Type A

Size: 3.90in x 1.65in x 1.22in

Type B

Size: 3.90in x 1.65in x 1.22in

Type C

Size: 4.11in x 1.65in x 1.22in

OPTIONS

- AC Inlet
  -IEC-320-C6
  -IEC-320-C8
  -IEC-320-C14
- Output Connector

FEATURES

- Wide Input Voltage Range of 90~264VAC
- RoHS2 Compliant
- Type B is a Class II System, Type A and C are Class I Systems
- Optional Output Connectors are Available
- Level VI Compliant
- 3 AC Inlets Available: IEC-320-C6, IEC-320-C8, or IEC-320-C14
- Short Circuit Protection
- 100% Burned-In Tested
- UL/cUL (UL 60950-1:2nd Edition), TUV/GS (EN60950-1: 2nd Edition Safety Approvals

APPLICATIONS

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

DESCRIPTION

The DTIPU20 Series of AC/DC switching mode single output power supplies provides 20 watts of continuous output power. All models have a single output, universal input voltage range, and an operating temperature range of -20°C ~ +70°C. This series also has three types of AC inlet connectors to choose from: Type A (IEC-320-C6), Type B (IEC-320-C8), or Type C (I. All supplies are UL 94V-1 compliant. All models meet FCC Part-15 class B and CISPR-22 class B emission limits and are designed to comply with UL/cUL (UL 60950-1:2nd Edition), TUV/GS (EN 60950-1) safety approvals. All units are Energy Star VI compliant and are 100% burn-in tested.

MODEL SELECTION TABLE

Model Number(1)	Input Voltage Range	Output Voltage	Output Current		Total Regulation	Output Power	Ripple & Noise	No Load Consumption
			Min Load	Max Load				
DTIPU20x-102	90~264VAC	5~6VDC	2.50A	3.00A	±5%	15W	100mVp-p	0.3W
DTIPU20x-103		6~8VDC	1.87A	2.30A	±5%	15W		
DTIPU20x-104		8~11VDC	1.81A	2.50A	±5%	20W		
DTIPU20x-105		11~13VDC	1.53A	1.81A	±5%	20W		
DTIPU20x-106		13~16VDC	1.25A	1.53A	±5%	20W		
DTIPU20x-107		16~21VDC	0.95A	1.25A	±4%	20W		
DTIPU20x-108		21~27VDC	0.74A	0.95A	±4%	20W		
DTIPU20x-109		27~33VDC	0.60A	0.74A	±3%	20W		
DTIPU20x-110		33~40VDC	0.50A	0.60A	±3%	20W		
DTIPU20x-111		40~50VDC	0.40A	0.50A	±3%	20W		

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 Approval Range		100		240	VAC
	Operate Range		90		264	
Input Frequency			47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC				0.5	A
	High Line, Full Load, Vin=240VAC				0.3	
Inrush Current	Low Line, Full Load, 25ºC, Cool Start, Vin=100VAC		25		50	A
	High Line, Full Load, 25ºC, Cool Start, Vin=240VAC		50		100	
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz				0.25	mA
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Line Regulation[4]	Full Load, Vin=100~120VAC		0.5		1	%
Load Regulation[5]	Vin=230VAC, 10~90% Load Change at Condition		3		5	%
Output Power			See Table			
Output Current			See Table			
Ripple & Noise[6]			See Table			
Transient Response Time	Full Load, Vin=110VAC				4	mS
Start-Up Time	Full Load, Vin=100~240VAC				3	S
Hold-Up Time[7]	Full Load, Vin=100VAC		8			S
Temperature Coefficient	Full Load, Vin=100~240VAC				±0.04	%/ºC
PROTECTION						
Short Circuit Protection			Automatic Recovery			
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derates linearly from 100% load at 40ºC to 50% load at 70ºC		-20		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					
Cooling			Free Air Convection			
MTBF	Operating Temperature at 25ºC (per MIL-HDBK-217F)		100,000			Hours
GENERAL SPECIFICATIONS						
Efficiency			76		85	%
Dielectric Withstanding Voltage	All Models	Primary to Secondary		4242		VDC
	Type A and Type C Only	Primary to PE		2550		
No Load Power Consumption				0.3		W
Surge Voltage	Line-Neutral				1	kV
	Line-PE & Neutral-PE				2	
PHYSICAL SPECIFICATIONS						
Weight			Approx. 6oz (170g)			
Dimensions (L x W x H)	Type A and Type B		3.90in x 1.65in x 1.22in (99mm x 42mm x 31mm)			
	Type C		4.11in x 1.65in x 1.22in (104.4mm x 42mm x 31mm)			
Flammability Rating			UI94V-1			
SAFETY CHARACTERISTICS						
Safety Approvals	UL/c-UL (UL 60950-1:2nd Edition), TUV/GS (EN60950-1:2nd Edition) CE, CB, FCC					
EMC Emission	EN55022 (CISPR22)					Class B
Safety Class	Type A and C					Class I
	Type B					Double Insulated, Class II

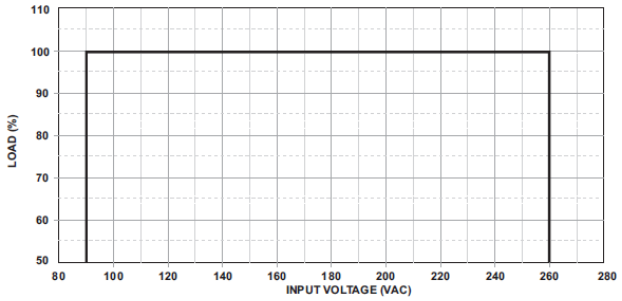
NOTES

1. "X" in model number indicates the AC Inlet type. "X" can either be "A" for IEC-320-C6, "B" for IEC-320-C8, or "C" for IEC-320-C14.
2. Output can provide up to peak load when 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 ±10% of input voltage from nominal line at rated load.
5. Load regulation is defined by changing ±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 a 0.47uF capacitor at rated load and nominal line.
7. 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.

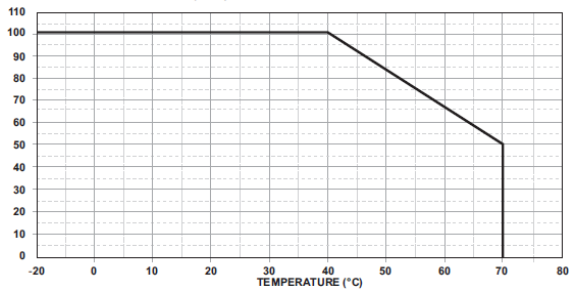
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

Input Voltage Derating Curve

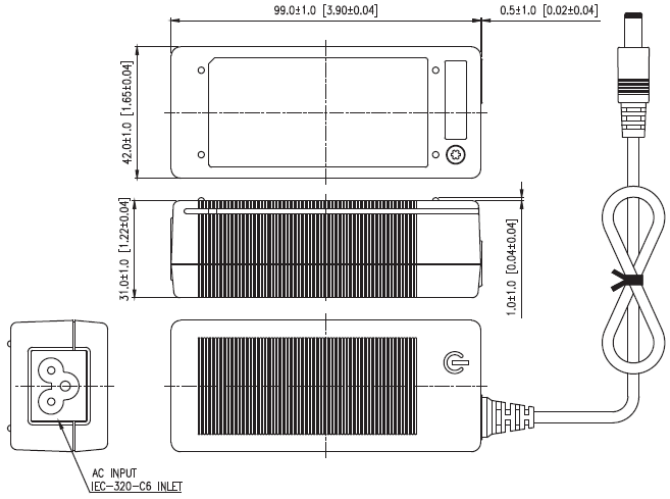


Temperature Derating Curve

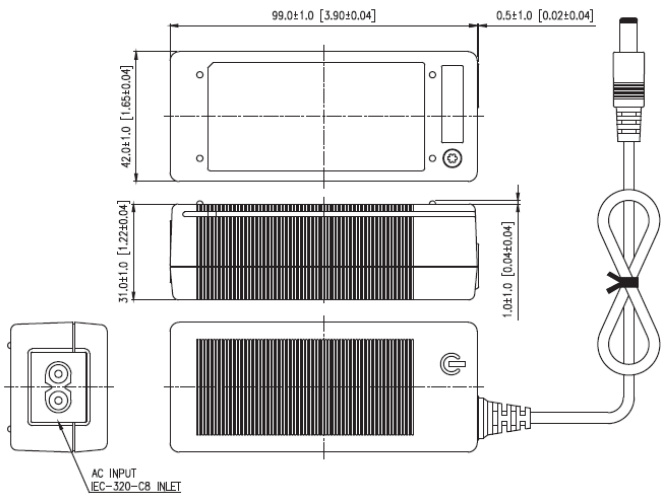


MECHANICAL DRAWINGS

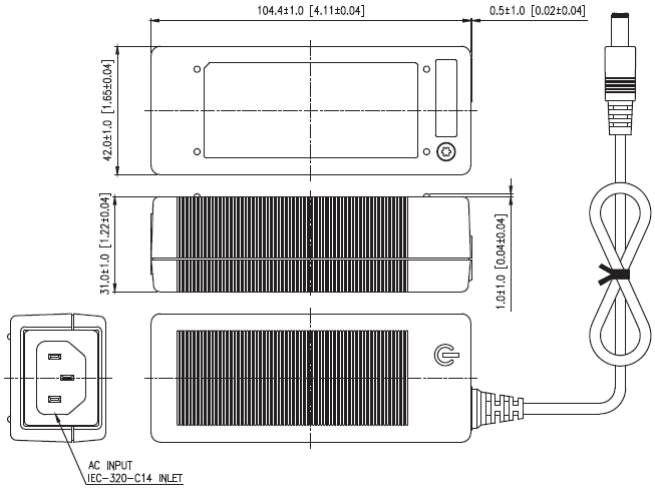
Type A



Type B



Type C



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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