TPS50-24 | TABLE TOP POWER SUPPLY



Features :

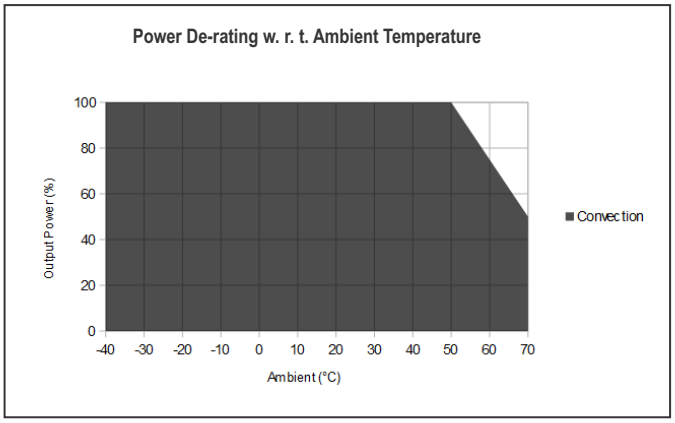
- Supports 90 - 264 VAC / 127 - 373 VDC
- Efficiency up to 86 %
- - 40°C to + 70°C Operating Temperature
- Compact size and 1U low profile
- Protection against short circuit, overload & overvoltage
- Cooling by free air convection

Certification : CE RoHS compliant

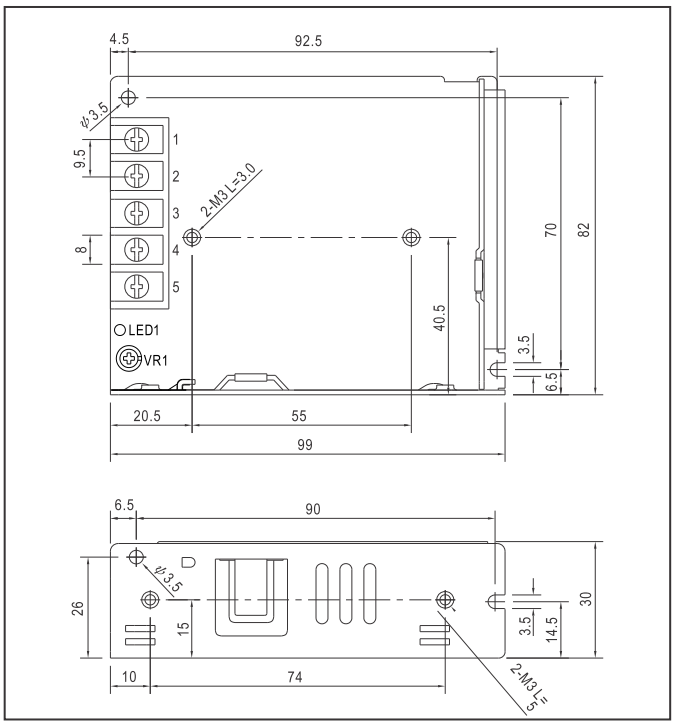
SPECIFICATIONS:

MODEL		TPS50-24
OUTPUT	NOMINAL DC VOLTAGE	24 V
	RATED CURRENT	2.2 A
	RATED POWER	52.8 W
	RIPPLE & NOISE (max)	< 1 % of Vout
	VOLTAGE ADJ. RANGE	24 V to 28 V
	VOLTAGE TOLERANCE	± 1 %
	LINE REGULATION	± 1 %
	LOAD REGULATION	± 1 %
	TURN ON TIME	< 3 sec ; at full load
	HOLD UP TIME	≥ 60 ms at 230 VAC & ≥ 10 ms at 115 VAC, Full load
	RISE TIME	< 100 ms
INPUT	VOLTAGE RANGE	90 - 264 VAC / 127 - 373 VDC
	FREQUENCY RANGE	47 - 63 Hz
	EFFICIENCY @ 230 VAC	Up to 86 %
	AC CURRENT	0.9 A @ 115 VAC; 0.50 A @ 230 VAC
	INRUSH CURRENT	< 45 Amps; Measured at 230 VAC, 25°C Ambient, Cold start
	LEAKAGE CURRENT	< 1 mA; 240 VAC input
	NO LOAD POWER CONSUMPTION	< 0.5 W; 115 VAC input
PROTECTION	OVERLOAD	> 110 % of rated output current; Hiccup mode; Autorecovery type.
	OVERVOLTAGE	28.5 - 33.5 VDC
		Hiccup mode; Autorecovery type.
	OUTPUT SHORT CIRCUIT	Hiccup mode when output is shorted; Autorecovery type.
ENVIRONMENT	OPERATING TEMP	- 40°C to + 70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C, - 40°C to 0°C startup is guaranteed with spec deviation (Output ripple can be more than 10 % of the output voltage.)
	STORAGE TEMP	- 40°C to + 85°C
	COOLING	Natural convection
	HUMIDITY	5 to 95 % RH, Non condensing
	ALTITUDE	2000 m
	VIBRATION	Component: 10 ~ 500 Hz, 2 G 10 min. / 1 cycle, period for 60 min. each along X, Y, Z axes
SAFETY & EMC	DIELECTRIC WITH STAND VOLTAGE	I/P to Earth : 2500 VAC I/P to O/P : 4000 VAC O/P to Earth : 1500 VAC
RELIABILITY	MTBF	> 545K hrs. as per MIL-HDBK-217F (25°C)
MECHANICAL	DIMENSION	99 x 82 x 30 mm (L x W x H)
	WEIGHT	< 230 gms
	MOUNTING	Table Top

De-rating curve



Mechanical dimensions



Connectors details

Ref Des	Pin number	Function
TRL1	1	AC Line
	2	AC Neutral
	3	Earth
	4	V1 Negative
	5	V1 Positive

Compliance

Applicable EMI / EMC Standards		
Category	**Reference Standards**	**Testing Level**
Conducted Emission	CISPR32	CLASS B
Radiated Emission	CISPR32	CLASS A
Electrostatic Discharge	IEC 61000-4-2	Level 4, Criteria A Level 3, Criteria A
Radiated Susceptibility	IEC 61000-4-3	Level 3, Criteria B
Electrical Fast Transient / Burst	IEC 61000-4-4	Level 3, Criteria A
Surge	IEC 61000-4-5	Level 3, Criteria A
Conducted Susceptibility	IEC 61000-4-6	Level 3, Criteria B
Power Frequency Magnetic Field	IEC 61000-4-8	Level 4, Criteria A
Voltage Dips & Interruption	IEC 61000-4-11	Criteria A & B
Safety	Designed to meet IEC 62368-1	

Ordering information

Product Code	Description	Certification
TPS50-24	52.8 W, 24 V / 2.2 A Table Top Power Supply in metal body.	CE RoHS compliant