

MW12 Series

12 Watt Medical Desktop Power Supply

MW12 Is Not Recommended For New Designs. Please Use MWA020 Class I As A Replacement

- High Efficiency
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time >20ms at full load
- Safety Approval - EN60601-1 Class I

Elpac Part Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MW1212-760-NC- BK	12.0V	1.0A	1.2A	±5%	78%
MW1224-760-NC-	24.0V	0.5A	0.6A	±5%	78%

Notes

1 Maximum peak load (14.4W) 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 rms
Inrush Current	<37A at 230VAC cold start
Zero Load Power Consumption	0.97W
Touch Leakage Current	<100µA @ 132VAC @ 60Hz <200µA @ 264VAC @ 60Hz

Output

Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<1s
Hold-Up Time	>20ms
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)

Notes

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



General

Efficiency	Avg Efficiency 78.1% @ 115VAC; 77.3% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	3.35" (85.0mm) x 1.97" (50.0mm) x 1.30" (33.0mm)
Weight	0.45 lbs (.20 kg)

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
Certified by:	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	6 ft.
Cord Size	2x16awg zip
Connector (PSU side)	Switchcraft 760 or equivalent
Mating Connector	Switchcraft 712A or equivalent

Output Pin Assignments



Center	+v1
Outside	Return



Inventory Results For MW12

Part Number	Distributor	Quantity	Inv. Date
MW1212-760-NC-BK	ALLIED ELECTRONICS, INC.	156	12/29/2015
MW1212-760-NC-BK	NEWARK ELEMENT14	590	12/28/2015
MW1224-760-NC-BK	ALLIED ELECTRONICS, INC.	61	12/29/2015