



**International
Components
Corporation**

TM

MWA 150 Series

150 Watts

Medical Switch Mode Power Supply

Elpac Power Systems™
Higher Efficiency, Higher Power Density, Uncompromised Reliability



TECHNICAL SUPPORT

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ENERGY STAR PARTNER

As a Global Supplier of Power Supplies, we are committed to meeting energy efficiency standards around the world. That is why we have partnered with the ENERGY STAR® Program and engineer our Elpac Power Systems™ to meet strict energy-efficiency guidelines established by the EPA and the US Department of Energy (DOE). The Energy Star program has developed International partnerships with countries and organizations in major global markets. Those participating in the program include Australia, Canada, European Union, European Free Trade Association, Japan, New Zealand, and Taiwan.

Furthering our International commitment, we have signed the EU Code of Conduct on Efficiency of External Power Supplies. Our Elpac Power Systems™ MWA150 series meets the efficiency standards of the International ENERGY STAR® program and the EU Code of Conduct.



5-YEAR LIMITED WARRANTY*

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

| 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 |
| Earth Leakage Current | <150µA @ 132VAC @ 60Hz |
| | <250µA @ 264VAC @ 60Hz |
| Patient Leakage Current | <50µA @ 132VAC @ 60Hz |
| | <75µA @ 264VAC @ 60Hz |

Notes

*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.

| 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) |





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| 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% |

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).

| General | |
|------------------------|--|
| Energy Star 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 |

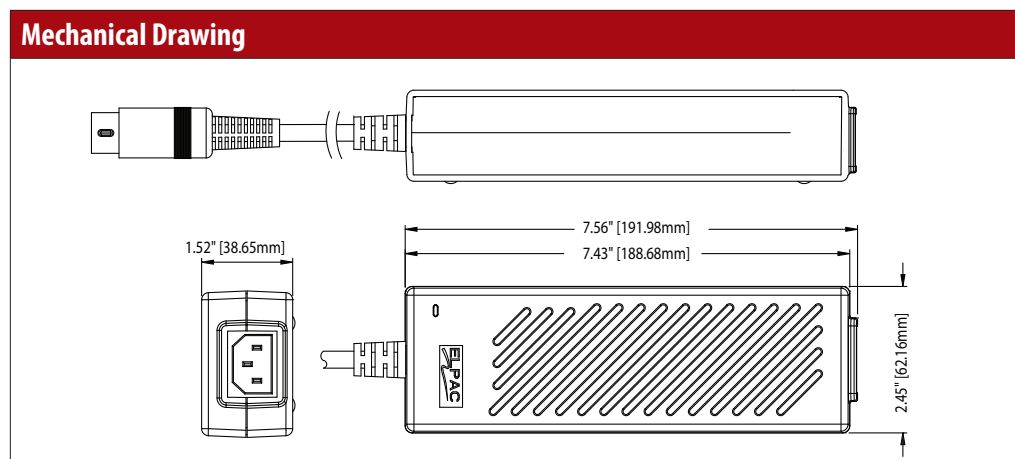
| Environmental | |
|-----------------------|---|
| Operating Temperature | 0 – 60°C (Full load to 40°C, derate linearly to 50% load at 60°C) |
| Storage Temperature | -40°C to +85°C |
| Relative Humidity | 5-95%, non-condensing |
| Cooling | Natural Convection |
| Vibration | All units production tested 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 |
| Safety Standards and Approvals | cTUVus |
| | 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 | 4ft for 12V & 15V 6ft for 18V & 24V |
| Connector (PSU side) | Switchcraft DIN-8 P/N 15BL8M (male pins) |
| Mating Connector | Switchcraft 62GB8F or equivalent |

| 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 | |



| Ordering Options Available (Contact Factory) | |
|---|--|
| White case | |
| Grounded Output | |