



## MWA020 Class II

### 20 Watt Medical Desktop Power Supply

- High Efficiency
- Fully Regulated DC Output
- 5 Year Limited Warranty
- Hold-Up Time > 18ms at full load
- Safety Approval - EN60601-1 Class II 3rd Edition
- Level V, EuP Directive Compliant
- LED indicator

Elpac Part Number	Output Voltage	Output Current	Peak Current <sup>1</sup>	Total Regulation <sup>2</sup>	Typical Efficiency <sup>3</sup>
MWA020005B-10A	5.0V	4.0A	4.2A	+/-5%	80%
MWA020009B-10A	9.0V	2.22A	2.3A	+/-5%	83%
MWA020012B-10A	12.0V	1.67A	1.75A	+/-5%	84%
MWA020024B-10A	24.0V	0.84A	0.87A	+/-5%	86%

#### Notes

1 Maximum peak load (21W) 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).

#### Input

Input Voltage	85–264VAC; 100–240VAC Nominal
Input Frequency	47–63Hz
Input Current	<0.5A
Inrush Current	<50A at 230VAC cold start
Zero Load Power Consumption	<0.3W
Earth Leakage Current (Typical)	<40µA @ 132VAC @ 60Hz (typical) <60µA @ 264VAC @ 60Hz (typical)

## Output

Output Voltage	See Part Number Table
Total Regulation	+/- 5%
Minimum Load	No minimum load required
Start-Up Delay	<1.5s
Hold-Up Time	>18ms at any input voltage
Ripple & Noise	<1% pk-pk
Over Voltage Protection	112-135%
Over Temperature Protection	Active - Recoverable: plus Passive - Non Recoverable
Over Current Protection	108-160%
Short Circuit Protection	shutdown, auto-restart (hiccup mode)


## General

Efficiency	Avg Efficiency 83.4% at 115VAC; 82.8% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	3.45" (87.7mm) x 2.04" (51.8mm) x 1.30" (33.0mm)
Weight	5V 0.4lbs (0.2Kg); 24V 0.3 lbs (0.16Kg)
Power Density	3.1 w/in <sup>3</sup>

## Environmental

Operating Temperature	0-60°C (Full load to 40°C, derate linearly to 50% load to 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 <sup>2</sup>

## EMC & Safety

Emissions	FCC class B, CISPR11 class B, EN6100-3-2, -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
	CB per IEC6061-1 2nd and 3rd Edition
	CE marked to LVD directive

## Input Configuration

Standard Input Cable	Not Provided
Connection on Power Supply Body	IEC 320 C8 Receptacle

## Output Configuration

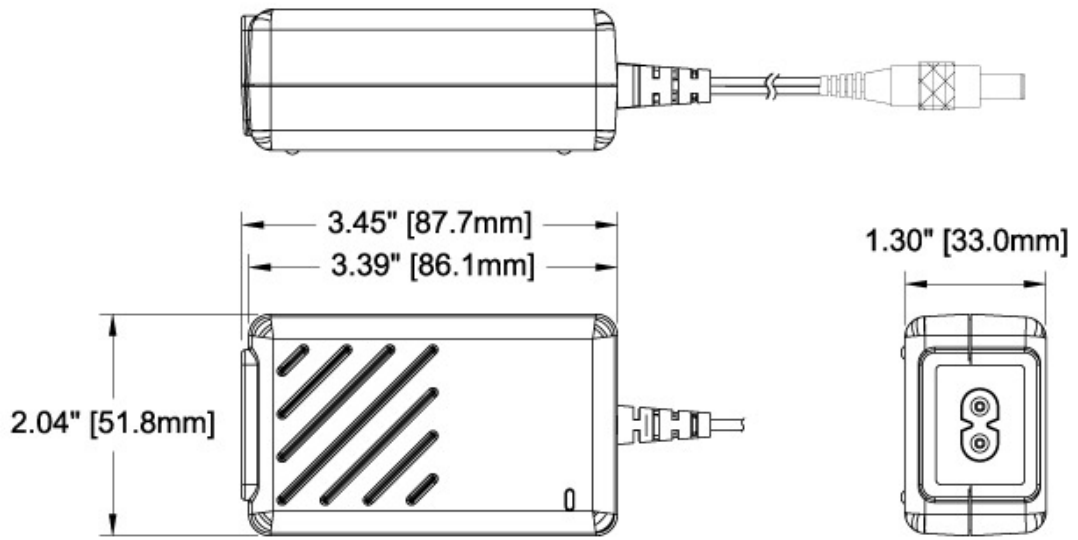
Standard Output Cable	6 ft.
Cord Size	16AWG zip (5V, 9V) 18AWG zip (12V) 20AWG zip (24V)
Connector (PSU side)	Switchcraft 760 or equivalent
Mating Connector	Switchcraft 712A or equivalent

## Output Pin Assignments



Center	+v1
Outside	Return

5V and 9V Model



12V and 24V Model

