TPIPU46 SERIES

50W Desk Top Switching Power Supplies For Industrial Equipment .

Description:

The 46 series of AC/DC switching mode power supplies provide 50 Watts of continuous output power. All supplies are UL 94V-1 min compliant, include IEC-320-C14 input for worldwide applications. All models meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1), TUV/GS(EN 60950-1) and new CE requirements. All units are 100% burned in and tested.



Features:

- Wide Input Voltage 90 to 264 VAC,47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Output Voltage Available From 5VDC Thru 50VDC
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Over Voltage Protection (Crowbar Design)
- Operating temperature -20~70℃
- Class I
- 2 year warranty

Safety Approvals :

Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Input Voltage	Operating Voltage	90		264	VAC
fin	Input Frequency		47		63	Hz
Po	Output Power Range	Vin=90 to 264VAC	0		50	W
Vo	Output Voltage Range		See rating chart			V
Io	Output Current Range		See rating chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC			1.35	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.8	A
Irl	Low Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=115VAC		12	15	A
Irh	High Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=230VAC		26	30	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	75	83	88	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	15	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3	1	2	S
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full Load, Vin=240VAC		0.5	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°c

Environmental :

	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		-20		70	°C
Tstg	Storage Temperature		-40		85	°C
Hr	Relative Humidity		5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
Pd	Derate linearly from 100% load at 40°C to 50% load at 70°C					

Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
Ris	Isolation Resistance	Test Voltage=500VDC	50			MΩ
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

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Output Voltage And Current Rating Chart (Single Output) :

	Model Number	Output Voltage	Output Current	Total ① Regulation	Maximum Output Power
*	TPIPU46-102	5 ~ 6 VDC	8.00Max	5%	40W
	TPIPU46-103	6 ~ 8 VDC	7.50 ~ 5.62 A	5%	45W
	TPIPU46-104	8 ~ 11 VDC	5.62 ~ 4.09 A	4%	45W
*	TPIPU46-105	11 ~ 13 VDC	4.09 ~ 3.46 A	3%	45W
	TPIPU46-106	13 ~ 16 VDC	3.46 ~ 2.81 A	3%	45W
	TPIPU46-107	16 ~ 21 VDC	3.12 ~ 2.38 A	3%	50W
	TPIPU36-108	21 ~ 27 VDC	2.38 ~ 1.85 A	2%	50W
	TPIPU46-109	27 ~ 33 VDC	1.85 ~ 1.51 A	2%	50W
	TPIPU46-110	33 ~ 40 VDC	1.51 ~ 1.25 A	2%	50W
*	TPIPU46-111	40 ~ 50 VDC	1.25 ~ 1.00 A	2%	50W

Mark " * " means approved by CEC level V.

① The total regulation on model 102 is required to use AWG#16 / 5C / 4FT output cable.
The total regulation on model 105 is required to use AWG#18 / 3C / 4FT, AWG#20 / 2C / 4FT output cable.
The total regulation on model 111 is required to use AWG#18 / 2C / 4FT output cable.
The regulation and efficiency will be changed by modified output cable.

Mechanical Specifications:

Note:
1. Dimensions are shown in inches or mm.
2. Weight: 535-560gs approx.
3. Optional output connector:
See page Appendix.

