



FEATURES

- 3" x 6" x 1.38" Compact Size
• Class I/II, BF Rated Outputs
• Low Leakage Current
• 5V/2A or 12V/1A Standby Power
• 12V/1A Fan Power or Auxiliary Output
• PFD, Remote Sense, Output Inhibit

INPUT SPECIFICATIONS

Input Voltage Range ..... 90-264 VAC
Input Frequency ..... 47-63 Hz
Input Current ..... 4A rms @ 115 VAC,
2A rms @ 230 VAC
Inrush Current ..... 20A @ 115 VAC or 40A @ 230 VAC,
at 25°C cold start
Earth Leakage Current ..... 220 µA max. @ 264 VAC, 63Hz
Touch Current ..... 100 µA max. @ 264 VAC, 63Hz
Standby Power Cons. .... 5V/100mA, 1W max.

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%
Overvoltage Protection ..... Set at 112-140% of its nominal
output voltage
Overcurrent Protection ..... 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 500 us after a
25% step load change
Standby Power ..... 5V/2A (standard) or 12V/1A
Fan Power/Aux. Output ..... 12V/1A max. (isolated output)

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

GENERAL SPECIFICATIONS

Switching Frequency ..... 100 kHz
Power Factor ..... 0.98 typical, with active PFC
Efficiency ..... 87% typical
Operating Altitude ..... 5,000 meters max.
Turn-on Delay ..... 3 sec. max. @ 100 VAC
Hold-up Time ..... 10 ms min. @ 110 VAC
Operating Temperature ..... 0°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
MTBF ..... 250 kHrs minimum at full load,
25°C ambient, calculated per
MIL-HDBK-217F



STANDARDS & COMPLIANCES

EN55011, EN55022 ..... Class B conducted, Class B radiated
FCC ..... Class B conducted, Class B radiated
VCCI ..... Class B conducted, Class B radiated
EN61000-3-2 ..... Harmonic distortion, Class A & D
EN61000-3-3 ..... Line flicker
EN61000-4-2 ..... ESD, ±8 KV air and ±6 KV contact
EN61000-4-3 ..... Radiated immunity, 3V/m
EN61000-4-4 ..... Fast transient/burst, ±2 KV
EN61000-4-5 ..... Surge, ±1 KV diff., ±2 KV com.
EN61000-4-6 ..... Conducted immunity, 3 Vrms
EN61000-4-8 ..... Magnetic field immunity, 3A/m
EN61000-4-11 ..... Voltage dips immunity,
30% reduction for 500 ms,
60% reduction for 100 ms,
>95% reduction for 10 ms
Safety Standards ..... UL/IEC/EN 60601-1 (3rd Edition),
ANSI/AAMI ES 60601-1:2005,
CSA C22.2 No. 60601-1:08,
UL/IEC/EN 60950-1 (2nd Edition),
CSA C22.2 No. 60950-1 (2nd Edition)
Agency Approvals ..... UL, cUL, TUV, CB, CE
Other Compliance ..... RoHS

MODELS LIST

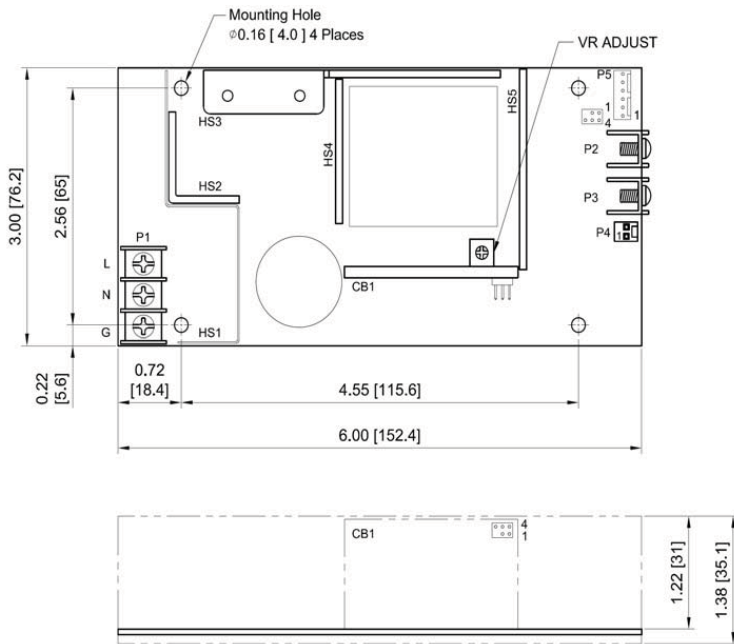
Table with columns: Product No., Voltage, @ Convection (Max. Current, Max. Power), @ 10 CFM Forced Air (Max. Current, Max. Power), Ripple & Noise. Lists models TMC300-S12 through TMC300-S48.

NOTES:

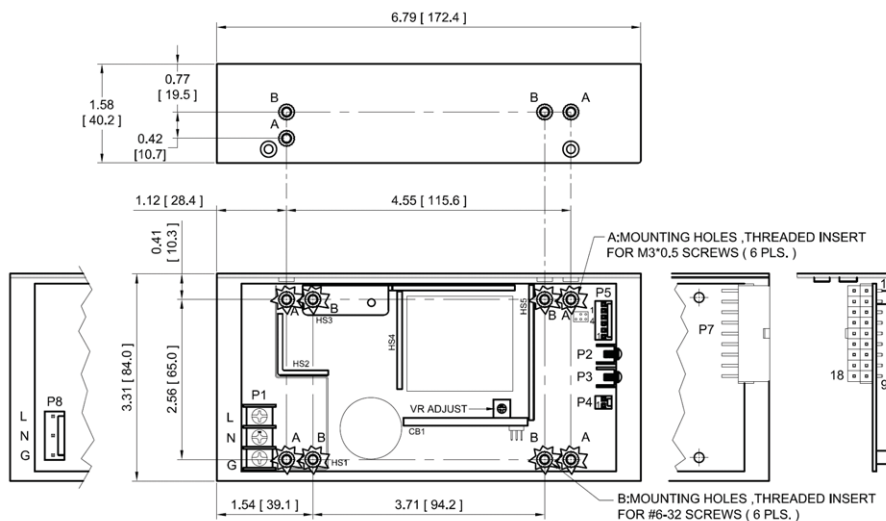
- 1. Standard form factor is open frame PCB. Add suffix "B" for L-bracket, e.g. TMC300-S12B. Add suffix "C" for enclosed frame with cooling fan, e.g. TMC300-S24C.
2. Standard models come with 5V@2A standby power. Add suffix "-E" for 12V@1A standby power, e.g. TMC300-S12-E.

### MECHANICAL SPECIFICATIONS

#### PCB Form Factor (Standard)



#### L-Bracket Form Factor (Suffix "B")



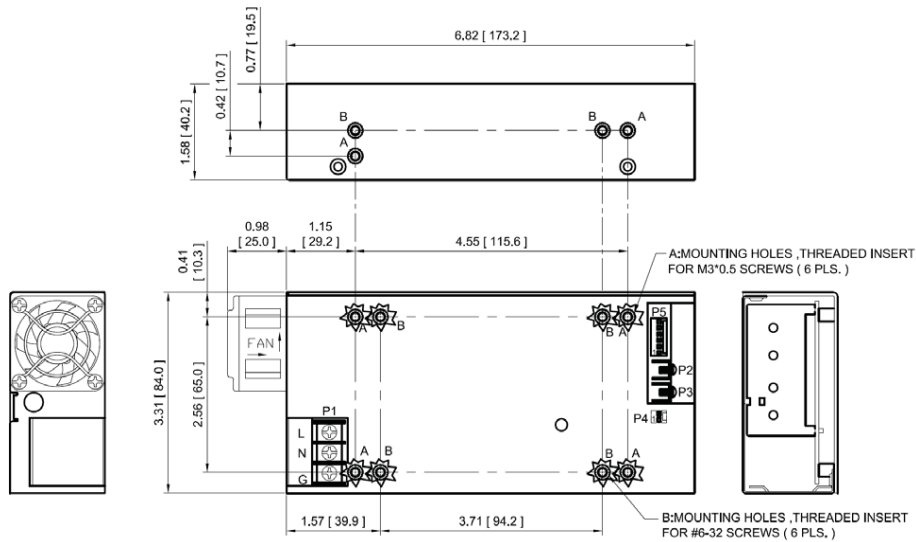
CONNECTOR	PIN	FUNCTION
P1, P8	1	AC LIVE
	2	NEUTRAL
	3	AC GROUND
P2		+V
P3		COMMON RETURN
P4	1	+12V FAN (ISOLATED)
	2	FAN RETURN (ISOLATED)
P5	1	-V SENSE
	2	+V SENSE
	3	PFD
	4	INHIBIT
	5	+5V or 12V STANDBY
	6	COMMON RETURN
P7	1	+5V or +12V STANDBY
	2	INHIBIT
	3 - 8	+V
	9	FAN RETURN
	10	STANDBY RETURN
	11	PFD
	12 - 17	COMMON RETURN
	18	+12V FAN

#### 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.

### MECHANICAL SPECIFICATIONS (cont.)

#### Enclosed Form Factor (Suffix "C")



#### NOTES:

1. Dimensions: inches [mm]
2. Tolerance: 0.02 [0.5] maximum
3. Input connector P1 is Dinkle terminal P/N DT-35-B01W-03 with M3, nickel plated screws
4. Output connectors P2, P3: M3 x 0.5 screw connectors
5. Fan connector P4: Molex header 22-04-1021 or equivalent, mating with Molex housing 22-01-1022 or equivalent
6. Connector P5: Molex header 22-04-1061 or equivalent, mating with Molex housing 22-01-1062 or equivalent
7. Optional output connector P7: Molex housing 39-30-1180 or equivalent, mating with Molex housing 39-01-2185 or equivalent
8. Optional input connector P8: Molex header 26-60-4050 or equivalent, mating with Molex housing 09-50-8050 or equivalent
9. Weight: 510 grams approx. (1.12 lbs) for L-bracket format, 612 grams approx. (1.35 lbs) for PCB format, 744 grams approx. (1.64 lbs) for enclosed format
10. Maximum penetration depth of fixing screws is 4mm from the outer chassis surface