Wall Industries, Inc.

Rev A

DTIPU20 Series
20 Watt
Single Output
AC/DC Desktop Power Supply

FEATURES

- Splash Proof
- Single Output
- 3 Year Warranty
- A Type: Class I Insulation
- B Type: Class II Insulation
- CEC and Energy Star Compliance
- 2 Types of Inlet Connectors Available
- Optional Output Connectors Available
- Approved as Limited Power Source (LPS)
- Wide Input Voltage 90~264VAC, 47~63Hz
- -20°C~+70°C Operating Temperature Range

Type A

Type B

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 two types of AC inlet connectors to choose from: Type A (IEC-320-C6) or Type B (IEC-320-C8). 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), TUV/GS (EN 60950-1) and new CE requirements. All units are CEC and Energy Star compliant and are 100% burn-in tested.

SPECIFICATIONS: *DTIPU20 Series*

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	Nom	Max	Unit
INPUT (V_{in})					
Operating Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Input Current (Low Line)	Io = Full Load, Vin = 115VAC			0.4	A
Input Current (High Line)	Io = Full Load, Vin = 230VAC			0.25	A
Inrush Current (Low Line)	Io = Full Load, 25°C, Cool Start, Vin = 115VAC		12	15	A
Inrush Current (High Line)	Io = Full Load, 25°C, Cool Start, Vin = 230VAC		26	30	A
Safety Ground Leakage Current (A Type)	Io = Full Load, Vin = 240VAC		0.5	0.75	mA
Safety Ground Leakage Current (B Type)	Io = Full Load, Vin = 240VAC		0.15	0.25	mA
Start-Up Time	Io = Full Load, Vin = 100VAC		0.25	0.5	s
OUTPUT (V_o)					
Output Voltage Range		See Rating Chart			
Load Regulation	Vin = 230VAC	1	3	5	%
Line Regulation	Io = Full Load		0.5	1	%
Output Power Range	Vin = 90 to 264VAC	0		20	W
Output Current Range		See Rating Chart			
Ripple & Noise (peak to peak)	Full Load, Vin = 90VAC		0.5	1	%
Transient Response Time	Io = Full Load to Half Load, Vin = 100VAC			4	ms
Hold-Up Time	Io = Full Load, Vin = 110VAC	12	14	16	ms
PROTECTION					
Over Voltage Protection		Nil			%
Over Current Protection		110		150	%
GENERAL					
Efficiency	Io = Full Load, Vin = 230VAC	75	85	95	%
Dielectric Withstanding Voltage For Primary to Secondary	Primary to Secondary	4242			VDC
Dielectric Withstanding Voltage For Primary to Ground (A Type Only)	Primary to Ground	2121			VDC
Isolation Resistance	Test Voltage = 500VDC	50			MΩ
No Load Power Consumption	No Load, Vin = 240VAC	0	0.4	0.5	W
ENVIRONMENTAL					
Operating Temperature	Derate linearly from 100% Load at 40°C to 50% load at 70°C	-20		70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Temperature Coefficient	All Outputs	-0.04		+0.04	%/°C
MTBF	Operating temperature at 25°C, Calculated per MIL-HDBK-217F	300,000 hours			
PHYSICAL					
Weight		Approximately 170 grams			
Dimensions (L x W x H)		3.90 x 1.65 x 1.22 inches			
Input Inlet		A Type: IEC-320-C6, B Type: IEC-320-C8			
Warranty		3 years			
SAFETY					
CISPR (EMI Requirements for CISPR-22)	Vin = 220VAC	B			Class
FCC (EMI Requirements for FCC Part-15)	Vin = 110VAC	B			Class

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MODEL SELECTION CHART

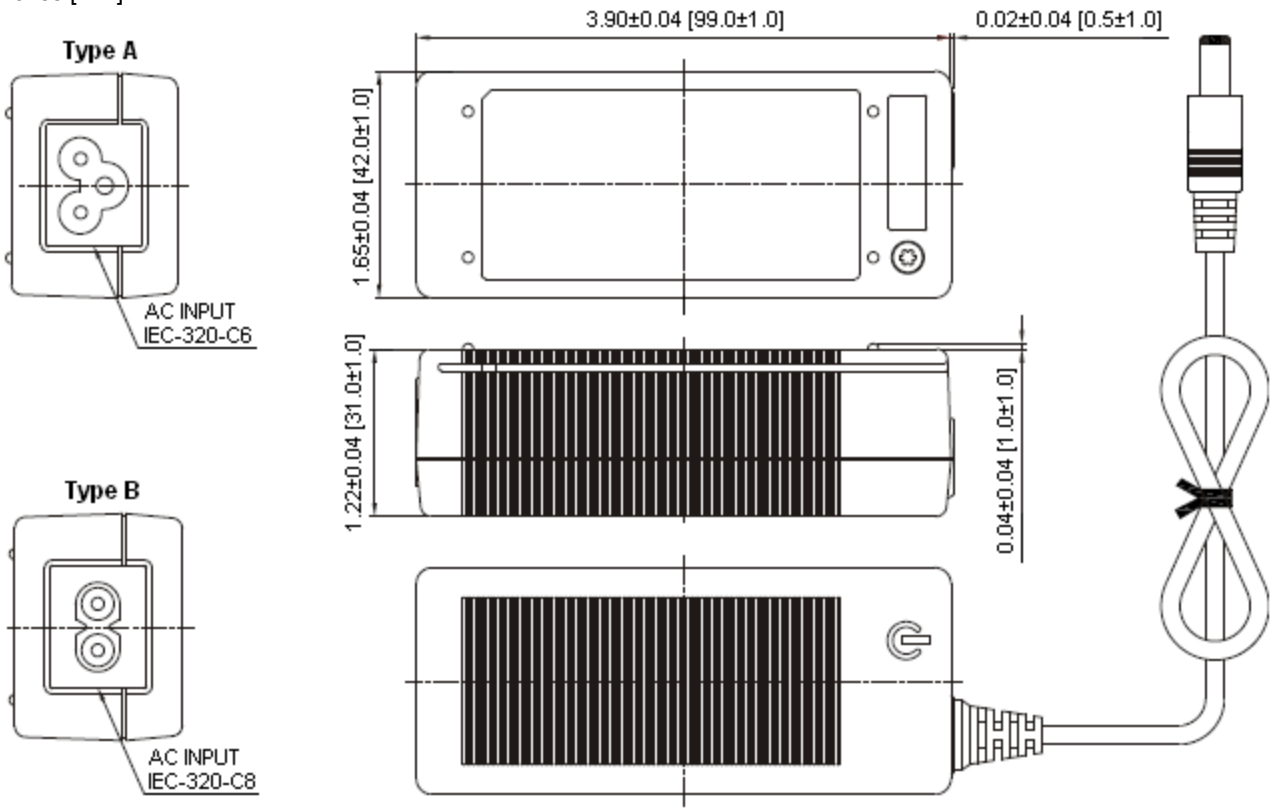
Model Number	Preset Voltage	Output Voltage Range	Output Current	Total Regulation	Max Output Power	AC Inlet Connector
*DTIPU20A-102	6 VDC	5 ~ 6 VDC	3.00 ~ 2.50A	5%	15W	IEC-320-C6
*DTIPU20A-105	13 VDC	11 ~ 13 VDC	1.81 ~ 1.53A	4%	20W	
*DTIPU20A-106	16 VDC	13 ~ 16 VDC	1.53 ~ 1.25A	4%	20W	
*DTIPU20A-108	27 VDC	21 ~ 27 VDC	0.95 ~ 0.74A	3%	20W	
*DTIPU20A-109	33 VDC	27 ~ 33 VDC	0.74 ~ 0.60A	3%	20W	
DTIPU20A-111	48 VDC	40 ~ 48 VDC	0.50 ~ 0.41A	3%	20W	
*DTIPU20B-102	6 VDC	5 ~ 6 VDC	3.00 ~ 2.50A	5%	15W	IEC-320-C8
*DTIPU20B-105	13 VDC	11 ~ 13 VDC	1.81 ~ 1.53A	4%	20W	
*DTIPU20B-106	16 VDC	13 ~ 16 VDC	1.53 ~ 1.25A	4%	20W	
*DTIPU20B-108	27 VDC	21 ~ 27 VDC	0.95 ~ 0.74A	3%	20W	
*DTIPU20B-109	33 VDC	27 ~ 33 VDC	0.74 ~ 0.60A	3%	20W	
DTIPU20B-111	48 VDC	40 ~ 48 VDC	0.50 ~ 0.41A	3%	20W	

NOTES

1. The DTIPU20 Series is designated as DTIPU20x-y where x represents the type of AC input inlet connector which can either be **A** (IEC-320-C6) or **B** (IEC-320-C8); y can be 102, 103, 104, 105, 106, 107, 108, 109, 110 or 111 for output voltage.
2. The output voltage is specified as a range (Ex: 40 ~ 48VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
3. To meet the total regulation specifications all models must use an AWG#18/4FT output cable. The regulation will change if the output cable is modified.
4. The "*" represents TUV/PSE approval. Models with output voltages under 30VDC have been approved by TUV/PSE.
5. Optional output connectors are available. Please call factory for ordering details.

MECHANICAL DRAWINGS

Unit: inches [mm]



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