Type A (IEC-320-C14 Inlet)

Type B (IEC-320-C8 Inlet)

Type C (IEC-320-C6 Inlet)

Size: 5.17in x 2.18in x 1.46in (131.3mm x 55.4mm x 37mm)

OPTIONS

- AC Inlet
- Output Connectors

FEATURES

- Wide Input Voltage Range: 80~275VAC
- Class I for A & C Types, Class II for B Type
- 100% Burn-In Tested
- RoHS2 Compliant
- Efficiency Level V Compliant
- Single Output
- Optional Output Connectors Available
- Cooling by Free Air Convection
- Over Voltage, Over Load, and Short Circuit Protection
- IEC-320-C14, IEC-320-C8, and IEC-320-C6 Input Inlets Available
- Meets FCC Part-18, CISPR-11 and EN55011 Class B Emission Limits
- UL/cUL, TUV T-Mark and Conformity Assessment in CE Marking
- IEC60601-1 3.1 Edition, ES60601-1:2005 (R2012), CSAC22.2 No.60601-1:14, EN60601-1:2006/A1:2013 Safety Approvals

APPLICATIONS

- Medical Equipment
- Patient Monitor
- Ultrasound Systems
- Blood Chemistry Analyzer
- Medical Imaging

DESCRIPTION

The DTMPU60 series of medical AC/DC desktop power supplies provides 63 Watts of continuous output power in a 5.17” x 2.18” x 1.46” package. This series consists of single output models with a 80~275VAC input voltage range. These supplies also have over voltage, over load and short circuit protection. All units are RoHS2 and Level V compliant. All models meet FCC Part-18, CISPR-11, and EN55011 class B emission limits and have IEC60601-1 3.1 edition, ES60601-1:2005 (R2012), CSAC22.2 No.6001-1:14, EN60601-1:2006.A1:2013 safety approvals. These units also meet new CE requirements and are well suited for use in hospital equipment as well as many other applications. The DTMPU60 series has three types of input inlets available: IEC-320-C14 (A Type), IEC-320-C8 (B Type), and IEC-320-C6 (C Type). Optional output connectors are also available for this series. Please call factory for ordering details.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	Total Regulation	Efficiency	Output Power	AC Inlet
DTMPU60A-105	80~275VAC	12VDC	5.25A	100mVp-p	±5%	87%	63W	IEC-320-C14
DTMPU60A-106		15VDC	4.20A	100mVp-p	±5%			
DTMPU60A-107		18VDC	3.50A	100mVp-p	±5%			
DTMPU60A-108		24VDC	2.62A	100mVp-p	±3%			
DTMPU60A-109		30VDC	2.10A	100mVp-p	±3%			
DTMPU60A-110		36VDC	1.75A	100mVp-p	±3%			
DTMPU60A-111		48VDC	1.31A	100mVp-p	±3%			
DTMPU60B-105	80~275VAC	12VDC	5.25A	100mVp-p	±5%	87%	63W	IEC-320-C8
DTMPU60B-106		15VDC	4.20A	100mVp-p	±5%			
DTMPU60B-107		18VDC	3.50A	100mVp-p	±5%			
DTMPU60B-108		24VDC	2.62A	100mVp-p	±3%			
DTMPU60B-109		30VDC	2.10A	100mVp-p	±3%			
DTMPU60B-110		36VDC	1.75A	100mVp-p	±3%			
DTMPU60B-111		48VDC	1.31A	100mVp-p	±3%			
DTMPU60C-105	80~275VAC	12VDC	5.25A	100mVp-p	±5%	87%	63W	IEC-320-C6
DTMPU60C-106		15VDC	4.20A	100mVp-p	±5%			
DTMPU60C-107		18VDC	3.50A	100mVp-p	±5%			
DTMPU60C-108		24VDC	2.62A	100mVp-p	±3%			
DTMPU60C-109		30VDC	2.10A	100mVp-p	±3%			
DTMPU60C-110		36VDC	1.75A	100mVp-p	±3%			
DTMPU60C-111		48VDC	1.31A	100mVp-p	±3%			

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					
Safety Approval Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Input Operate Voltage Range	Derate linearly from 100% load at 90VAC to 80% load at 80VAC	80		275	VAC
Input Frequency	Sine Wave	47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC		1.62		A
	High Line, Full Load, Vin=240VAC		0.72		
Input Inrush Current	Low Line, Full Load, 25ºC, Cool Start, Vin=100VAC			37	A
	High Line, Full Load, 25ºC, Cool Start, Vin=240VAC			74	
No Load Power Consumption			0.5		W
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			1	%
Load Regulation		See Table			
Output Power				63	W
Output Current		See Table			
Ripple & Noise (20MHz bandwidth)		See Table			
Time of Transient Response	A Type: Io=Full Load to Half Load, VIn=110VAC			4	mS
	B & C Type: Full Load, Vin=110VAC			4	
Start-Up Time	Full Load, Vin=100~240VAC			2	S
Hold Up Time	Full Load, Vin=110VAC		12		mS
Temperature Coefficient	All Conditions			±0.04	%/ºC
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Over Voltage Protection		112		132	%
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derate linearly from 100% load at 50ºC to 50% Load at 70ºC	-10		+70	ºC
Storage Temperature	10~95%RH	-40		85	ºC
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Operating Altitude	All conditions			3000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X,Y,Z axes			5	G
MTBF	A Type: Operating Temperature at 25º, per MIL-HDBK-217F	200,000			Hours
	B & C Type: Operating Temperature at 25ºC per MIL-HDBK-217F	100,000			
GENERAL SPECIFICATIONS					
Efficiency	Full Load, Vin=230VAC	See Table			
Dielectric Withstanding Voltage	A, B, C Types: Primary to Secondary, Limit Current <10mA			4000	VAC
	A & C Types: Primary to PE, limit current <10mA			1500	VAC
Insulation Resistance	A & C Types	50			MΩ
Safety Ground Leakage Current	A & C Types: Vin=240VAC, Fi=60Hz			0.1	mA
PHYSICAL SPECIFICATIONS					
Weight		Approx. 11.64~13.40oz (330~380g)			
Dimensions (L x W x H)		5.17in x 2.18in x 1.46in (131.3mm x 55.4mm x 37mm)			
Cooling		Free Air Convection			
Flammability Rating		UL94V-1			
SAFETY CHARACTERISTICS					
Safety Approvals	IEC60601-1 Edition 3.1 ES60601-1:2005(R2012) CSAC22.2 No. 60601-1:14 EN60601-1:2006/A1:2013				
EMC Emission	Compliance to EN55011 (CISPR11), EN60601-1-2				Class B
Electro Static Discharge	Air Discharge, IEC61000-4-2			15	kV
	Contact Discharge, IEC61000-4-2			8	
Surge Voltage	Line-Neutral			1	kV
	Line-PE & Neutral-PE			2	
Protection Class	Type A & C	Class I			
	Type B	Double Insulated, Class II			

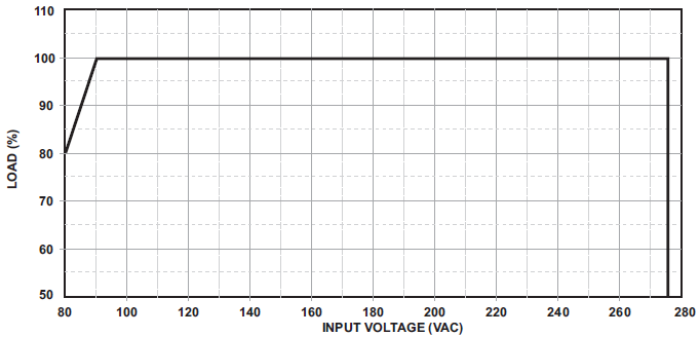
NOTES

1. Output can provide up to peak load when the power supply starts up. Staying in more than rated load continually is not allowed.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
5. 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.
6. 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.
7. Efficiency is measured at rated load and nominal line.

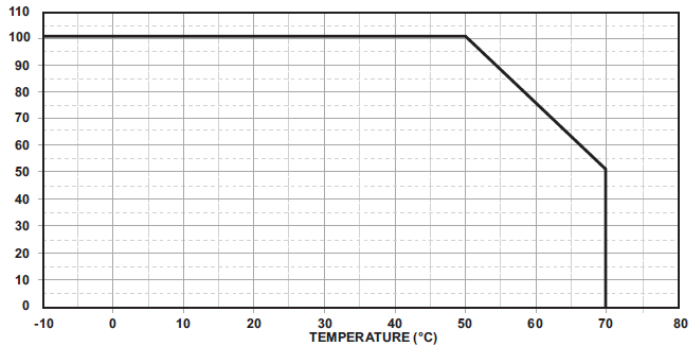
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

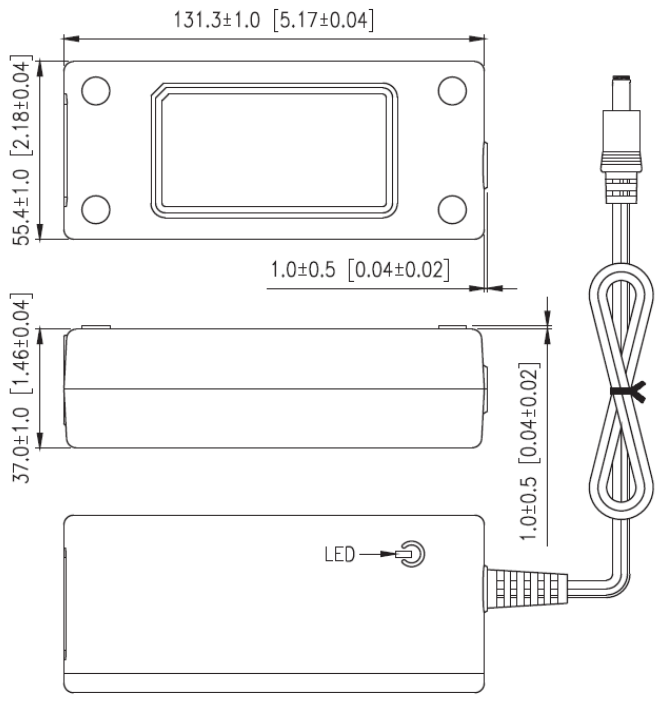
Input Voltage Derating Curve



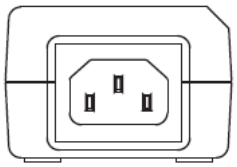
Temperature Derating Curve



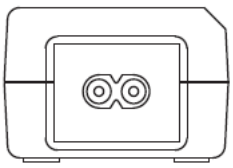
MECHANICAL DRAWINGS



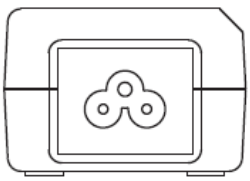
Type A
IEC-320-C14



Type B
IEC-320-C8



Type C
IEC-320-C6



Notes:

1. DTMPU60x-105~107 are required to use AWG#16/4FT output cable.
2. DTMPU60x-108~111 are required to use AWG#18/6FT output cable.
3. Regulation and efficiency will be changed by modified output cable.
4. Optional output connectors available. Please contact factory.

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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