

# **MW40 Series**

Medical Switch Mode Power Supply

## >Elpac Power Systems

### TECHNICAL SUPPORT

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- High Efficiency: Level V
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time > 16ms at full load
- Medical Approval EN60601-1 Class I

Input		
Input Voltage	85 – 264VAC 100 – 240VAC Nominal	
Input Frequency	47 – 63Hz	
Input Current	<1A rms	
Inrush Current	<37A at 230VAC cold start	
Zero Load Power Consumption	0.3W	
Touch Current/	<50μA @ 132VAC @ 60Hz	
Leakage Current (typical)	<75μA @ 264VAC @ 60Hz	

Output		
Output Voltage	See Table	
Total Regulation	+/-5%	
Minimum Load	No minimum load required	
Start-up Delay	<.25s	
Hold-Up Time	>16ms	
Ripple & Noise	<1% pk-pk **	
Over Voltage Protection	110-135%	
Over Temperature Protection	Active - Recoverable; plus Passive - Non Recoverable	
Over Current Protection	120 - 180%	
Short Circuit Protection	shutdown, auto-restart (hiccup mode)	

<sup>\*</sup>visit www.iccus.com for complete details \*\*Ripple and noise measured with 20MHz bandwidth; 10μF tantalum capacitor in parallel with a 0.1μF ceramic capacitor.









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TM

Model Number	Output Voltage	Output Current	Peak Current <sup>1</sup>	Total Regulation <sup>2</sup>	Minimum Efficiency <sup>3</sup>
MW4009-760F-NC-BK	9.0V	4.4A	5.3A	±5%	84%
MW4012-760F-NC-BK	12.0V	3.3A	4.0A	±5%	86%
MW4015-760F-NC-BK	15.0V	2.7A	3.2A	±5%	87%
MW4018-760F-NC-BK	18.0V	2.2A	2.6A	±5%	87%
MW4024-760F-NC-BK	24.0V	1.7A	2.0A	±5%	88%

### Notes

- 1) Maximum peak load (48W) lasting 500ms with a maximum 10% duty cycle.
- 2) Includes initial setting, line regulation, load, regulation, and thermal drift.
- 3) Typical at 115VAC

General	
Efficiency	Avg. Efficiency 86.4% @ 115VAC; 85.7% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	5.0 (127.0mm) x 3.0 (76.2 mm) x 1.3 (33.0mm)
Weight	0.8 lbs (.36 kg)

Environmental		
Operating Temperature	0 – 40C, linearly derated to 50% load at 60C	
Storage Temperature	-40°C to +85°C	
Relative Humidity	5-95%, non-condensing	
Cooling	Natural Convection	
Vibration	All units production tested to 19.6m/s <sup>2</sup>	

EMC & Safety		
Emissions	FCC class B, CISPR11 class B EN61000-3-2, -3	
Immunity	EN60601-4-2, -3, -4, -5, -6, -8, -11	
	cTUVus	
Certified by TUV to the following:	UL 60601-1	
	CAN/CSA-22.2 No.601.1-M90	
	CB per IEC60601-1	
	CE marked to LVD	

Input Configuration		
Standard Input Cable	Not Provided	
Connection on Power Supply Body	IEC 320 C14 Receptacle	

Output Configuration	
Standard Output Cable	6ft
Connector (PSU side)	Switchcraft 760 or equivalent
Mating Connector	Switchcraft 712A or equivalent

Output Pin Assignments		
Center	+V1	Rtn +V
Outside	Return	1KUI — +V





