

ELPAC MWA150 SERIES CLASS II

150 Watt
Medical Desktop Power Supply

- Medical Approval - EN60601-1 Class II 3.1 Edition
- EMC safety - IEC/EN 60601-1-2 4th edition
- Low Leakage Current
- High Efficiency: Level V
- High Power Density 5.4W/in³
- Lifetime Expectation >5 years
- LED Indicator
- 5-Year Limited Warranty



INPUT	
Input Voltage	85 – 264VAC (100 – 240VAC Nominal)
Input Frequency	47 – 63Hz (50-60Hz Rated)
Input Current	2.0A-0.9A rms
Inrush Current	<37A at 230VAC cold start
Power Factor	>0.97
Zero Load Power	<0.5W
Earth Leakage Current (Typical)	N/A
	N/A
Touch Leakage Current	<50µA @ 132VAC @ 60Hz
	<100µA @ 264VAC @ 60Hz

OUTPUT	
Output Voltage	See Table
Total Regulation	±5%
Minimum Load	No minimum load required
Start-Up Delay	<1.5s
Hold-Up Time	>25ms at any input voltage of full load
Ripple & Noise	<1% pk-pk **
Over Voltage Protection	110 – 135%
Over Temperature Protection	Active - Recoverable; Passive - Non recoverable
Over Current Protection	120 – 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.

Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MWA150012B-12A	12.0V	12.5A	15.0A	±5%	89%
MWA150015B-12A	15.0V	10.0A	12.0A	±5%	90%
MWA150018B-11A	18.0V	8.3A	10.0A	±5%	90%
MWA150024B-11A	24.0V	6.3A	7.5A	±5%	91%
MWA150028B-11A	28.0V	5.3A	6.4A	±5%	91%
MWA150048B-11A	48.0V	3.2A	3.75A	±5%	92%

Notes

1) Maximum peak load (180W) lasting 500ms with a maximum 10% duty cycle.

2) Includes initial setting, line regulation, load regulation, and thermal drift.

3) Typical at 115VAC (including output cable).

4) AC cord not included-AC cord part number 67400-242-AB can be ordered separately.

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inventusTM
POWER

General

Efficiency	Avg. Efficiency 90.5% @ 115VAC; Avg. Efficiency 92.5% @ 230VAC;
MTBF	min. 200,000 hours, SR-332 issue 3
Size	7.56" (192mm) x 2.45" (62.2mm) x 1.52" (38.7mm)
Weight	1.55 LBS (0.7 Kg)
Power Density	5.4W/in ³

Environmental

Operating Temperature	0–60°C (Full load to 40°C, derate linearly to 50% load at 60°C)
Storage Temperature	-40°C to +85°C
Relative Humidity	5-95%, non-condensing
Cooling	Natural Convection
Vibration	Unites meet MIL-STD-810G Figure 514.6C-1 category 4

EMC & Safety

Emissions	FCC class B, CISPR11 class B IEC/EN60601-1-2(Ed.4) EN61000-3-2, -3
Immunity	EN61000-4-2, -3, -4, -5, -6, -11
Certified by TUV to the following:	cTUVus
	ANSI/AAMI ES60601-1:2005+A2+A1
	CAN/CSA-C22.2 No.60601-1:14
	CB per IEC60601-1 3.1 Edition
	CE marked to LVD and CE EMC

Input & Output Configuration

Standard Input Cable	Not Provided Separately (P/N 67400-242-AB)
Connection on Power Supply Body	IEC 320 C8 Receptacle
Standard Output Cable	4ft for 12V 15V 6ft for 18V, 24V, 28V, 48V
Output Cable Cord Size	4x16awg (12V, 15V, 18V) 4x18awg (24V*, 28V*, 48V*)
Output Cable Connector	Switchcraft DIN-8, P/N 15BL8M Switchcraft DIN-5, P/N 05GM5MX
Output Cable Mating Connector	Switchcraft 62GB8FX(8 pin) or equivalent(12V, 15V, 18V, 24V) Switchcraft 57GB5FX (5 pin) or equivalent(28V, 48V)

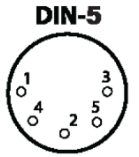
Output Pin Assignments

Pin 1	+V1
Pin 2	+V1
Pin 3	Return
Pin 4	+V1
Pin 5	Return
Pin 6	+V1
Pin 7	Return
Pin 8	Return



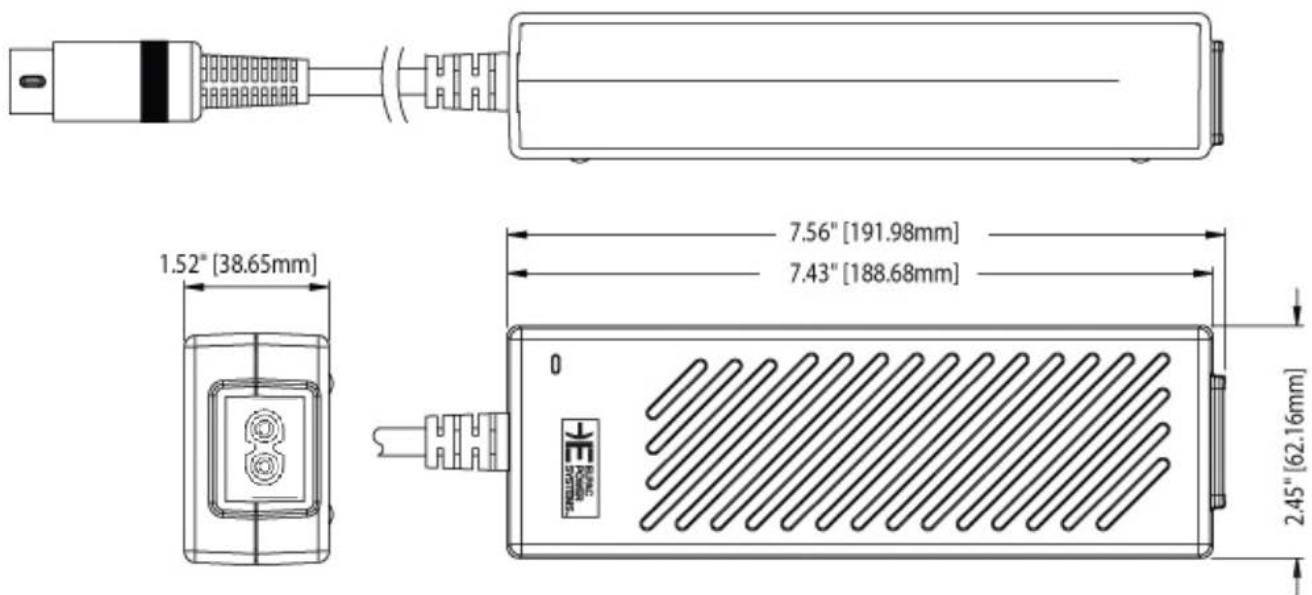
Output Pin Assignments

Pin 1	+V1
Pin 2	+V1
Pin 3	Return
Pin 4	+V1
Pin 5	Return



*with EMI bead

Mechanical Drawing



MWA150-DWG