

IEC-320-C14 (Type A)



IEC-320-C8 (Type B)



IEC-320-C6 (Type C)



Size: 4.11in x 1.65in x 1.22in
(104.4mm x 42mm x 31mm)

Size: 3.90in x 1.65in x 1.22in
(99mm x 42mm x 31mm)

Size: 3.90in x 1.65in x 1.22in
(99mm x 42mm x 31mm)

OPTIONS

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

FEATURES

- Class I for A & C Types; Class II for B Type
- Burn-in Tested
- A & C Types are Efficiency Level VI Compliant
- Single Output Voltages Available from 5~48VDC
- Wide Input Voltage Range: 80~275VAC
- Short Circuit Protection
- Efficiency up to 86.35%
- -20°C to +70°C Operating Temperature Range
- IEC-320-C14, IEC-320-C8, and IEC-320-C6 AC Inlets Available
- A & C Types Meet IEC 62368-1 Edition 2.0, UL 62368-1, CAN/CSA-C22.2 No. 62368-1-14, EN 62368-1: 2014, and J 62368-1 Safety Approvals
- B Type Meets UL 60950-1: 2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013, CSA C22.2 No. 60950-1-07 Safety Approvals
- Optional Output Connectors Available

APPLICATIONS

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

DESCRIPTION

The DTIPU25 series of AC/DC desktop power supplies provides up to 25 Watts of continuous output power. This series consists of single output models with a 80~275VAC input voltage range. Each model in this series is burn-in tested, has short circuit protection, and has optional output connectors available. The A and C type models of the DTIPU25 series meet IEC 62368-1 Edition 2.0, UL 62368-1, CAN/CSA-C22.2 No. 62368-1-14, EN 62368-1: 2014, and J 62368-1 safety approvals, while the B type models meet UL 60950-1: 2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013, CSA C22.2 No. 60950-1-07 safety approvals.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage ⁽¹⁾	Output Current		Ripple & Noise	Total Regulation	Output Power	Efficiency	Efficiency Level	Typ. No Load Consumption	Class	AC Inlet
			Min Load	Max Load								
DTIPU25A-102*	80~275VAC	5~6VDC	2.75A	3.30A	60mVp-p	±5%	16.5W	81.97%	VI	0.1W	Class I	IEC-320-C14
DTIPU25A-103*		6~8VDC	2.50A	3.33A	80mVp-p	±5%	20W	85.47%	VI	0.1W		
DTIPU25A-104*		8~11VDC	2.00A	2.75A	110mVp-p	±5%	22W	85.87%	VI	0.1W		
DTIPU25A-105		11~13VDC	1.92A	2.27A	130mVp-p	±5%	25W	86.35%	VI	0.1W		
DTIPU25A-106*		13~16VDC	1.56A	1.92A	150mVp-p	±5%	25W	86.35%	VI	0.1W		
DTIPU25A-107*		16~21VDC	1.19A	1.56A	200mVp-p	±5%	25W	86.35%	VI	0.1W		
DTIPU25A-108*		21~27VDC	0.92A	1.19A	200mVp-p	±4%	25W	86.35%	VI	0.1W		
DTIPU25A-109*		27~33VDC	0.75A	0.92A	250mVp-p	±3%	25W	86.35%	VI	0.1W		
DTIPU25A-110*		33~40VDC	0.62A	0.75A	250mVp-p	±3%	25W	86.35%	VI	0.1W		
DTIPU25A-111		40~48VDC	0.52A	0.62A	300mVp-p	±3%	25W	86.35%	VI	0.1W		
DTIPU25B-102*		80~275VAC	5~6VDC	2.75A	3.30A	60mVp-p	±5%	16.5W	75.3%	-		
DTIPU25B-103	6~8VDC		2.50A	3.33A	80mVp-p	±5%	20W	77%	-	0.5W		
DTIPU25B-104*	8~11VDC		2.00A	2.75A	110mVp-p	±5%	22W	77.9%	-	0.5W		
DTIPU25B-105	11~13VDC		1.92A	2.27A	130mVp-p	±5%	25W	82.4%	CEC V	0.3W		
DTIPU25B-106*	13~16VDC		1.56A	1.92A	150mVp-p	±5%	25W	82.4%	CEC V	0.3W		
DTIPU25B-107	16~21VDC		1.19A	1.56A	200mVp-p	±5%	25W	83%	CEC V	0.3W		
DTIPU25B-108	21~27VDC		0.92A	1.19A	200mVp-p	±4%	25W	83%	CEC V	0.3W		
DTIPU25B-109*	27~33VDC		0.75A	0.92A	250mVp-p	±3%	25W	83%	CEC V	0.3W		
DTIPU25B-110*	33~40VDC		0.62A	0.75A	250mVp-p	±3%	25W	83%	CEC V	0.3W		
DTIPU25B-111*	40~48VDC		0.52A	0.62A	300mVp-p	±3%	25W	83%	CEC V	0.3W		
DTIPU25C-102*	80~275VAC		5~6VDC	2.75A	3.30A	60mVp-p	±5%	16.5W	81.97%	VI	0.1W	Class I
DTIPU25C-103*		6~8VDC	2.50A	3.33A	80mVp-p	±5%	20W	85.47%	VI	0.1W		
DTIPU25C-104*		8~11VDC	2.00A	2.75A	110mVp-p	±5%	22W	85.87%	V	0.1W		
DTIPU25C-105		11~13VDC	1.92A	2.27A	130mVp-p	±5%	25W	86.35%	VI	0.1W		
DTIPU25C-106*		13~16VDC	1.56A	1.92A	150mVp-p	±5%	25W	86.35%	VI	0.1W		
DTIPU25C-107*		16~21VDC	1.19A	1.56A	200mVp-p	±5%	25W	86.35%	VI	0.1W		
DTIPU25C-108*		21~27VDC	0.92A	1.19A	200mVp-p	±4%	25W	86.35%	VI	0.1W		
DTIPU25C-109*		27~33VDC	0.75A	0.92A	250mVp-p	±3%	25W	86.35%	VI	0.1W		
DTIPU25C-110*		33~40VDC	0.62A	0.75A	250mVp-p	±3%	25W	86.35%	VI	0.1W		
DTIPU25C-111*		40~48VDC	0.52A	0.62A	300mVp-p	±3%	25W	86.35%	VI	0.1W		

*MOQ is required. Please contact sales.

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 & Specification in Label Operate Voltage Range, See Derating Curve	100		240	VAC
Input Frequency	Sine Wave	47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC High Line, Full Load, Vin=240VAC		0.55 0.22		A
Inrush Current	A Type	Low Line, Full Load, 25°C, Cool Start, Vin=100VAC High Line, Full Load, 25°C, Cool Start, Vin=240VAC		30 60	A
	B & C Type	Low Line, Full Load, 25°C, Cool Start, Vin=100VAC High Line, Full Load, 25°C, Cool Start, Vin=240VAC		25 60	A
Safety Ground Leakage Current	A & C Type	Vin=264VAC, Fi=63Hz		0.75	mA
	B Type	Vin=240VAC, Fi=60Hz		0.25	
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	1		5	%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise		See Table			
Transient Response Time	Io=Full Load to Half Load, Vin=110			4	ms
Start-Up Time	Full Load, Vin=100~240VAC			2	S
Hold-Up Time	Full Load, Vin=100VAC		12		S
Temperature Coefficient	Full Load, Vin=100~240VAC			±0.04	%/°C

SPECIFICATIONS

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
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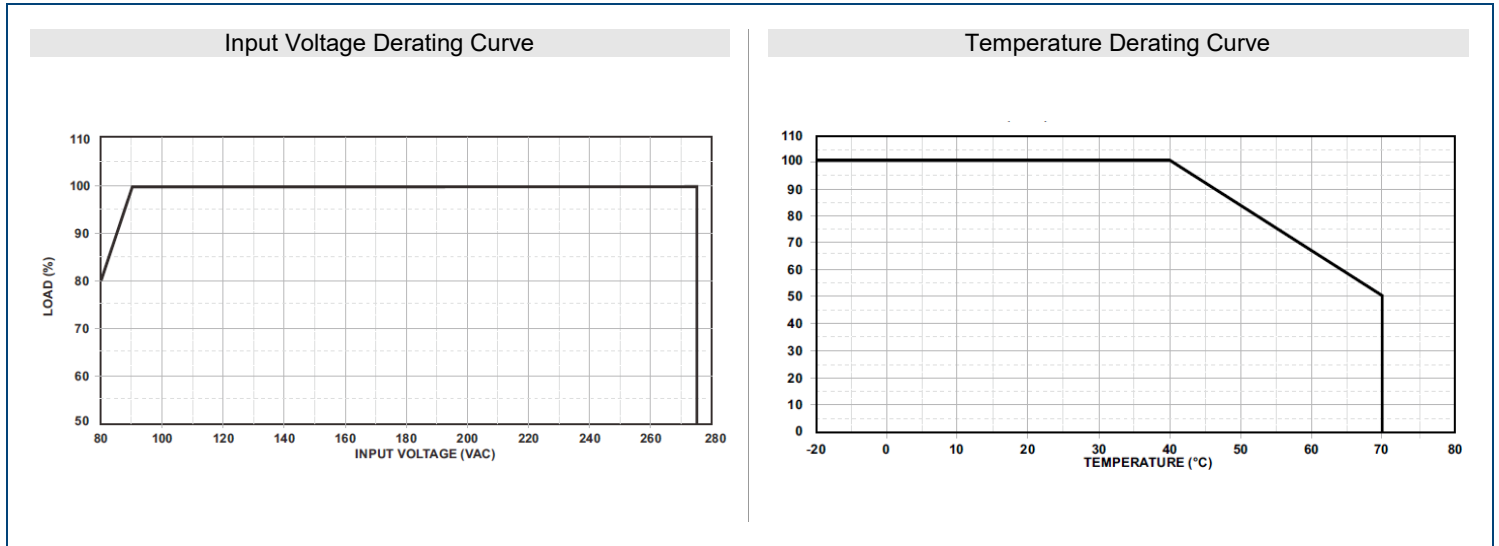
SPECIFICATION	TEST CONDITIONS		Min	Typ	Max	Unit
PROTECTION						
Short Circuit Protection			Automatic Recovery			
ENVIRONMENTAL SPECIFICATIONS						
Operating Temperature	Derate linearly from 100% load at 40°C to 50% load at 70°C		-20		70	°C
Storage Temperature	10~95%RH		-40		85	°C
Operating Humidity	Non-Condensing		0		95	%RH
Storage Humidity			0		95	%RH
Operating Altitude (Elevation)	All Conditions				2000	M
Vibration	10~500Hz, 10min./1cycle, 60min. Each along X, Y, Z axes				5	G
MTBF	Operating Temperature at 25°C, calculated per MIL-HDBK-217F		300,000			Hour
GENERAL SPECIFICATIONS						
Efficiency	Measured at rated load and nominal line		See Table			
Dielectric Withstanding Voltage	All Models	Primary to Secondary			4242	VDC
	A & C Models	Primary to PE			2121	
Surge Voltage	All Models	Line-Neutral			1	kV
	A & C Models	Line-PE & Neutral-PE			2	
PHYSICAL SPECIFICATIONS						
Weight			Approx. 6oz (170g)			
Dimensions (L x W x H)	A Type		4.11in x 1.65in x 1.22in (104.4mm x 42mm x 31mm)			
	B & C Type		3.90in x 1.65in x 1.22in (99mm x 42mm x 31mm)			
Cooling			Free Air Convection			
SAFETY CHARACTERISTICS						
Safety Approvals	A & C Type		IEC 62368-1 Edition 2.0, UL 62368-1, CAN/CSA-C22.2 No. 62368-1-14, EN 62368-1: 2014, and J 62368-1			
	B Type		UL 60950-1: 2nd Edition, IEC 60950-1:2005/A2:2013, EN60950-1:2006/A2:2013, CSA C22.2 No. 60950-1-07			
EMC Emission	A & C Type	Compliance to EN55032 (CISPR32)	Class B			
	B Type	Compliance to EN55022 (CISPR22)	Class B			
Electro Static Discharge	Air Discharge: IEC61000-4-2		8			kV
	Contact Discharge: IEC61000-4-2		4			
Safety Class	A & C Models		Class I			
	B Models		Double Insulated, Class II			

NOTES

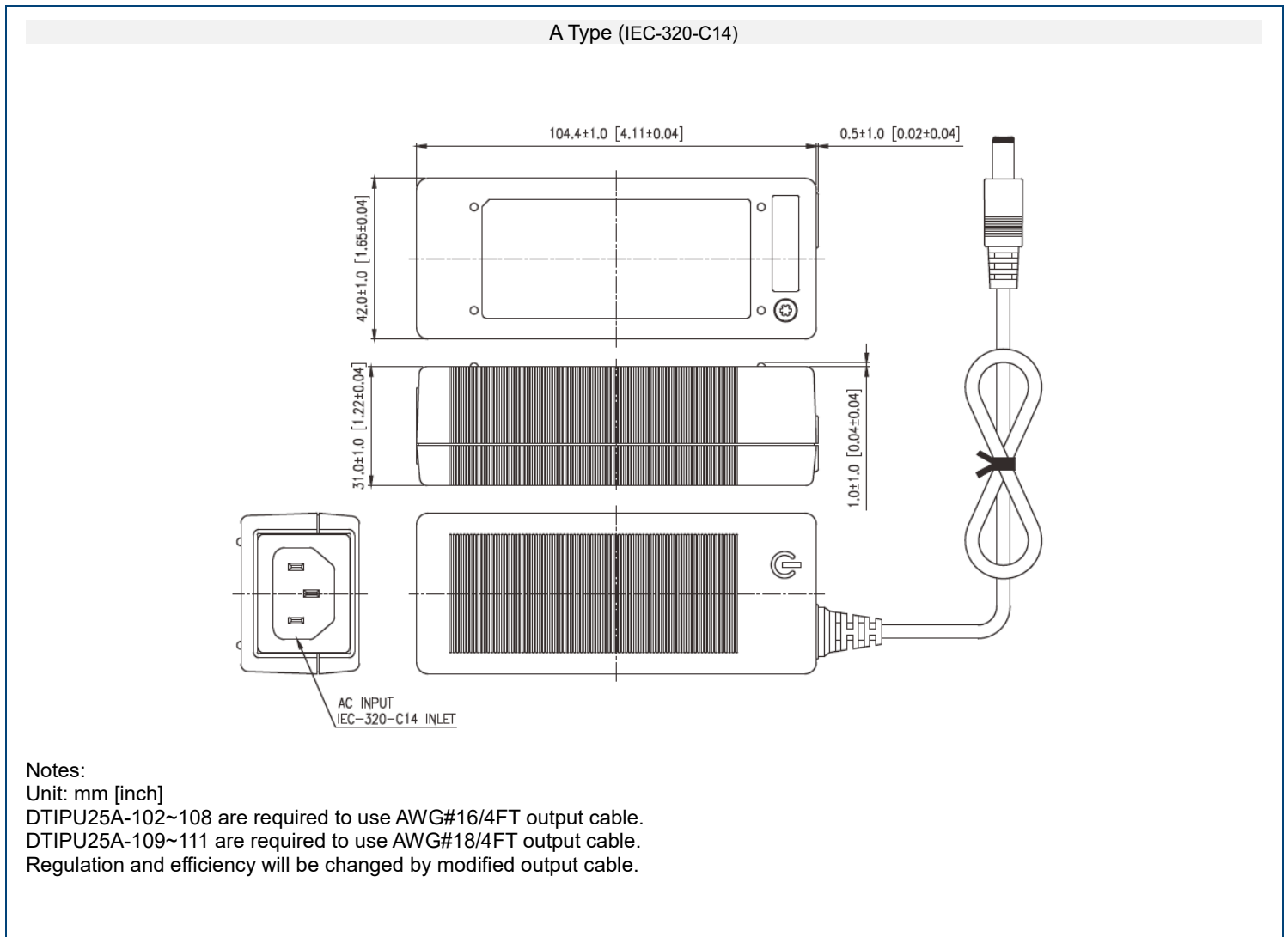
1. Factory setting, cannot be adjusted.
2. Output can provide up to peak load when power supply starts up. Continually staying in rated load is not allowed.
3. Each output is checked to be within voltage accuracy in 60% rated load condition.
4. At factory, in 60% load condition, each output is checked to be within voltage accuracy.
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 from peak to peak with a bandwidth limit of 20MHZ (measured at the output connector with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor).
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.
9. Optional output connectors are available. Contact sales for details.
10. This product is Listed to applicable standards and requirements by UL.

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

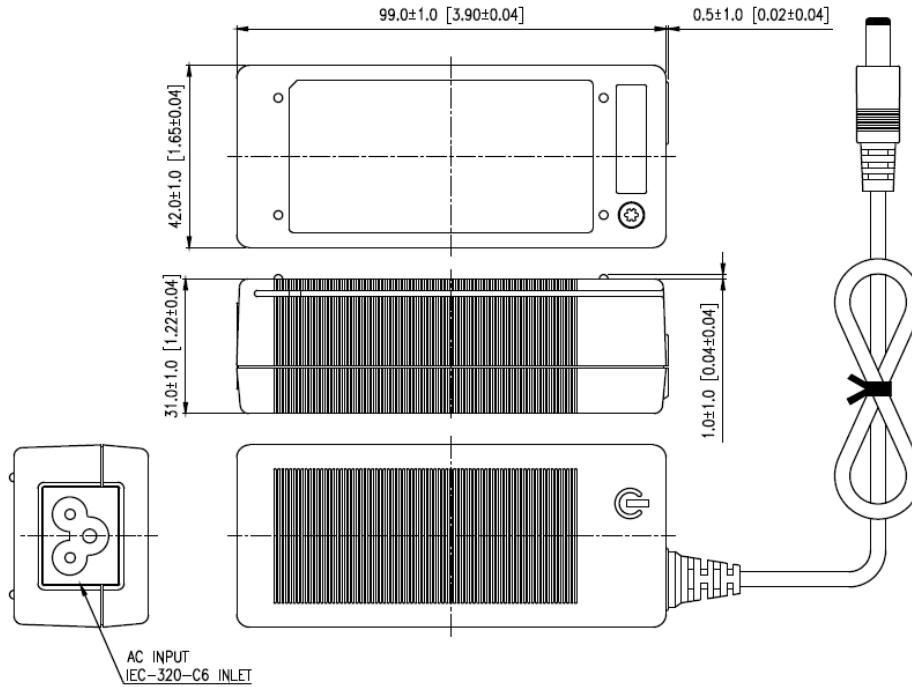
DERATING CURVES



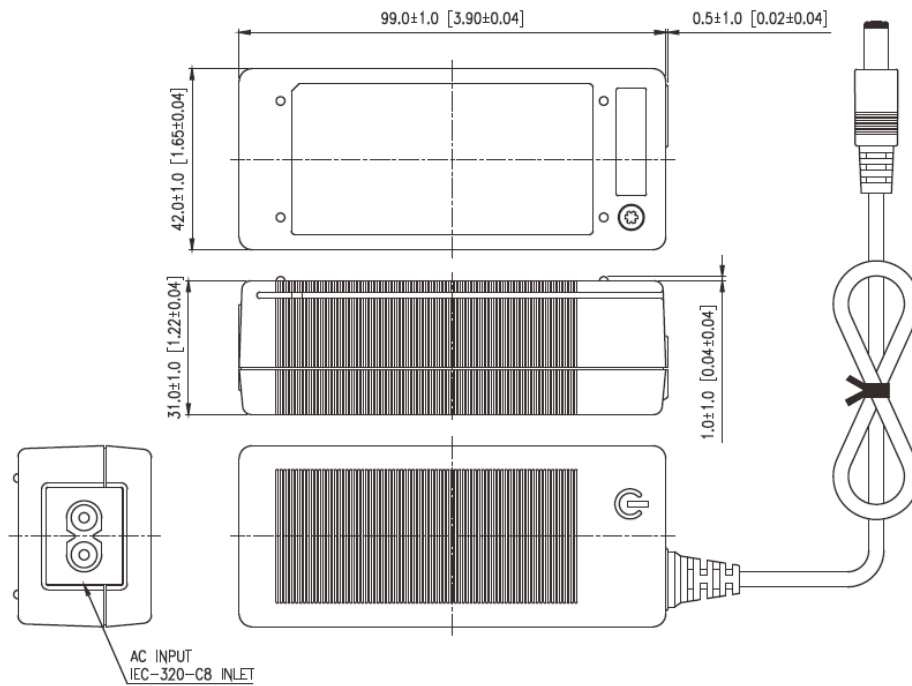
MECHANICAL DRAWINGS



B Type (IEC-320-C8)



C Type (IEC-320-C6)



Notes:

Unit: mm [inch]

DTIPU25C-102~108 are required to use AWG#16/4FT output cable.

DTIPU25C-109~111 are required to use AWG#18/4FT output cable.

Regulation and efficiency will be changed by modified output cable.

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.

Contact **Wall Industries** for further information:

Phone: ☎ (603)778-2300
Toll Free: ☎ (888)597-9255
Fax: ☎ (603)778-9797
E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive
Exeter, NH 03833

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