



ELPAC MTA040 SERIES

40 Watt
Medical Open Frame Power Supply

- Safety Approval - EN60601-1 Class I
- Hold-up Time >14ms at full load
- Floating Output
- EISA, CEC Compliant
- 5-Year Limited Warranty
- Lifetime Expectation >5 years



Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MTA040009A	9.0V	4.4A	5.3A	±5%	85%
MTA040012A	12.0V	3.3A	4.0A	±5%	87%
MTA040015A	15.0V	2.7A	3.2A	±5%	88%
MTA040024A	24.0V	1.7A	2.0A	±5%	87%

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

INPUT	
Input Voltage	85 – 264VAC 100 – 240VAC Nominal
Input Frequency	47 – 63Hz
Input Current	<1.0A rms
Inrush Current	<37A at 230VAC cold start
Zero Load Power Consumption	<0.3W
Earth Leakage Current (Typical)	<60µA @ 132VAC @ 60Hz <80µA @ 264VAC @ 60Hz
Touch Leakage Current	<30µA @ 132VAC @ 60Hz <55µA @ 264VAC @ 60Hz

OUTPUT	
Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<250ms
Hold-Up Time	>14ms
Ripple & Noise	<1% pk-pk **
Over Voltage Protection	112 – 135%
Over Temperature Protection	First Stage - Recoverable; plus 2nd stage - Non Recoverable
Over Current Protection	108 – 180%
Short Circuit Protection	Shutdown, auto-restart (hiccup mode)

Notes

**Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.

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General		Environmental		EMC & Safety	
Efficiency	Avg. Efficiency 87.1% @ 115VAC; 87.1% @ 230VAC	Operating Temperature	0 – 70°C (Full load to 50°C, derate linearly to 50% load at 70°C)	Emissions	FCC class B, CISPR11 class B EN61000-3-2, -3
MTBF	min. 200,000 hours demonstrated	Storage Temperature	-40°C to +85°C	Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11
Size	4.00" (101.6mm) x 2.00" (50.81mm) x 0.99" (25.2mm)	Relative Humidity	5-95%, non-condensing	Certified by TUV to the following:	cTUVus
Weight	.029 lbs (0.13 Kg)	Cooling	Natural Convection		UL 60601-1
Power Density	5.6=76W/in³	Vibration	All units production tested to 19.6m/s²		CAN/CSA-22.2 No.601.1-M90
					CB per IEC60601-1
					CE marked to LVD

Input Configuration		Output Configuration		Input Pin Assignments	
Mating Connector	AMP p/n 640250-3 (or equivalent)	Connector (PSU side)	AMP p/n 640445-6 (or equivalent)	Pin 1	AC Line
Connection on Power Supply Body	AMP p/n 640445-3 (or equivalent)	Mating Connector	AMP p/n 640250-6 (or equivalent)	Pin 2	<not assembled>
				Pin 3	AC neutral

Mechanical Drawing		Output Pin Assignments	
		Pin 1	+V1
		Pin 2	+V1
		Pin 3	Return
		Pin 4	Return
		Pin 5	No Connection
		Pin 6	No Connection