at rated load, and nominal line.
- (9) This product is Listed to applicable standards and requirements by UL.

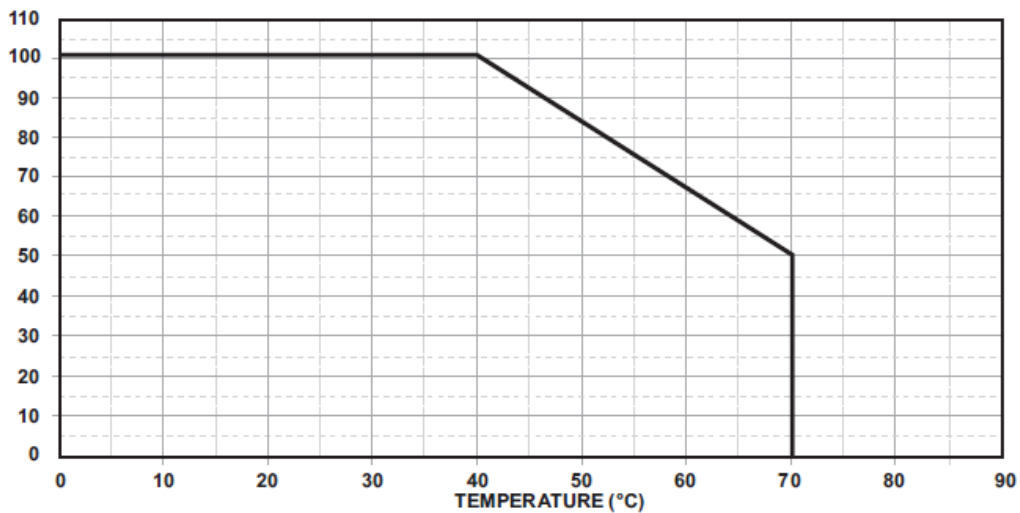
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

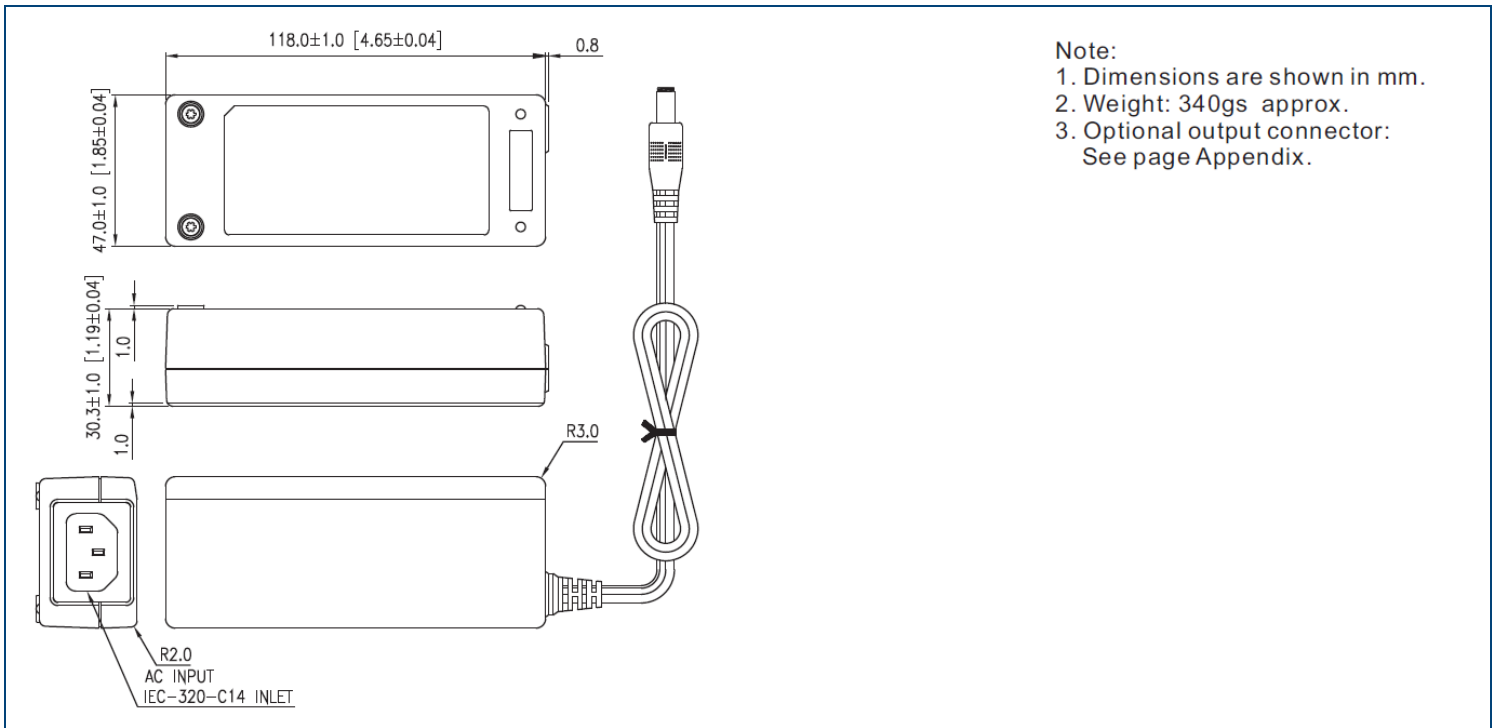
Input Voltage Derating Curve



Temperature Derating Curve



MECHANICAL DRAWINGS



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: 2015 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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