



Size: 7.40in x 3.52in x 1.94in (188mm x 89.5mm x 49.3mm)

OPTIONS

- Output Connectors
- ON/OFF Switch

FEATURES

- Wide Operating Voltage of 90~260VAC, 47 to 63Hz
- IEC-320-C14 Input Inlet
- Single Output
- Input to Output: 2MOPP
- Class I
- Over Voltage, Short Circuit, and Over Load Protection
- Optional ON/OFF Switch
- RoHS Compliant
- Medical Safety 3rd (IEC60601-1 3rd Edition)
- ANSI/AAMI ES 60601-1:2005(UL/cUL 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition) Safety Approvals

APPLICATIONS

- Patient Monitor
- Blood Pressure System
- Portable Medical Devices
- ECG Machine

DESCRIPTION

The DTHPU180A series of AC DC medical desktop power supplies provides up to 180 watts of output power in a 7.40" x 3.52" x 1.94" package. This series consists of single output models ranging from 12VDC to 48VDC and a wide operating voltage of 90~260VAC. Each model is RoHS compliant and has over voltage, short circuit, and over load protection. This series has an IEC-320-C14 input inlet, medical safety (IEC 60601-1 3rd Edition) approvals, and ANSI/AAMI ES 60601-1:2005(UL/cUL 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition) safety approvals. Please call factory for order details.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise		Total Regulation	Output Power	No Load Consumption	Efficiency
				Min.-Max. Load	No-Min. Load				
DTHPU180A-105	90~260VAC	12VDC	14A	100mVp-p	120mVp-p	±5%	168W	0.5W	89%
DTHPU180A-107		19VDC	9.47A	100mVp-p	190mVp-p	±5%	180W	0.5W	91%
DTHPU180A-108		24VDC	7.50A	100mVp-p	240mVp-p	±4%	180W	0.5W	91%
DTHPU180A-109		30VDC	6.00A	100mVp-p	300mVp-p	±3%	180W	0.5W	92%
DTHPU180A-110		33VDC	5.455A	100mVp-p	330mVp-p	±3%	180W	0.5W	93%
DTHPU180A-111		48VDC	3.75A	100mVp-p	480mVp-p	±3%	180W	0.5W	93%

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.

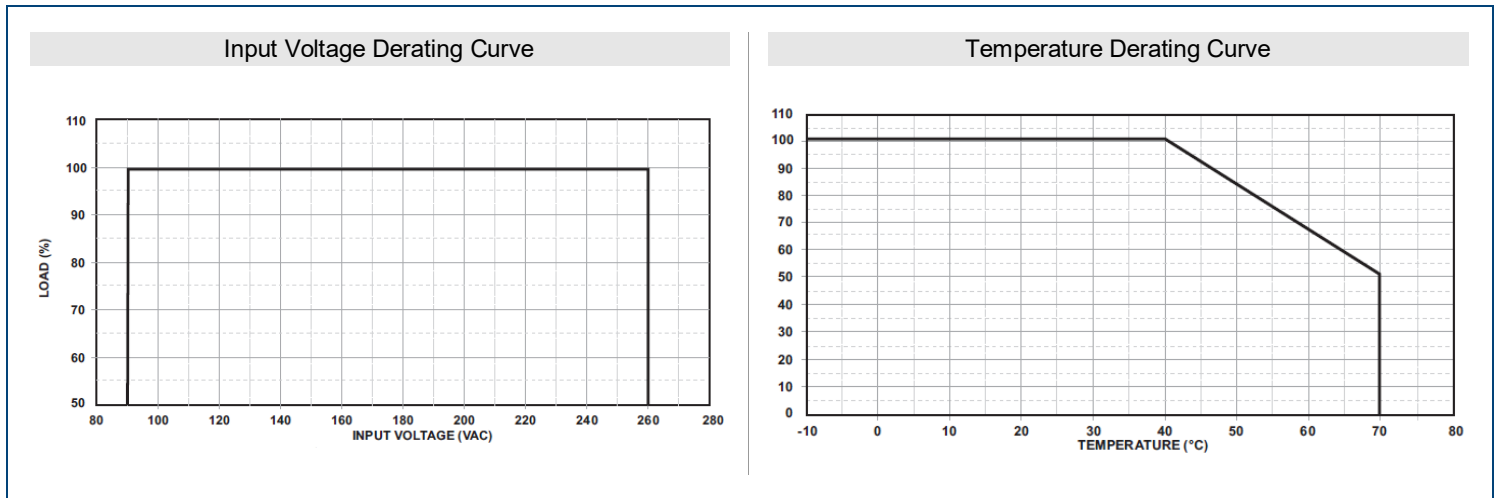
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Operate Input Voltage Range		90		260	VAC
Safety Approval Input Voltage Range		100		240	VAC
Input Frequency	Sine Wave	47		63	Hz
Power Factor Correction		0.95		1	
Input Current	Low Line	Full Load, Vin=100VAC		2.2	A
	High Line	Full Load, Vin=240VAC		0.9	
Inrush Current	Low Line	Full Load, 25°C, Cool Start, Vin=100VAC		60	A
	High Line	Full Load, 25°C, Cool Start, Vin=240VAC		120	
OUTPUT SPECIFICATIONS					
Output Voltage				See Table	
Line Regulation ⁽³⁾	Full Load, Vin=100~120VAC or 200~240VAC			1	%
Total Regulation ⁽⁴⁾				See Table	
Output Power				See Table	
Output Current				See Table	
Ripple & Noise (20MHz bandwidth) ⁽⁵⁾				See Table	
Transient Response Time	Full Load, Vin=110VAC			4	ms
Hold-Up Time ⁽⁶⁾	Full Load, Vin=110VAC	20			ms
Start-Up Time	Full Load, Vin=100~240VAC			2	S
Temperature Coefficient	All conditions	-0.04		+0.04	%/°C
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 Case Temperature	Derate linearly from 100% load at 40°C to 50% load at 70°C	-10		70	°C
Storage Temperature	10~95%RH	-40		85	°C
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Surge Voltage				2	kV
Operating Altitude	All Conditions			3000	m
Vibration	10~500Hz, 10min./1cycle, 60min. each along X, Y, Z axes	5			G
Electro Static Discharge	Air Discharge, IEC61000-4-2			8	kV
	Contact Discharge, IEC61000-4-2			6	kV
Cooling				Free Air Convection	
Flammability Rating				UL94V-1	
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100,000			hours
GENERAL SPECIFICATIONS					
Efficiency ⁽⁷⁾	Full Load, Vin=230VAC			See Table	
Insulation Resistance	Primary to Secondary, 500VDC, 25°C/70% RH	50			MΩ
Dielectric Withstanding Voltage (P-S)	Primary to Secondary, limit current <10mA			4000	VAC
Dielectric Withstanding Voltage (P-G)	Primary to PE, limit current <10mA			1500	VAC
Safety Ground Leakage Current	Vin=240VAC, 60Hz			0.25	mA
PHYSICAL SPECIFICATIONS					
Weight				31.53~33.58oz (894~952g)	
Dimensions (L x W x H)				7.40in x 3.52in x 1.94in (188mm x 89.5mm x 49.3mm)	
SAFETY & EMC CHARACTERISTICS					
Safety Approvals	ANSI/AAMI ES 60601-1:2005 (UL/cUL 3 rd Edition ⁽⁸⁾) EN 60601-1:2006 (TUV/T-mark 3 rd Edition)				
EMC Emission	Compliance to EN55011 (CISPR11), EN61000-3-2, 3			B Class	
Protection Class	Class I				

NOTES

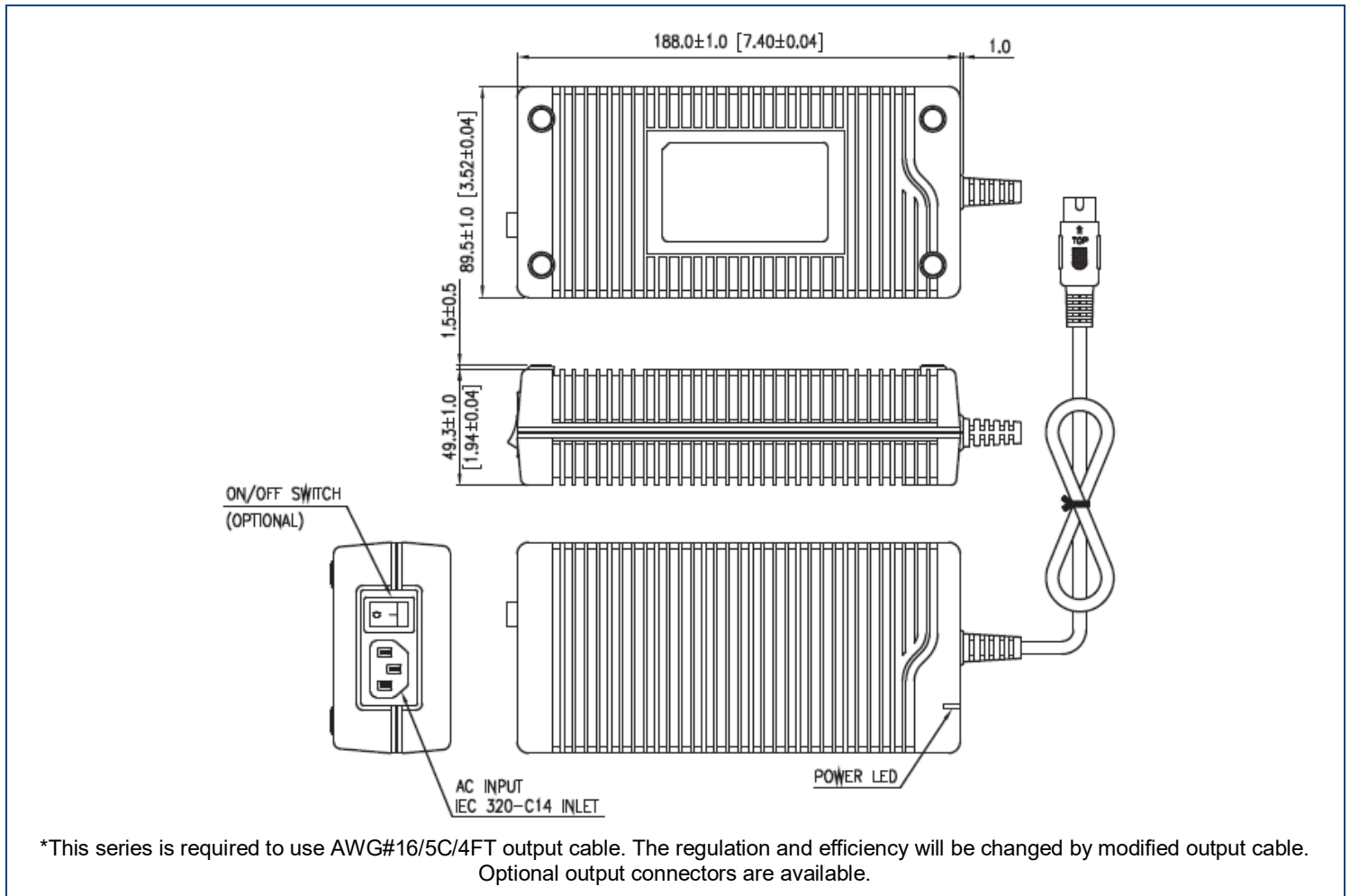
- (1) Output can provide up to peak load when the power supply starts up. Staying in rated load continuously is not allowed.
- (2) Each output is checked to be within voltage accuracy at factory in 60% rated load condition.
- (3) Line regulation is defined by changing ±10% of input voltage range nominal 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.
- (8) 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



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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