

MWA150 Series

150 Watts Medical Switch Mode Power Supply

>E Elpac Power Systems

TECHNICAL SUPPORT

WORLDWIDE 1-888-357-2280 saleselpac@iccus.com www.iccus.com

EUROPE +44.1383.432920 saleseurope@iccus.com



5-YEAR LIMITED WARRANTY*

- High Efficiency: Level V
- High Power Density 5.4W/in³
- Lifetime Expectation >5 years
- Hold-up Time >25ms at full load
- EISA Compliant
- CEC Compliant
- Floating Output
- Medical Approval EN60601-1 Class I

Input	
Input Voltage	85 – 264VAC 100 – 240VAC Nominal
Input Frequency	47 – 63Hz
Input Current	<2A rms
Inrush Current	<37A at 230VAC cold start
Power Factor	>0.97
Zero Load Power Consumption	<0.5W
	<150μA @ 132VAC @ 60Hz
Earth Leakage Current	<250μA @ 264VAC @ 60Hz
	<50μA @ 132VAC @ 60Hz
Patient Leakage Current	<75μA @ 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
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)

^{*}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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±5%

Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MWA150012A-12A	12.0V	12.5A	15.0A	±5%	89%
MWA150015A-12A	15.0V	10.0A	12.0A	±5%	90%
MWA150018A-12A	18.0V	8.3A	10.0A	±5%	90%
MWA150024A-12A	24.0V	6.3A	7.5A	±5%	91%

3.75A

3.2A

MWA150048A-12A

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

48.0V

- 2) Includes initial setting, line regulation, load regulation, and thermal drift. 3) Typical at 115VAC (including output cable).

General	
Efficiency	Avg. Efficiency 90.8% @ 115VAC; 92.8% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	7.56" (192mm) x 2.45" (62.2mm) x 1.52" (38.7mm)
Weight	1.55 lbs (0.70 Kg)
Power Density	5.4W/in ³

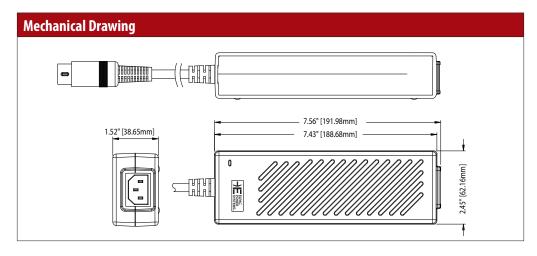
Environmental		
Operating Temperature	0 – 60°C (Full load to 40°C, derate linearly to 50% load at 60°C)	
Storage Temperature	-40°C to +85°C	
Relative Humidity	5-95%, non-condensing	
Cooling	Natural Convection	
Vibration	All units production tested to 19.6m/s ²	

EMC & Safety		
Emissions	FCC class B, CISPR11 class B EN61000-3-2, -3	
Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11	
	cTUVus	
Certified by	UL 60601-1	
following:	CAN/CSA-22.2 No.601.1-M90	
(LT Pilled Lings)	CB per IEC60601-1	
c. E. Amadelli US	CE marked to LVD	

92%

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

Output Configuration		
Standard	4ft for 12V & 15V	
Output Cable	6ft for 18V & 24V	
Connector	Switchcraft DIN-8	
(PSU side)	P/N 15BL8M (male pins)	
Mating	Switchcraft 62GB8F	
Connector	or equivalent	



Output Pin Assignments		
Pin 1	+V1	
Pin 2	+V1	DIN-8
Pin 3	Return	
Pin 4	+V1	06 8 7 1 0 3
Pin 5	Return	$\left(\begin{array}{ccc} 1 & \circ & 3 \\ \circ & & \circ \\ 4 & & 5 \end{array}\right)$
Pin 6	+V1	$\begin{pmatrix} 4 & 5 \\ 0 & 2 & 0 \end{pmatrix}$
Pin 7	Return	
Pin 8	Return	

Ordering Options Available		
Grounded Output	Overmolding	
Ferrite Cores	Output Cord Lengths	
Custom Imprinting	Special Labeling	
Special Packaging		

