



Size: 8.74in x 4.41in x 1.77in
(222mm x 112mm x 45mm)

FEATURES

- ITE & Medical Approvals (Class I & Class II)
- 3-prong IEC320-C14, Class I or 2-prong IEC320-C18, Class II AC Inlets Available
- DOE Level VI Efficiency Compliant
- RoHS Compliant
- REACH Compliant
- Touch Current <100uA
- Suitable for BF Applications with Appropriate System Considerations
- IP42 Design for Models without I/O Switch
- Medical Safety Approved (2x MOPP Between Primary to Secondary)
- Short Circuit, Over Load, and Over Voltage Protection
- UL/c-UL 60601-1 3.1 Edition, TUV EN60601-1 3.1 Edition, CB IEC60601-1 3.1 Edition, UL/c-UL UL60950-1, UL/cUL 62368-1, TUV EN60950-1, TUV EN62368-1, CB IEC60950-1, CB IEC62368-4, CCC (Class I), and PSE (Class I) Safety Approvals

DESCRIPTION

The DTAIM300A series of AC DC switching desktop power supplies provides 300 watts of output power for a variety of applications. This series consists of single output models with a wide input range of 90-264VAC. All models are RoHS, REACH and Efficiency Level VI compliant. The DTAIM300A series has high average efficiency >88% as well as short circuit, over load, and over voltage protection. Each model has UL/c-UL 60601-1 3.1 Edition, TUV EN60601-1 3.1 Edition, CB IEC60601-1 3.1 Edition, UL/c-UL UL60950-1, UL/cUL 62368-1, TUV EN60950-1, TUV EN62368-1, CB IEC60950-1, CB IEC62368-4, CCC (Class I), and PSE (Class I) safety approvals. To types of AC inlets are available for this series: 3-prong IEC320-C14, Class I and 2-prong IEC320-C18, Class II and models are available with or without an I/O switch. Please call factory for order details.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise ⁽²⁾	Output Power	Efficiency Level
DTAIM300A-1Y120MZ	90-264VAC	12V	25A	240mVp-p	300W	VI
DTAIM300A-1Y150MZ		15V	20A	300mVp-p		
DTAIM300A-1Y190MZ		19V	15.79A	300mVp-p		
DTAIM300A-1Y240MZ		24V	12.5A	300mVp-p		
DTAIM300A-1Y280MZ		28V	10.71A	300mVp-p		
DTAIM300A-1Y480MZ		48V	6.25A	300mVp-p		
DTAIM300A-1Y540MZ		54V	5.56A	300mVp-p		

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	TEST CONDITIONS			Unit
		Min	Typ	Max	
INPUT SPECIFICATIONS					
Input Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Inrush Current	Peak @115VAC cold start @25°C			35	A
	Peak @230VAC cold start @25°C			70	
Input Current (rms)	@115VAC			3	A
	@230VAC			1.5	
No Load Input Power				0.5	W
Power Factor	@115VAC @Full Load	0.95			
	@230VAC @Full Load	0.90			
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Output Regulation ⁽³⁾		-5		+5	%
Output Power	Convection Cooling			300	W
Output Current		See Table			
Ripple & Noise (Vp-p)		See Table			
Hold-Up Time	@Full Load, 115VAC		>10		ms
Touch Current	@264VAC			100	uA

SPECIFICATIONS

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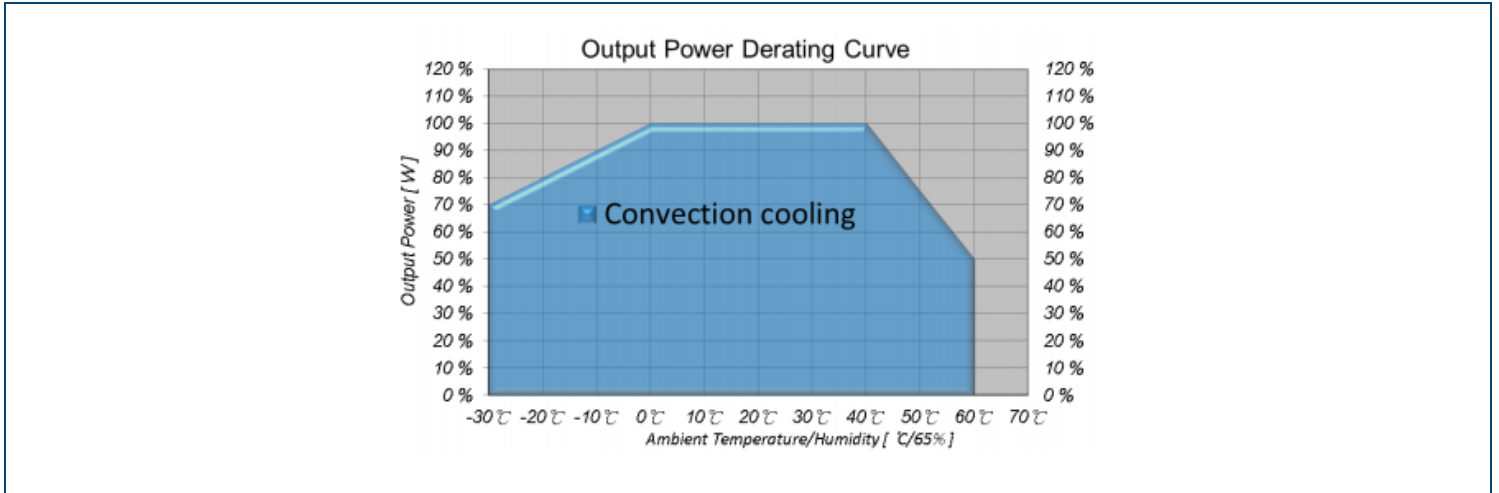
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
PROTECTION					
Short Circuit Protection		Automatic Recovery			
Over Load Protection	Maximum Rating, Automatic Recovery	105		150	%
Over Voltage Protection		Automatic Recovery			
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Refer to Derating Curve	-30		+60	°C
Storage Temperature		-30		85	°C
Humidity	Non-Condensing	0		95	%
Altitude During Operation	ITE/Medical			5000	m
AC Inlet	3-Prong 2-Prong	IEC320-C14 IEC320-C18		Class I Class II	
Cooling		Convection Cooling			
MTBF	@Full Load and 25°C ambient temperature based on Bellcore TR-332	200,000			Hours
GENERAL SPECIFICATIONS					
Efficiency	25%, 50%, 75%, and 100% of Full Load @115/230VAC		>88		%
PHYSICAL SPECIFICATIONS					
Weight		3.46lbs (1.57kgs)			
Dimensions (L x W x H)		8.74in x 4.4in x 1.77in (222mm x 112mm x 45mm)			
SAFETY & EMC CHARACTERISTICS					
Safety Standards ⁽⁴⁾		UL/c-UL 60601-1 3.1 Edition TUV EN60601-1 3.1 Edition CB IEC60601-1 3.1 Edition UL/c-UL UL60950-1 UL/cUL 62368-1 TUV EN60950-1 TUV EN62368-1 CB IEC60950-1 CB IEC62368-4 CCC (Class I) PSE (Class I)			
EMC Standards		EN60601-1-2			Ed4:2015
		IEC60601-1-2			Ed4:2014
		EN 55011		Class B	
		EN55032		Class B	
		EN55024		Class B	
		FCC Part 15		Class B	
		FCC Part 18		Class B	
	CE				

NOTES

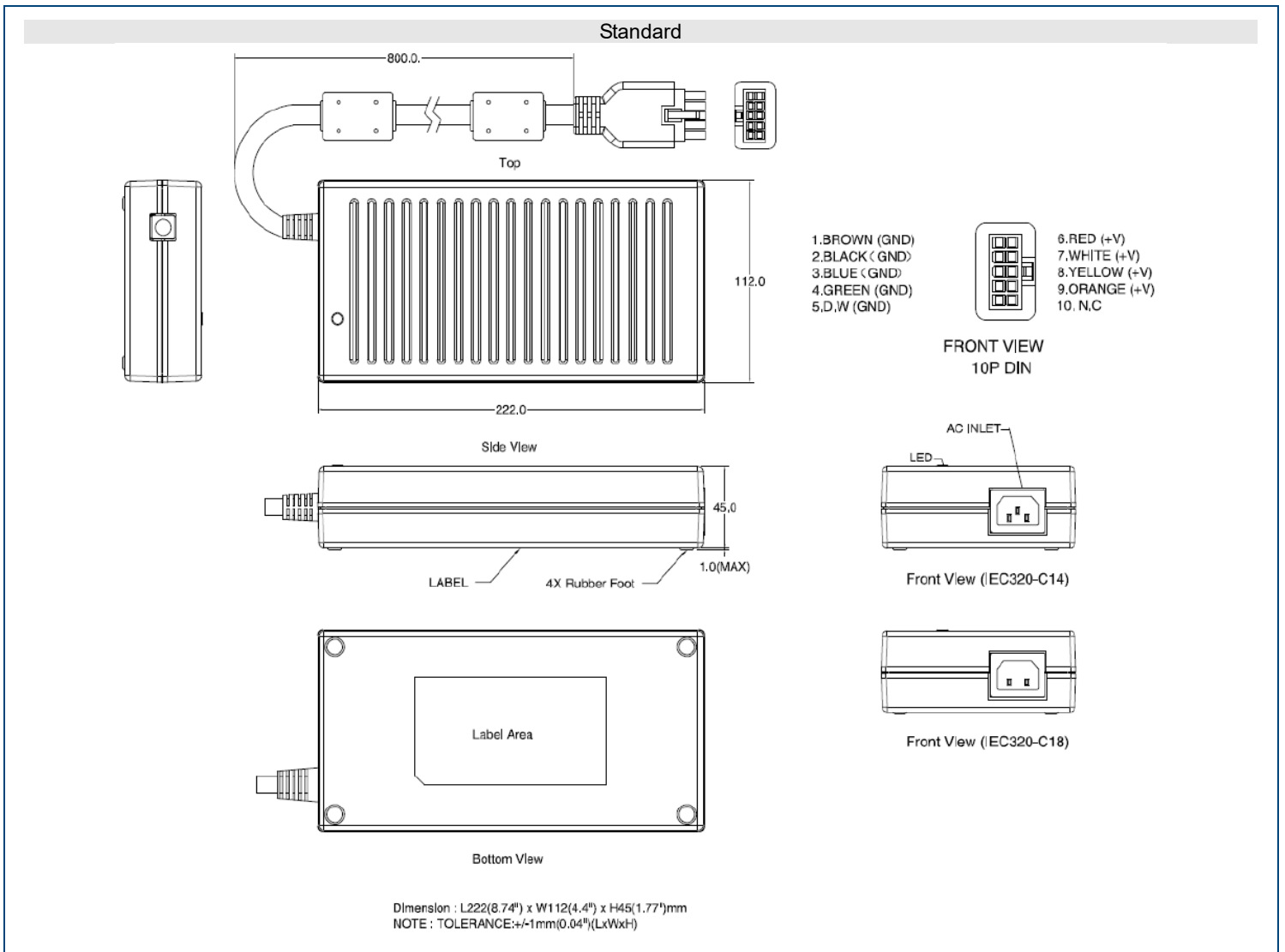
- (1) "Z" in model name indicates AC Inlet. Z=1: Class I, 3-prong IEC320-C14 AC Inlet, Z=2 Class II, 2-Prong IEC320-C18 AC Inlet. To indicate an I/O switch, add "S" to end of model number.
- (2) Ripple & Noise are measured at oscilloscope 20MHz bandwidth by a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
- (3) Output regulation is ±10% at -30 to -20°C
- (4) This product is Listed to applicable standards and requirements by UL.

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

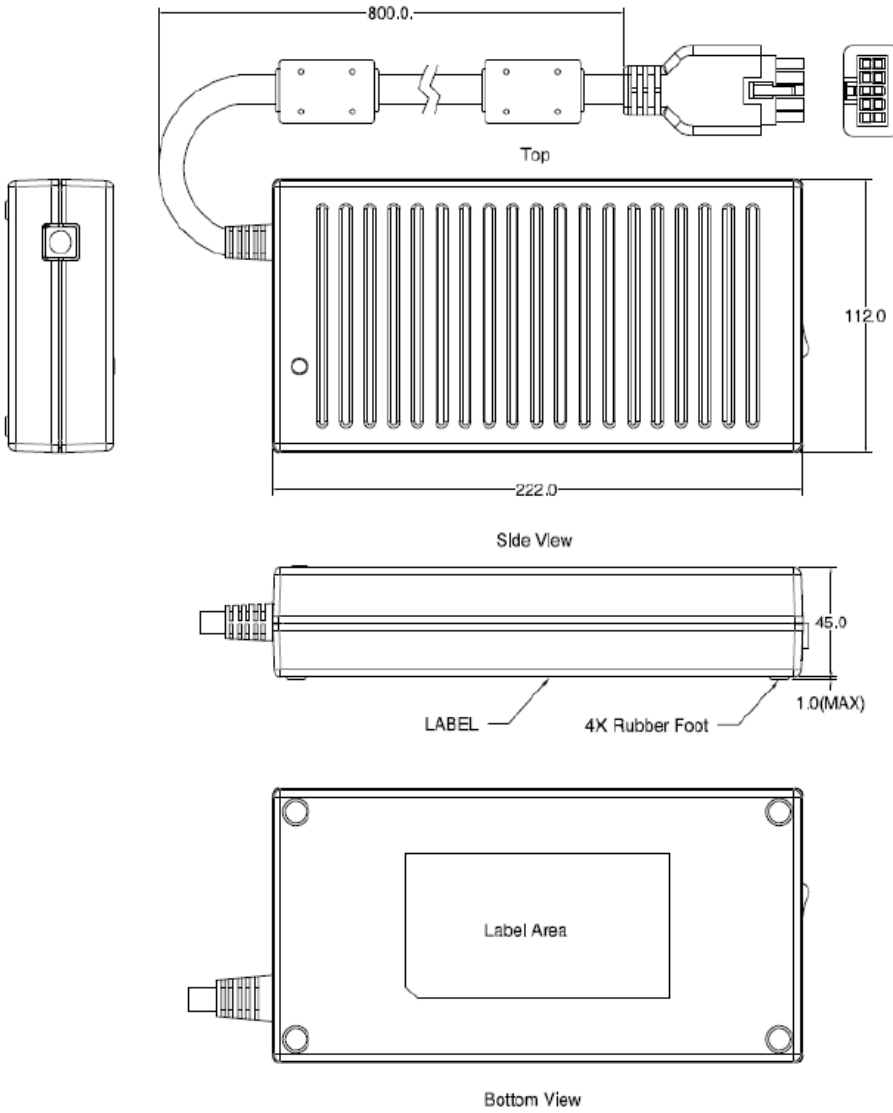
DERATING CURVES



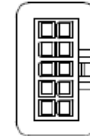
MECHANICAL DRAWINGS



With I/O Switch ("S" Suffix)

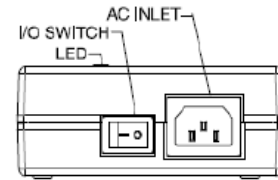


- 1. BROWN (GND)
- 2. BLACK (GND)
- 3. BLUE (GND)
- 4. GREEN (GND)
- 5. D.W (GND)

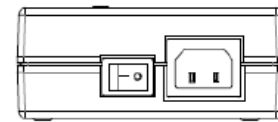


- 6. RED (+V)
- 7. WHITE (+V)
- 8. YELLOW (+V)
- 9. ORANGE (+V)
- 10. N.C

FRONT VIEW
10P DIN



Front View (IEC320-C14)



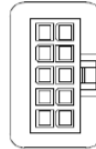
Front View (IEC320-C18)

Dimension : L222(8.74") x W112(4.4") x H45(1.77")mm
 NOTE : TOLERANCE: +/-1mm(0.04")(LxWxH)

MATCHING CONNECTORS

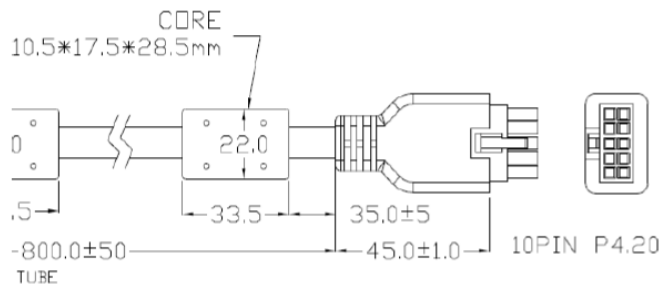
DC Output Connector
Standard Male Plug (Power Supply Side): 10 PIN Min Fit Pitch: 4.2mm
Mating: Molex P/N: 39-28-1123 or equivalent
DC Output Cable: 8C+1, UL2464, 16AWG, VW-1, 80°C, 300V

- 1.BROWN (GND)
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- 3.BLUE (GND)
- 4.GREEN (GND)
- 5.D.W (GND)



- 6.RED (+V)
- 7.WHITE (+V)
- 8.YELLOW (+V)
- 9.ORANGE (+V)
- 10. N.C

FRONT VIEW
10P DIN



MODEL NUMBER SETUP

DTAIM	300A	-	1Y120	M	Z	S
Series Name	Output Power		Output Voltage	Medical	AC Inlet	I/O Switch
			1Y120: 12V 1Y150: 15V 1Y190: 19V 1Y240: 24V 1Y280: 28V 1Y480: 48V 1Y540: 54V		1: Class I, 3-prong IEC320-C14 AC Inlet 2: Class II, 2-Prong IEC320-C18 AC Inlet	Blank: None S: I/O Switch

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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