



**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



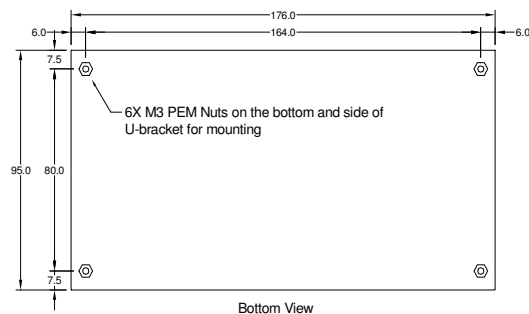
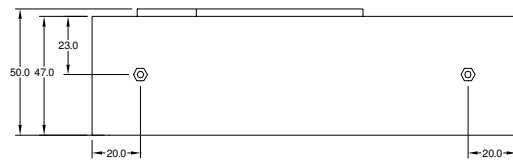
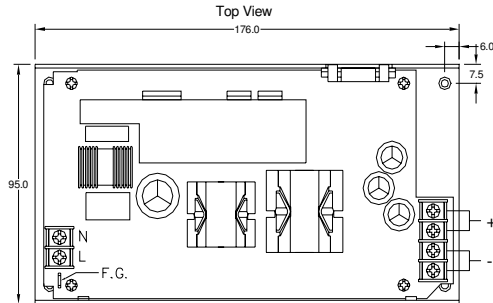
**MODELS LIST**

Product No.	Output Voltage	Max. Load @ Convection	Output Regulation	Ripple & Noise (Vp-p) <sup>(1)</sup>	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