



MWA065 Series

65 Watt Medical Desktop Power Supply

- High Efficiency: Level V
- High Power Density 4.9W/in3
- Lifetime Expectation >5 years
- Hold-up Time >25ms at full load
- EISA, CEC Compliant
- Medical Approval EN60601-1 Class I

Elpac Part Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MWA065009A-11A	9.0V	8.0A	9.6A	±5%	85%
MWA065012A-11A	12.0V	6.0A	7.2A	±5%	88%
MWA065015A-11A	15.0V	4.8A	5.7A	±5%	89%
MWA065018A-11A	18.0V	4.0A	4.8A	±5%	90%
MWA065024A-11A	24.0V	3.0A	3.6A	±5%	91%

Notes

¹ Maximum peak load (86W) lasting 500ms with a maximum 10% duty cycle.

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

 $^{3\} Typical\ at\ 115VAC,\ full\ load\ (including\ output\ cable).$

Input

Input Voltage 85 - 264VAC 100 - 240VAC Nominal

Input Frequency 47 - 63Hz

Input Current <1.5A rms

Inrush Current <37A at 230VAC cold start

Zero Load Power Consumption <0.5W

Earth Leakage Current (Typical) <80µA @ 132VAC @ 60Hz

<100µA @ 264VAC @ 60Hz

Patient Leakage Current <40µA @ 132VAC @ 60Hz

<50µA @ 264VAC @ 60Hz

Output

Output Voltage See Table

Total Regulation +/-5%

Minimum Load No minimum load required

Start-Up Delay <750ms

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 Protetion 120 - 180%

Short Circuit Protection shutdown, auto-restart (hiccup mode)

Notes

General

Efficiency Avg Efficiency 88.2% @ 115VAC; 89.7% @ 230VAC

MTBF min. 200,000 hours demonstrated

Size 5.02" (127.6mm) x 2.20" (55.9mm) x 1.37" (34.8mm)

Weight 1.3 lbs (.59 kg)

Power Density 4.9W/in3

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

Environmental

Operating Temperature $0 - 60^{\circ}$ 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/s2

EMC & Safety

Emissions FCC class B, CISPR11 class B EN61000-3-2, -3

Immunity EN61000-4-2, -3, -4, -5, -6, -8, -11

Certified by TUV to the following: 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 (9V)

Standard Output Cable 4 ft.

Cord Size 2x16awg

Connector (PSU side) Switchcraft DIN-5, P/N 05GM5MX (male pins)

Mating Connector Switchcraft 57GB5FX (5 pin) or equivalent

Output Configuration (12V, 18V, 24V)

Standard Output Cable 6 ft.

Cord Size 2x16awg

Connector (PSU side) Switchcraft DIN-5, P/N 05GM5MX (male pins)

Mating Connector Switchcraft 57GB5FX or equivalent

Output Pin Assignments

DIN-5



Pin 1 Return

Pin 2 Return

Pin 3 +V1

Pin 4 Return

Pin 5 +V1

