



Size: 3.66in x 1.97in x 1.55in (93mm x 50mm x 39.3mm)

FEATURES

- 80~275VAC Operating Input Voltage Range
- High ESD Immunity
- 100% Burned In and Tested
- Input to Output: 2MOPP
- RoHS2 Compliant
- Short Circuit Protection
- Cooling by Free Air Convection
- US, UK, EU, and AU Plugs Available
- IEC60601-1 Edition 3.1, ES60601-1: 2005 (R2012), CSAC22.2 NO. 60601-1:14, EN 60601-1:2006/A1:2013, and IEC60950-1:2005/A2:2013 Safety Approvals

APPLICATIONS

- Breathing Therapy Device
- Blood Pressure System
- Portable Medical Device
- ECG, EEG
- Medical Tablet

DESCRIPTION

The WMIPHU40 series of medical AC/DC power supplies offers up to 40 watts of output power in a wall mount package with interchangeable plugs. This series consists of single output models with a wide operating input voltage range of 80~275VAC. Each model features high ESD immunity, short circuit protection, and has been 100% burned in and tested. This series has IEC60601-1 Edition 3.1, ES60601-1: 2005 (R2012), CSAC22.2 NO. 60601-1:14, EN 60601-1:2006/A1:2013, and IEC60950-1:2005/A2:2013 safety approvals.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage ⁽²⁾		Output Current ⁽³⁾		Ripple & Noise	Output Power	Efficiency
		Min.	Max.	Min Load	Max Load			
WMIPHU40-102x	80~275VAC	5VDC	5.99VDC	5A	5A	100mVp-p	30W	85%
WMIPHU40-103x		6.5VDC	8VDC	3.75A	4.61A	100mVp-p	30W	86.95%
WMIPHU40-104x		8VDC	11VDC	3.18A	4.38A	100mVp-p	35W	87.35%
WMIPHU40-105x		11VDC	13VDC	3.07A	3.64A	100mVp-p	40W	87.59%
WMIPHU40-106x		13VDC	16VDC	2.50A	3.07A	120mVp-p	40W	87.59%
WMIPHU40-107x		16VDC	21VDC	1.90A	2.50A	120mVp-p	40W	87.59%
WMIPHU40-108x		21VDC	27VDC	1.48A	1.90A	120mVp-p	40W	87.59%
WMIPHU40-109x		27VDC	33VDC	1.21A	1.48A	120mVp-p	40W	87.59%
WMIPHU40-110x		33VDC	40VDC	1.00A	1.21A	200mVp-p	40W	87.59%
WMIPHU40-111x		40VDC	48VDC	0.83A	1.00A	200mVp-p	40W	87.59%

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 and Specification in Label	100		240	VAC
	Operating Voltage Range ⁽⁴⁾	80		275	
Input Frequency	Sine Wave	47		63	Hz
Input Current	Low Line, Full Load, Vin=100VAC		0.93		A
	High Line, Full Load, Vin=240VAC		0.54		
Inrush Current	Low Line, Full Load, 25°C, Cool Start, Vin=100VAC			115	A
	High Line, Full Load, 25°C, Cool Start, Vin=240VAC			270	
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC	0.5		1	%
Total Regulation	WMIPHU40-102x-WMIPHU40-107x		±5		%
	WMIPHU40-108x-WMIPHU40-111x		±3		
No Load Consumption			0.1		W
Output Power		See Table			
Output Current		See Table			
Ripple & Noise		See Table			
Time of Transient Response	Io=Full Load to Half Load, Vin=110VAC			4	ms
Start-Up Time	Full Load, Vin=100~240VAC			3	S
Hold-Up Time	Full Load, Vin=110VAC		8		mS
Temperature Coefficient	All Conditions			±0.04	%/°C

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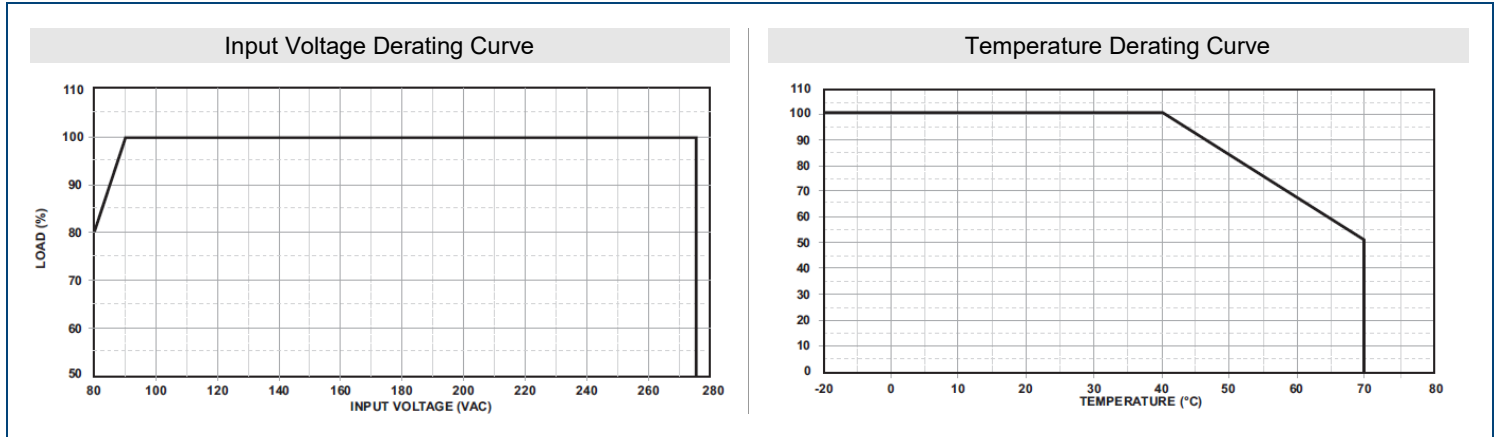
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
PROTECTION					
Short Circuit Protection				Automatic Recovery	
Protection Mode				Hiccup	
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derate linearly from 100% load at 40°C to 50% load at 70°C	-20		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	Non-Condensing	0		95	%RH
Storage Humidity		0		95	%RH
Operating Altitude	All Conditions			5000	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	200,000			H
GENERAL SPECIFICATIONS					
Efficiency	Full Load, Vin=230VAC			See Table	
Dielectric Withstanding Voltage	Primary to Secondary, Limit Current <10mA			4000	VAC
PHYSICAL SPECIFICATIONS					
Weight				Approx. 7.94oz (225g)	
Dimensions (L x W x H)				3.66in x 1.97in x 1.55in (93mm x 50mm x 39.3mm)	
Cooling				Free Air Convection	
Flammability Rating				UL94V-1	
SAFETY CHARACTERISTICS					
Safety Approvals		IEC60601-1 Edition 3.1 ES60601-1:2005 (R2012) CSAC22.2 No. 60601-1:14 EN60601-1:2006/A1:2013 IEC60950-1:2005/A2:2013			
EMC Emission	Compliance to	EN55011 (CISPR11) EN60601-1-12			
Electro Static Discharge	IEC61000-4-2	Air Discharge		15	kV
		Contact Discharge		8	
Surge Voltage	Line-Neutral			1	kV
Protection Class		Double Insulated, Class II			

NOTES

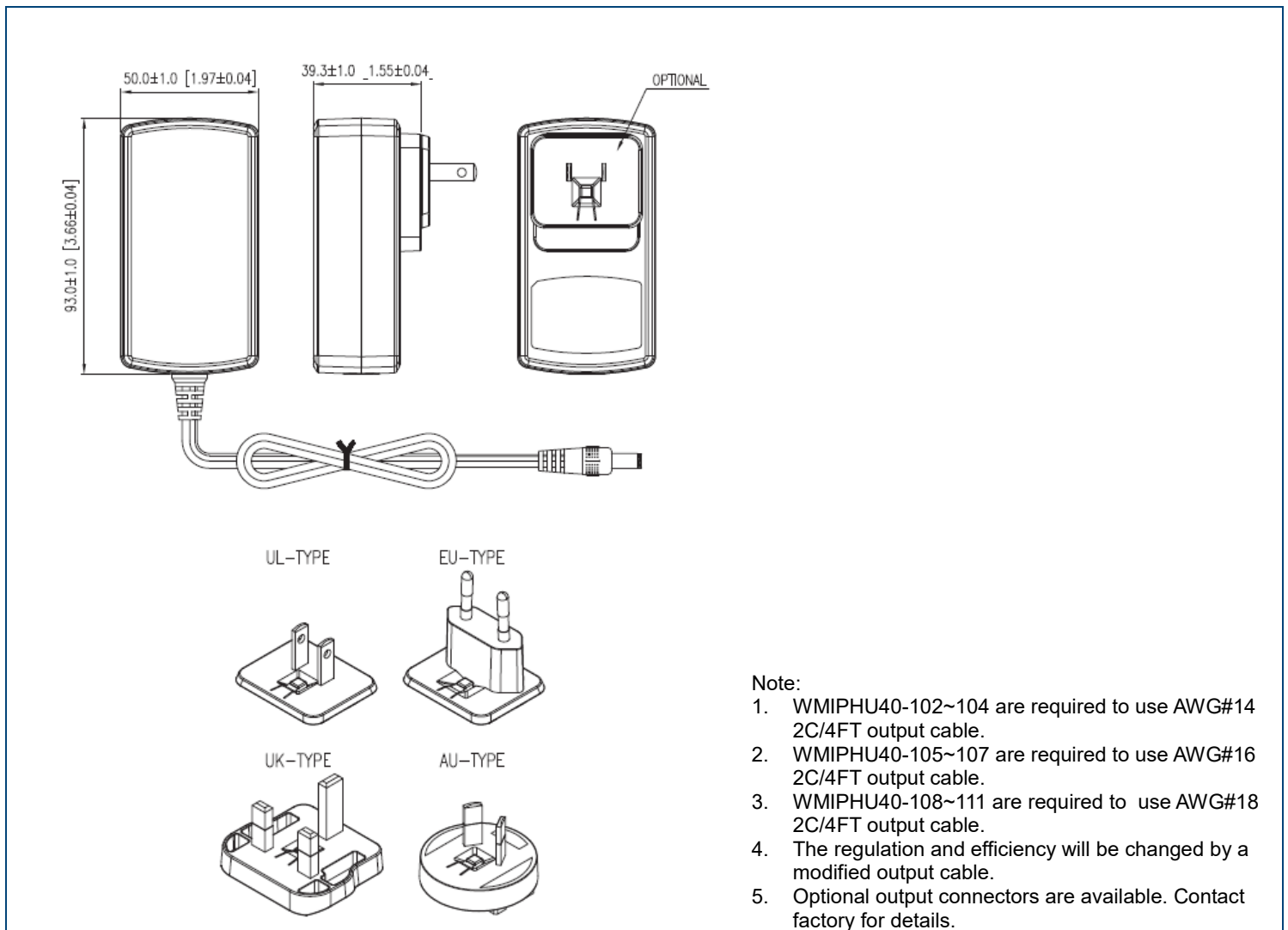
1. "x" in model number indicates plug type. "x" can either be "U" for US plug, "K" for UK plug, "E" for EU plug, or "A" for Aus plug.
2. Factory setting, cannot be adjusted.
3. Based on output voltage.
4. Derate linearly from 100% load at 90VAC to 80% load at 80VAC
5. All Models are designed to comply with UL/cUL, TUV T-mark and conformity assessment in CE marking.
6. This product is Listed to applicable standards and requirements by UL.
7. Output can provide up to peak load when power supply starts up. Continually staying in more than the rated load is not allowed.
8. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
9. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
10. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
11. The ripple is measured from peak to peak with a bandwidth-limit of 20MHz (measured at the output connector with a 0.1uF ceramic capacitor and 47uF electrolytic capacitor).
12. 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



MECHANICAL DRAWINGS



MODEL NUMBER SETUP

WMIPHU	40	-	102	U
Series Name	Output Power		Output Voltage	Plug Type
			102: 5-5.99VDC 103: 6.5-8VDC 104: 8-11VDC 105: 11-13VDC 106: 13-16VDC 107: 16-21VDC 108: 21-27VDC 109: 27-33VDC 110: 33-40VDC 111: 40-48VDC	U: US Plug K: UK Plug E: EU Plug A: Aus Plug

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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