



Economy Version



Size: 4.21in x 1.85in x 1.19in (107mm x 47mm x 30mm)

OPTIONS

- Output Connector
- Output Voltage

FEATURES

- Wide Operating Voltage of 90~264VAC
- IEC-320-C14 Input Inlet
- Optional Output Connectors Available
- Single Outputs
- Class I System
- Energy Efficiency Level VI
- RoHS Compliant
- Over Current and Short Circuit Protection
- High Efficiency of 84~90%
- 1 Year Warranty

APPLICATIONS

- Ethernet Hub
- Portable Devices
- Charger
- Monitor
- Set-top Box
- AV Equipment

DESCRIPTION

The DTEPU40A series of AC DC desktop power supplies offers up to 40 watts of output power in a 4.2" x 1.85" x 1.19" package. This series offers single output models with output voltages ranging from 5~48VDC 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 84~90%. Each model is also protected against both 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 ⁽⁷⁾	No Load Power Consumption	Output Power	Total Regulation	Efficiency
DTEPU40A-102	90~264VAC	5~5.99VDC	5.00A	100mVp-p	0.1 Watts	30W	±5%	89~95%
DTEPU40A-103		6.5~8VDC	3.75~4.61A			30W	±5%	
DTEPU40A-104		8~11VDC	3.18~4.38A			35W	±5%	
DTEPU40A-105		11~13VDC	3.07~3.64A			40W	±5%	
DTEPU40A-106		13~16VDC	2.50~3.07A			40W	±5%	
DTEPU40A-107		16~21VDC	1.90~2.50A			40W	±5%	
DTEPU40A-108		21~27VDC	1.48~1.90A			40W	±3%	
DTEPU40A-109		27~33VDC	1.21~1.48A			40W	±3%	
DTEPU40A-110		33~40VDC	1.00~1.21A			40W	±2%	
DTEPU40A-111		40~48VDC	0.83~1.00A			40W	±2%	

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		Sine Wave	47		63	Hz		
Input Current	Low Line	Io=Full Load, Vin=100VAC			0.9	A		
	High Line	Io=Full Load, Vin=240VAC			0.52			
Inrush Current	Low Line	Io=Full Load, 25°C, Cool Start, Vin=115VAC	40		50	A		
	High Line	Io=Full Load, 25°C, Cool Start, Vin=230VAC	80		100			
OUTPUT SPECIFICATIONS								
Output Voltage			See Table					
Line Regulation ⁽⁵⁾		Full Load, Vin=100VAC	0.5		1	%		
Load Regulation ⁽⁶⁾		Vin=230VAC, 10~90% Load Change at Condition	4		5	%		
Output Power			See Table					
Output Current			See Table					
Ripple & Noise (20MHz BW) ⁽⁷⁾		Rated Load and Nominal Line		100		mVp-p		
Hold-Up Time ⁽⁸⁾		Io=Full Load, Vin=110VAC	8			mS		
Start-Up Time		Io=Full Load, Vin=100VAC			3	S		
Temperature Coefficient		All Outputs			±0.04	%/°C		
No Load Power Consumption		No Load, Vin=230VAC			0.1	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 to 50% load at 70°C	0		70	°C		
Storage Temperature		10~95% RH	-40		85	°C		
Operating Humidity		Non-condensing	0		95	%RH		
Storage Humidity			0		95	%RH		
Electro Static Discharge		Air Discharge, IEC61000-4-5			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			
MTBF		Operating Temperature at 25°C, calculated per MIL-HDBK-217F	100,000			hours		
Cooling			Free Air Convection					
Flammability Rating			UL94V-1					
GENERAL SPECIFICATIONS								
Efficiency ⁽⁹⁾		Io=Full Load, Vin=230VAC	84		90	%		
Dielectric Withstanding Voltage		Primary to Secondary	4242			VDC		
		Primary to PE	2550					
Isolation Resistance		Test Voltage=500VDC	50			MΩ		
Safety Ground Leakage Current		Vin=240VAC/60Hz			0.75	mA		
PHYSICAL SPECIFICATIONS								
Weight			9.35-9.88oz (265-280g)					
Dimensions (L x W x H)			4.21in x 1.85in x 1.19in (107mm x 47mm x 30mm)					
SAFETY & EMC CHARACTERISTICS								
Safety Approvals ⁽²⁾		UL/c-UL (UL 60950-1: 2 nd Edition) ⁽¹⁰⁾ TUV/GS (EN 60950-1: 2 nd Edition)						
EMC Emission		Compliance to EN55022 (CISPR22)		B Class				
Protection Classes		Class I						

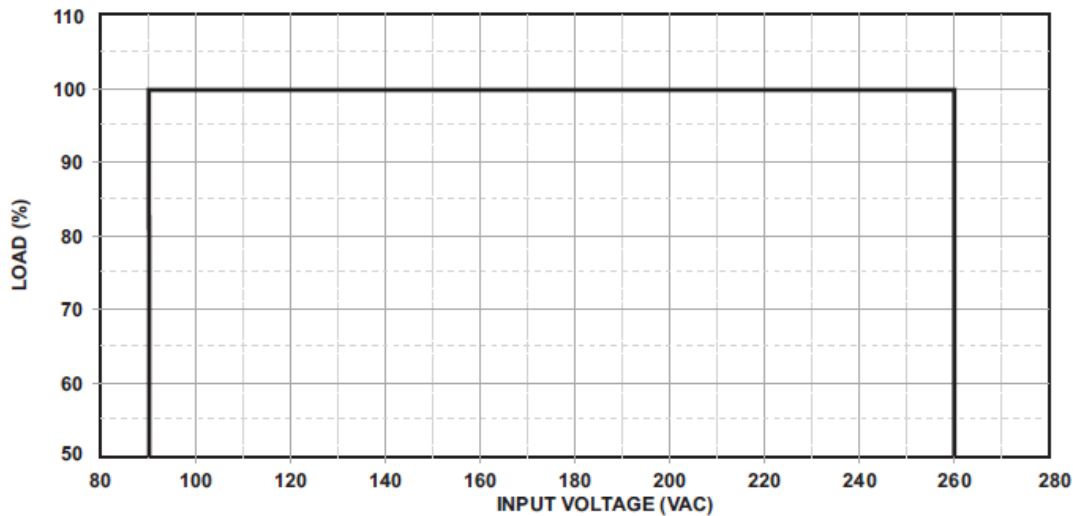
NOTES

- (1) DTEPU40A-102-104 are required to use AWG#14/4FT output cable.
DTEPU40A-105-110 are required to use AWG#18/4FT output cable.
DTEPU40A-111 is required to use AWG#20/4FT output cable.
The electrical characteristics will be changed by modified output cable.
- (2) The DTEPU40A-102 is available on NRCan mark
- (3) Output can provide up to peak load when the power supply starts up. Staying in more than rated load continuously is not allowed.
- (4) Each output is checked to be within voltage accuracy in 60% rated load condition.
- (5) Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- (6) Load regulation is defined by changing $\pm 40\%$ 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 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.
- (9) Efficiency measured at rated load and nominal line.
- (10) This product is Listed to applicable standards and requirements by UL.

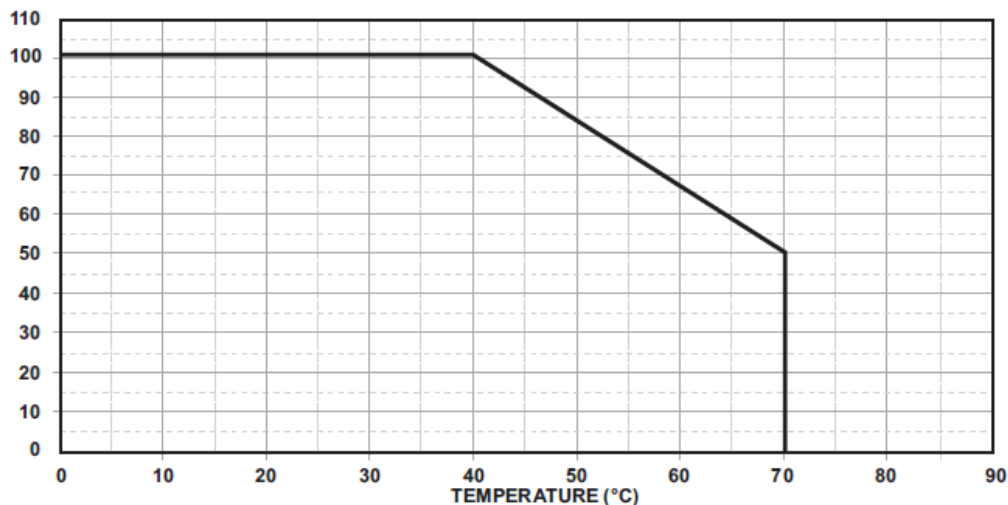
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

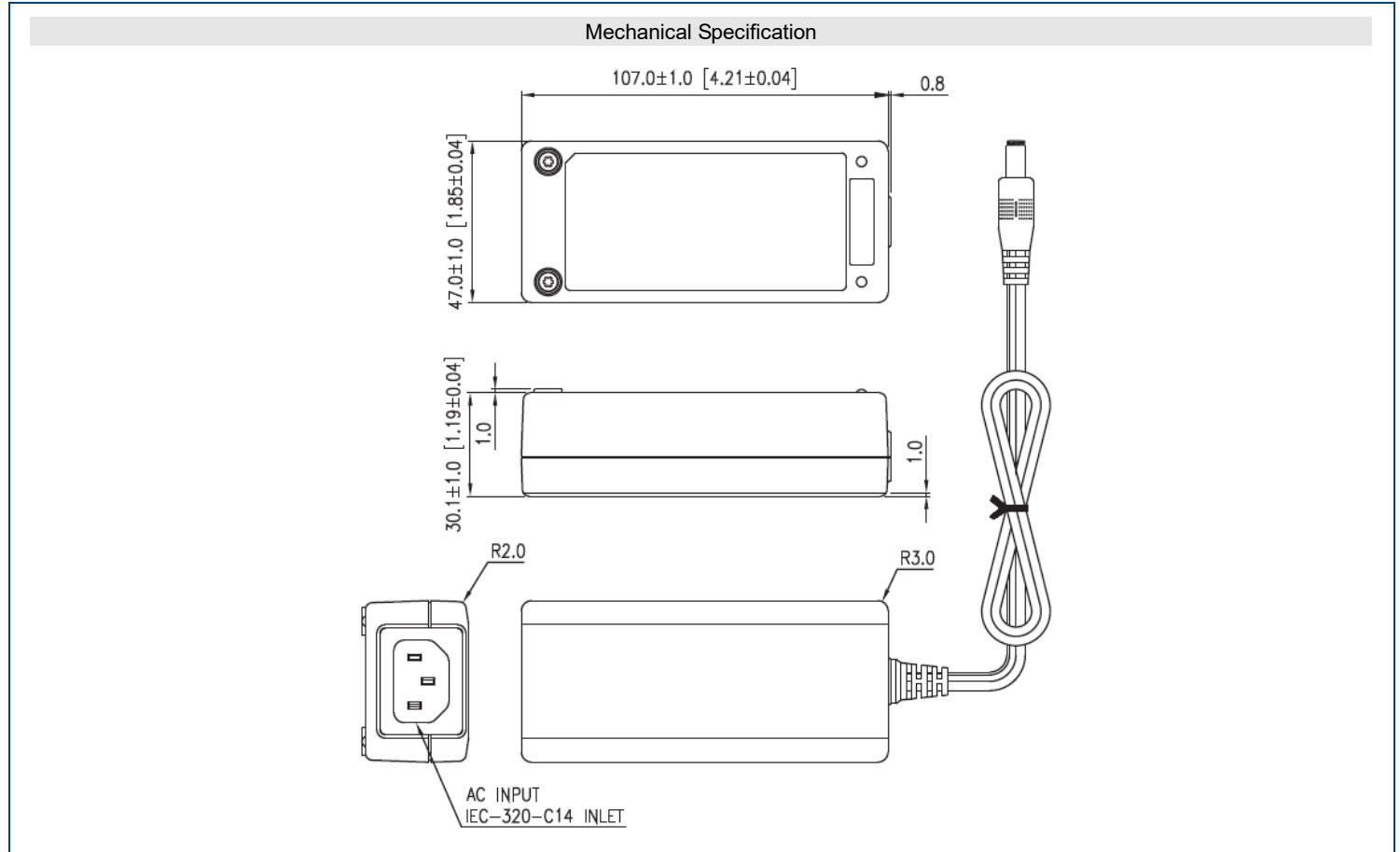
Input Voltage Derating Curve



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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