TWM200 Series

200W Medical Grade AC/DC Power Supplies

FEATURES

- 90-264 VAC Universal Input
- 0.9 to 0.95 Power Factor
- 200W Output @ Convection Cooling
- No Load Power Consumption < 500mW
- Meet Efficiency Level V Requirement
- Approved to IEC/EN/UL 60601-1 3rd Edition



ELECTRICAL SPECIFICATIONS

Input Voltage ..... 90-264 VAC
Input Frequency ..... 47-63 Hz
Input Current ..... 3A (rms) max. @ 115 VAC, 1.5A (rms) max. @ 230 VAC
Inrush Current ..... 35A max. @ 115 VAC, 70A max. @ 230 VAC at cold start +25°C
Earth Leakage Current ..... 228 µA max. @ 264 VAC, 63 Hz
Power Factor ..... >0.95 @115 VAC, >0.9 @230 VAC
Output Power Ratings ..... See table
Output Voltage Regulation .. ±5%
Ripple & Noise ..... See table

STANDARDS & COMPLIANCES

EMC Standards ..... EN 60601-1-2, EN55011, FCC Part 18 Class B
Safety Standards ..... IEC/EN/UL 60601-1 3rd Edition, ANSI/AAMI ES 60601-1: 2005, CAN/CSA C22.2 No. 60601-1:08
Agency Approvals ..... CSA, CUS, TUV, CE, CB, FCC
Other Compliances ..... RoHS, CEC

GENERAL SPECIFICATIONS

Efficiency ..... >87% at full load, 115 VAC
Switching Frequency ..... 53-58 KHz
Hold-up Time ..... >16 ms at full load, 115 VAC
Operating Temperature ..... 0°C to +60°C
Derating ..... Derate linearly 2.5%/°C from +41°C to +60°C
Temperature Coefficient ..... ±0.04%/°C
Operating Humidity ..... 10% to 95% non-condensing
Short-Circuit Protection ..... Auto-recovery
Overload Protection ..... Set at 110% to 160% of the maximum rating, Auto-recovery
Overvoltage Protection ..... Shutdown and latch off, AC recycle
Withstand Voltage ..... 4,000 VAC from input to output, 1,500 VAC from input to ground, 500 VAC from output to ground
MTBF ..... >140K hours at full load and 25°C ambient temperature calculated per MIL-HDBK-217F

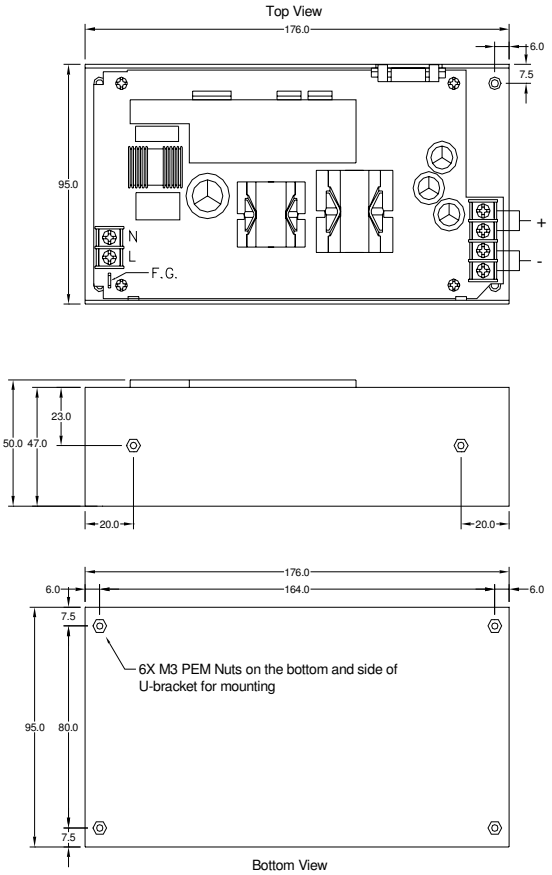
MODELS LIST

Product No.	Output Voltage	Max. Load @ Convection	Output Regulation	Ripple & Noise (Vp-p) [1]	Max. Output Power
TWM200-12	12V	16.66A	±5%	240mV	200W
TWM200-16	16V	12.50A	±5%	300mV	200W
TWM200-19	19V	10.53A	±5%	300mV	200W
TWM200-20	20V	10A	±5%	300mV	200W
TWM200-24	24V	8.33A	±5%	300mV	200W
TWM200-36	36V	5.555A	±5%	300mV	200W
TWM200-48	48V	4.166A	±5%	300mV	200W

Notes:

1. R&N are measured at 20 MHz bandwidth with a 10µF electrolytic capacitor and a 0.1µF ceramic capacitor in parallel.

MECHANICAL SPECIFICATIONS



Notes:
1. Dimensions in mm
2. Tolerance: ±0.5mm

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