FEAURES
- Compact Size 2” x 4” x 1.26”
- Ultra High Power Density 10W/cubic inch
- 90–132 VAC or 180–264 VAC Full Range Input
- Low Earth Leakage Current
- Conducted EMI Class B

INPUT SPECIFICATIONS
Input Voltage Range ............ 90–132 VAC or 180–264 VAC
Input Frequency .................. 47–63Hz
Input Current ........................ 1.9A rms @ 100–120 VAC
1.1A rms @ 200–240 VAC
Inrush Current ..................... 40A @ 115 VAC or 80A @ 230 VAC, at 25°C cold start
Earth Leakage Current ......... 150µA max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS
Output Voltage/Current ........ See models list
Tolerance ................................ ±2%
Minimum Load .................... Not required
Ripple and Noise* ............... 150mV peak to peak on 5V model;
1% peak to peak on other models
Overvoltage Protection ...... Provided on output; set at 110-140% of its nominal output voltage
Overcurrent Protection ......... All outputs protected to short-circuit 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 500µs after a 25% step load change

GENERAL SPECIFICATIONS
Switching Frequency ........... 100KHz
Efficiency .......................... 88–90% @ 230 VAC full load
Hold-up Time ..................... 12ms minimum at 110 VAC
Line Regulation ................... ±0.2% max. at full load
Operating Temperature ....... -10°C to +70°C
Derating ......................... Derate from 100% at +50°C linearly to 50% at +70°C
Cooling .......................... Convection
Storage Temperature ............ -40°C to +85°C
Relative Humidity ............... 5% to 95% non-condensing
Withstand Voltage ............... 4000 VAC from input to output
1500 VAC from input to ground
500 VAC from output to ground
MTBF ................................ 270K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

MODELS LIST

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<tr>
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<tr>
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<td>20A</td>
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<td>2.1A</td>
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Notes: 1. Safety approvals are for PCB form only.
2. Add suffix "C" to order unit with cover fitted, e.g. TMC100-S18C, etc.

STANDARDS & COMPLIANCES
- EN55011, EN55022 .......... Class B conducted and radiated
- FCC .............................. Class B conducted and radiated
- VCCI ............................. Class B conducted and radiated
- EN 61000-3-2 ............... Harmonic distortion, Class A
- 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 dip immunity, 30% reduction for 500ms (criteria A @ 230 VAC, criteria B @ 100 VAC), 60% reduction for 100ms (criteria B), >95% reduction for 10ms (criteria A)

Safety Standards ............ UL 60601-1, EN 60601-1,
CSA C22.2 No. 601.1, UL 60950-1, EN 60950-1,
CIA C22.2 No. 60950-1

Agency Approvals ............ UL, cUL, TUV, CE, CB
Other Compliances ......... RoHS
TMC100 Series
100 Watts Medical & ITE Switching Power Supplies

MECHANICAL SPECIFICATIONS

NOTES:

1. Dimensions: inches [mm]
2. Tolerance: 0.02 [0.5] maximum
3. Connector P1: Molex header 09-65-2038 or equivalent, mating with Molex housing 09-50-1031 or equivalent.
4. Connector P2: Molex header 09-65-2068 or equivalent, mating with Molex header 09-50-1061 or equivalent.
5. To ensure compliance with level B emissions, connect the three marked mounting holes (*) with metallic standoffs to chassis.
6. Weight: 190 grams (0.44 lbs.) approx.

CONNECTOR

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