



FEATURES

- 4" x 7" x 1.7" Compact Size
Low Leakage Current
5V/200mA Standby Power
12V/300mA Fan Power or Auxiliary Output
PFD, Remote Sense, Output Inhibit
BF Rated Outputs

INPUT SPECIFICATIONS

Input Voltage Range 90-264 VAC, with active PFC
Input Frequency 47-63 Hz
Input Current 5.2A rms @ 115 VAC, 60 Hz
2.6A rms @ 230 VAC, 50 Hz
Inrush Current 30A @ 115 VAC or 60A @ 230 VAC,
at 25°C cold start
Earth Leakage Current 300 µA max. @ 264 VAC, 63Hz
Touch Current 100 µA max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS

Output Power Ratings See table
Ripple and Noise* 1% peak to peak max.
Line Regulation ±0.5% max. @ full load
Output Tolerance ±2%
Over Voltage Protection Set at 115-140% of its nominal
output voltage
Over Current Protection Protected to short-circuit
conditions
Thermal Shutdown Protected to over temperature
conditions
Temperature Coefficient ±0.04%/°C max.
Remote Sense Compensation for cable losses
up to 0.5V
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
Standby Power 5V/200mA max.
Fan Power/Aux. Output 12V/300mA max.

* Peak to peak with 20MHz bandwidth and 10µF tantalum capacitor in parallel with
0.1µF ceramic capacitor at rated line voltage and load ranges

GENERAL SPECIFICATIONS

Switching Frequency 85 kHz typical
Efficiency 90% typical
Operating Altitude 5,000 meters max.
Hold-up Time 10 ms min. @ 110 VAC
Operating Temperature -10°C to +70°C
Derating Derate from 100% @ +50°C
linearly to 50% @ +70°C;
applicable to convection and
forced-air cooling conditions
Storage Temperature -40°C to +85°C
Relative Humidity 5% to 95% non-condensing
Withstand Voltage 4,000 VAC, input-output (2MOPP)
1,500 VAC, input-ground (1MOPP)
1,500 VAC, output-ground



MODELS LIST

Table with 7 columns: Product No., Voltage, @ Convection (Max. Current, Max. Power), @ 30 CFM Forced Air (Max. Current, Max. Power), and Ripple & Noise. Lists models TMC500-S12 through TMC500-S57.

NOTES:

- 1. Standard form factor is U-bracket. Add suffix "C" for enclosed frame with cooling fan, e.g. TMC500-S24C.
2. All models may be operated at no-load without damage and output voltage fluctuates beyond 5% due to the burst-mode operation of the IC control.

GENERAL SPECIFICATIONS (CONT.)

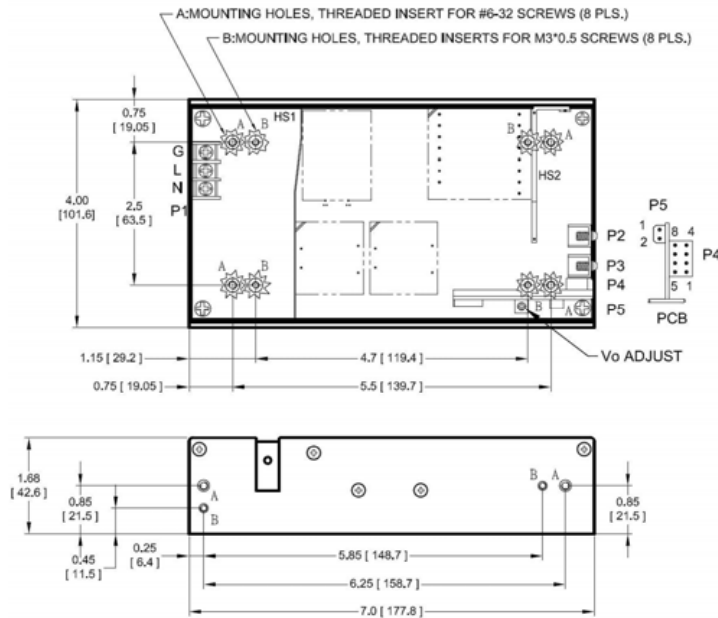
MTBF 250 kHrs minimum at full load,
25°C ambient, calculated per
MIL-HDBK-217F

STANDARDS & COMPLIANCE

EN/IEC 60601-1-2:2014 ... EMC & Immunity Performance
EN55011, EN55022 Class B conducted, Class A radiated
FCC Class B conducted, Class A radiated
VCCI Class B conducted, Class A radiated
EN61000-3-2 Harmonic distortion, Class A & D
EN61000-3-3 Line flicker
EN61000-4-2 ESD, ±15 KV air and ±8 KV contact
EN61000-4-3 Radiated immunity, 10V/m
EN61000-4-4 Fast transient/burst, ±2 KV
EN61000-4-5 Surge, ±1 KV diff., ±2 KV com.
EN61000-4-6 Conducted immunity, 10 Vrms
EN61000-4-8 Magnetic field immunity, 30A/m
EN61000-4-11 Voltage dip immunity,
30% reduction for 500 ms,
100% reduction for 10 ms
Safety Standards UL/IEC/EN 60601-1 (Edition 3.1)
ANSI/AAMI ES 60601-1:2012
CSA C22.2 No. 60601-1:2014
IEC/EN 60950-1 (2nd Edition)
Agency Approvals UL, cUL, TUV, CB, CE
Other Compliance RoHS

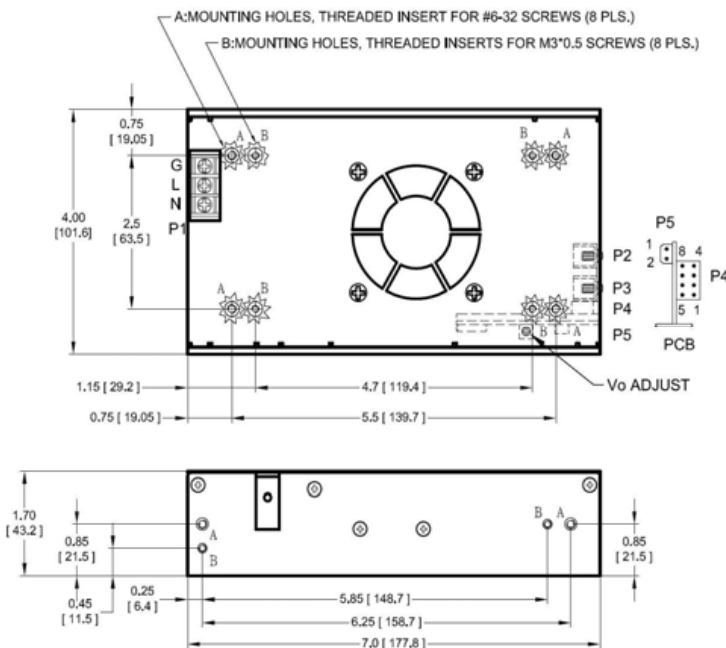
MECHANICAL SPECIFICATIONS

U-Bracket Form Factor (Standard)



CONNECTOR	PIN	FUNCTION
P1 (AC)	1	AC GROUND
	2	LIVE
	3	NEUTRAL
P2		+V
P3		COMMON RETURN
P4	1	COMMON RETURN
	2	+V SENSE
	3	-V SENSE
	4	PFD
	5	INHIBIT
	6	+5V STANDBY
	7	N.C.
	8	N.C.
P5	1	+12V FAN
	2	COMMON RETURN

Enclosed Form Factor (Suffix "C")



CONTROL SIGNALS	
PFD	TTL logic high for normal operation, low upon loss of input power. This signal appears at least 1ms prior to V1 output dropping 5% below its nominal value. This signal also provides a minimum delay of 100ms after V1 is within regulation.
INHIBIT	Requires an external TTL high level signal to inhibit outputs for standard models.

NOTES:

1. Dimensions: inches [mm]
2. Tolerance: 0.02 [0.5] maximum
3. Input connector P1: Dinkle terminal P/N DT-35-B01W-03 with M3, nickel plated screws.
4. Output connectors P2, P3: M4 x 0.7 screw connectors.
5. Output connector P4: Molex header 87833-08 or equivalent, mating with Molex housing 51110-0850 or equivalent.
6. Fan connector P5: JST header S2B-ZR-3.4 or equivalent, mating with JST housing ZHR-2 or equivalent.
7. Weight: 1 KG approx. (2.23 lbs) for U-bracket format, 1.14 KGS approx. (2.52 lbs) for enclosed format.
8. Maximum penetration depth of fixing screws is 4mm from the outer chassis surface.