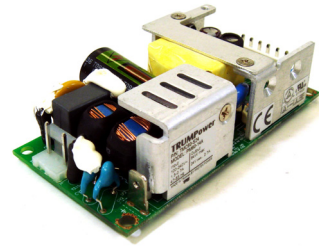




FEATURES

- Single, Dual and Triple Outputs
- 2" x 4" x 1.18" Compact Size
- 90-264 VAC Universal Input
- Level B Emissions
- Approved to IEC/EN/UL/CSA 60950-1, 2nd Edition



MODELS LIST

Product No. [1]	OUTPUT #1					OUTPUT #2				OUTPUT #3				Max. Output Power
	Voltage	Min. Current	Max. Current @ Convection	Max. Current @ 5 CFM [2]	Tol.	Voltage	Min. Current	Max. Current	Tol.	Voltage	Min. Current	Max. Current	Tol.	
TUC60-S05	5V	0A	11A	-	±2%	-	-	-	-	-	-	-	-	55W
TUC60-S12	12V	0A	5A	-	±2%	-	-	-	-	-	-	-	-	60W
TUC60-S15	15V	0A	4.3A	-	±2%	-	-	-	-	-	-	-	-	64W
TUC60-S24	24V	0A	2.7A	-	±2%	-	-	-	-	-	-	-	-	64W
TUC60-S48	48V	0A	1.35A	-	±2%	-	-	-	-	-	-	-	-	64W
TUC60-D23	+5V	0.5A	6A	8A	±3%	+12V	0.1A	3A	±5%	-	-	-	-	55W
TUC60-D25	+5V	0.5A	6A	8A	±3%	+24V	0.1A	1.5A	±5%	-	-	-	-	55W
TUC60-T31	+5V	0.5A	6A	8A	±3%	+12V	0.1A	3A	±5%	-12V	0A	0.5A	±4%	55W
TUC60-T31-3	+3.3V	0.8A	6A	8A	±3%	+5.2V	0.1A	3A	±5%	+12V	0A	0.5A	±4%	37.5W
TUC60-T31-5	+5V	0.5A	6A	8A	±3%	+3.3V	0A	1.5A	±5%	+12V	0A	0.5A	±4%	37.5/47.5W [3]
TUC60-T32	+5V	0.5A	6A	8A	±3%	+15V	0.1A	2.4A	±5%	-15V	0A	0.5A	±4%	55W
TUC60-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 unit with cover fitted, add suffix "C", e.g. TUC60-S24C.
- 2) Maximum current of output #1 for multi-output models can be 8A at 5 CFM forced air provided by user.
- 3) 47.5 W with 5 CFM forced air provided by user
- 4) The out voltages of a multiple output model may go outside of the stated tolerance when an output load current is out of stated limits. All models may be operated at no load without damage.

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 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor across the output.

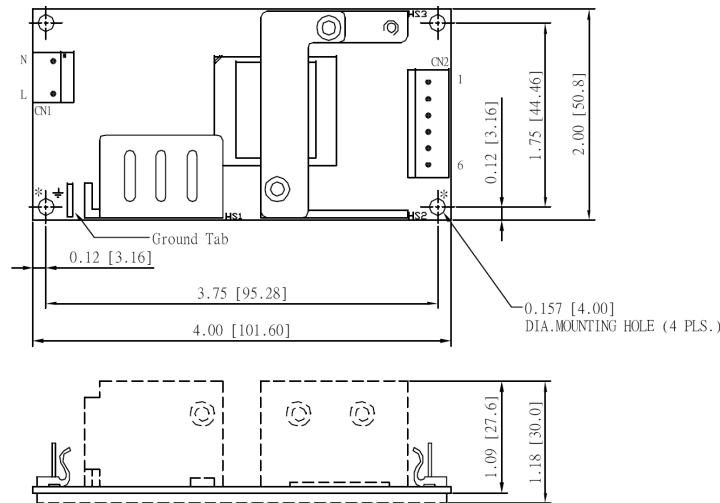
GENERAL SPECIFICATIONS

Switching Frequency	62±5 KHz
Efficiency	80-88% typical except 75% on TUC60-T31-3 and TUC60-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	3,000 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

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 ±4 KV contact
EN 61000-4-3	Radiated immunity, 3V/m
EN 61000-4-4	Fast transient/burst, ±1 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 and >95% reduction for 10 ms
Safety Standards	IEC/EN/UL 60950-1 (2nd Ed.), CSA C22.2 No. 60950-1 (2nd Ed.)
Agency Approvals	TUV, CB, CE (LVD)
Other Compliance	RoHS

MECHANICAL SPECIFICATIONS



DC OUTPUT CONNECTOR (CN2)			
PIN	SINGLE	DUAL	TRIPLE
1	+V	V1	V1
2	+V	V1	V1
3	RETURN	COMMON RETURN	COMMON RETURN
4	RETURN	COMMON RETURN	COMMON RETURN
5	N.C.	N.C.	V3
6	N.C.	V2	V2

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.