



FEATURES

- 90~264 VAC Universal Input
- 0.98 Active Power Factor
- Efficiency of 85% Minimum
- Low Safety Ground Leakage Current
- Certified to Medical and ITE Safety Standards



MODELS LIST

Product No.	Output Voltage	Maximum Current @ 13CFM	Maximum Output Power
TMP400-18	18V	22.23A	400W
TMP400-24	24V	16.67A	400W
TMP400-28	28V	14.29A	400W
TMP400-36	36V	11.12A	400W
TMP400-48	48V	8.34A	400W

INPUT SPECIFICATIONS

Input Voltage Range 90~264 VAC
 Input Frequency 47~63Hz
 Input Current 4.2A rms @ 115 VAC, 60 Hz
 2.1A rms @ 230 VAC, 50 Hz
 Inrush Current 20A @ 115 VAC or 40A
 @ 230 VAC, at 25°C cold start
 Earth Leakage Current 300µA max. @ 264 VAC, 63 Hz
 Touch Current 100µA max. @264 VAC, 63 Hz

OUTPUT SPECIFICATIONS

Output Power Ratings See table
 Minimum Load Not required
 Tolerance ±5%
 Ripple and Noise* 1% peak to peak max. at full load
 Overvoltage Protection Set at 115-140% of its nominal output voltage
 Overcurrent Protection Protected to short-circuit conditions
 Thermal Shutdown Protected to over temperature conditions
 Temperature Coefficient ±0.04%/°C max.
 Transient Response Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change

* Measured with 20MHz bandwidth at rated line voltage and output load ranges, with a 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor in parallel across the output.

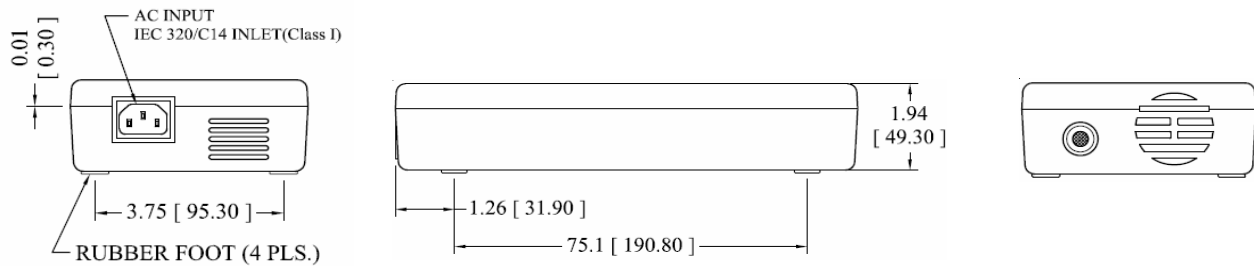
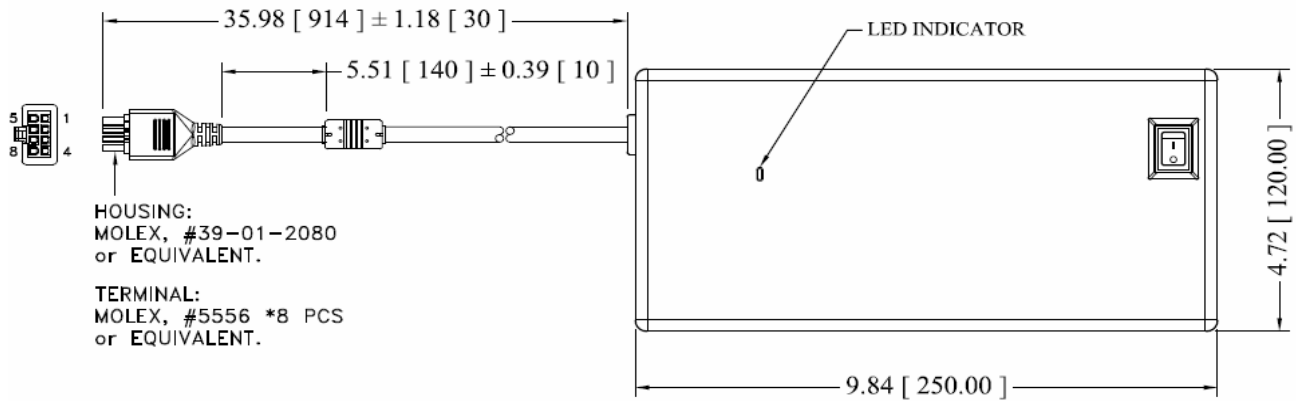
GENERAL SPECIFICATIONS

Power Factor 0.98 typical @ 115 VAC
 Efficiency 85% min. @ 115 VAC or 230 VAC
 Hold-up Time 12ms @ 110 VAC & 400W
 Switching Frequency 85 KHz typical
 Line Regulation ±0.5% max. at full load
 Operating Temperature 0°C to +60°C
 Derating Derate from 100% at +40°C linearly to 50% at +60°C
 Storage Temperature -40°C to +85°C
 Relative Humidity 5% to 95% non-condensing
 Withstand Voltage 5,600 VDC from input to output
 2,100 VDC from input to ground
 700 VDC from output to ground
 Operating Altitude 5,000 meters max.
 MTBF 350K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

STANDARDS & COMPLIANCES

EN 55011/EN 55022 Class B, conducted & radiated
 FCC Class B, conducted & radiated
 VCCI Class B, conducted & radiated
 EN 61000-3-2 Harmonic distortion, Class B & D
 EN 61000-3-3 Line flicker
 EN 61000-4-2 ESD, ±8 KV air and ±6 KV contact
 EN 61000-4-3 Radiated immunity, 3V/m
 EN 61000-4-4 Fast transient/burst, ±2 KV
 EN 61000-4-5 Surge, ±1 KV diff., ±2 KV com.
 EN 61000-4-6 Conducted immunity, 3 Vrms
 EN 61000-4-8 Magnetic field immunity, 3A/m
 EN 61000-4-11 Voltage dips, 30% reduction for 500ms, 60% reduction for 100ms, >95% reduction for 10ms
 Safety Standards IEC/EN/UL 60601-1 3rd Ed. ANSI/AAMI ES 60601-1:2005 CSA C22.2 No. 60601-1:08 IEC/EN 60950-1 2nd Ed.
 Agency Approvals UL, cUL, TUV, CE, CB
 Other Compliances RoHS, CEC & Energy Star Level V

MECHANICAL SPECIFICATIONS



Unit: inch [mm]
Tolerance: 0.02 [0.5] maximum

DC OUTPUT CONNECTOR	
PIN	FUNCTION
1	+V
2	
3	
4	
5	RETURN
6	
7	
8	

Notes:

1. Standard output connector: Molex Mini-Fit receptacle, P/N 39-01-2080 with female terminal #5556 or equivalent.
2. Mating connector: Molex plug 39-01-2086 and male terminal #5558, #5566, #5599 or equivalent.
3. Contact TRUMPower for output connector options.
4. Weight: 1.5kg (3.28 lbs) approx.