

FEATURES

- 2" x 4" Footprint with 1.18" Low Profile
- Open PCB, L-Bracket & Cover Available
- 90~264 VAC Universal Input
- Single, Dual, or Triple Outputs
- Low Earth Leakage Current
- Level B Emissions



MODELS LIST

Product No.	OUTPUT #1					OUTPUT #2				OUTPUT #3				Max. Output Power ^[3]
	Voltage	Min. Current	Max. Current @ Convection	Max. Current @ 5 CFM ^[2]	Tol.	Voltage	Min. Current	Max. Current	Tol.	Voltage	Min. Current	Max. Current	Tol.	
TMC60-S05	5V	0A	11A	—	±2%	—	—	—	—	—	—	—	—	55W
TMC60-S12	12V	0A	5A	—	±2%	—	—	—	—	—	—	—	—	60W
TMC60-S15	15V	0A	4.3A	—	±2%	—	—	—	—	—	—	—	—	64W
TMC60-S24	24V	0A	2.7A	—	±2%	—	—	—	—	—	—	—	—	64W
TMC60-S48	48V	0A	1.35A	—	±2%	—	—	—	—	—	—	—	—	64W
TMC60-D23	+5V	0.5A	6A	8A	±3%	+12V	0.1A	3A	±5%	—	—	—	—	55W
TMC60-D25	+5V	0.5A	6A	8A	±3%	+24V	0.1A	1.5A	±5%	—	—	—	—	55W
TMC60-T31	+5V	0.5A	6A	8A	±3%	+12V	0.1A	3A	±5%	-12V	0A	0.5A	±4%	55W
TMC60-T31-3	+3.3V	0.8A	6A	8A	±3%	+5.2V	0.1A	3A	±5%	+12V	0A	0.5A	±4%	37.5W
TMC60-T31-5	+5V	0.5A	6A	8A	±3%	+3.3V	0A	1.5A	±5%	+12V	0A	0.5A	±4%	37.5/47.5W ^[4]
TMC60-T32	+5V	0.5A	6A	8A	±3%	+15V	0.1A	2.4A	±5%	-15V	0A	0.5A	±4%	55W
TMC60-T39	+5V	0.5A	6A	8A	±3%	+24V	0.1A	1.5A	±5%	-12V	0A	0.5A	±4%	55W

NOTES:

1) Safety approvals are for PCB form only. To order L-bracket version, add suffix "B", e.g. TMC60-S12B. To order enclosed version, add suffix "C", e.g. TMC60-D23C.

2) Maximum current of output #1 for multi-output models can be 8A at 5 CFM forced air provided by user.

3) The maximum output power listed is convection rating.

4) 47.5W with 5 CFM forced air is provided by user.

5) The output voltages of a multiple output model may go outside of the listed tolerance when an output load current is beyond its limits.

INPUT & OUTPUT SPECIFICATIONS

Input Voltage Range	90~264 VAC	Overvoltage Protection	Provided on output #1 only; set at 112-132% of its nominal output voltage
Input Frequency	47~63 Hz	Overcurrent Protection	All outputs protected to short-circuit conditions
Input Current	1.3A (rms) @ 100 VAC 0.7A (rms) @ 240 VAC	Temperature Coefficient	±0.04%/°C max.
Inrush Current	30A @ 115 VAC or 60A @ 230 VAC, at 25°C cold start	Transient Response	Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 µs after a 25% step load change
Earth Leakage Current	150 µA max. @ 264 VAC, 63Hz		
Output Power Ratings	See rating table		
Tolerance	See rating table		
Ripple and Noise*	100 mVp-p on 3.3V & 5V models; 1% peak to peak on other models		

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

TMC60 Series

37.5~64 Watts Medical & ITE AC/DC Power Supplies

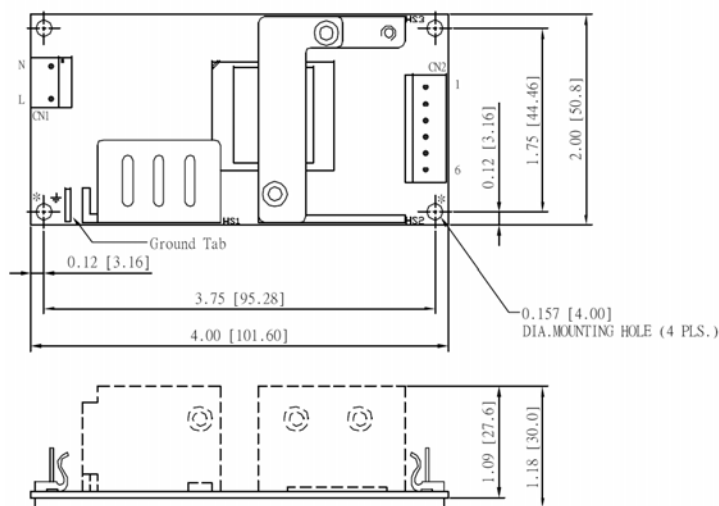
GENERAL SPECIFICATIONS

Switching Frequency	62±5 KHz
Efficiency	80~88% typical except 75% on TMC60-T31-3 and TMC60-T31-5
Hold-up Time	12 ms minimum at 110 VAC
Line Regulation	±0.5% max. at full load
Operating Temperature	-10°C to +70°C
Derating	Derate from 100% @ +50°C linearly to 50% @ +70°C
Storage Temperature	-40°C to +85°C
Relative Humidity	5% to 95% non-condensing
Withstand Voltage	4,000 VAC from input to output 1,500 VAC from input to ground 500 VAC from output to ground
MTBF	400K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

STANDARDS & COMPLIANCES

IEC 60601-1-2	EMC & Immunity performance
EN 55011, EN 55022	Class B conducted and radiated
FCC, VCCI	Class B conducted and radiated
EN 61000-3-2	Harmonic distortion, Class A & 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 dip immunity, 30% reduction for 500 ms, 60% reduction for 100 ms, >95% reduction for 10 ms
Safety Standards	UL 60601-1, EN 60601-1, CSA C22.2 No. 601.1, UL 60950-1, EN 60950-1, CSA C22.2 No. 60950-1
Agency Approvals	UL, cUL, TUV, CB, CE (LVD)
Other Compliance	RoHS

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions: inches [mm]
2. Tolerance: 0.02 [0.5] maximum
3. Connector CN1: Molex header 09-65-2038 or equivalent, mating with Molex housing 09-50-1031 or equivalent.
4. Connector CN2: Molex header 09-65-2068 or equivalent, mating with Molex housing 09-50-1061 or equivalent.
5. Ground tab is 0.25 [6.35] x 0.032 [0.8] fast-on connector.
6. To ensure compliance with level B emissions, connect the two * marked mounting holes with metallic standoffs to chassis.
7. Weight: 205 grams (0.45 lb.) approx.

DC OUTPUT CONNECTORS (CN2)			
PIN	SINGLE	DUAL	TRIPLE
1	OUTPUT	OUTPUT #1	OUTPUT #1
2	OUTPUT	OUTPUT #1	OUTPUT #1
3	RETURN	COMMON RETURN	COMMON RETURN
4	RETURN	COMMON RETURN	COMMON RETURN
5	N.C.	N.C.	OUTPUT #3
6	N.C.	OUTPUT #2	OUTPUT #2