

TPIPU20A SERIES

20W Desk Top Switching Power Supplies For Industrial Equipment

Description:

The 20A series of AC/DC switching mode power supplies provide 20 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. 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-C6 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- Splash proof
- Class I
- CEC and Energy Star compliance
- Approved as Limited Power Source (LPS).
- Operating temperature -20~70°C
- 3 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		20	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			0.4	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.25	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	85	95	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC	1	3	5	%
OVP	Over Voltage Protection		Nil			%
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	12	14	16	mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC		0.25	0.5	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
Pno	No-Load Power Consumption	No load, Vin=240VAC	0	0.4	0.5	W

Environmental :

Sym.	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		0.3M			Hrs
Pd	Derate linearly from 100% load at 40 °C to 50% load at 70 °C					

TPIPU20A SERIES

20W Desk Top Switching Power Supplies For Industrial Equipment

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			M Ω
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total ^① Regulation	Maximum Output Power
* TPIPU20A-102	5 ~ 6 VDC	3.00 ~ 2.50 A	5%	15W
* TPIPU20A-105	11 ~ 13 VDC	1.81 ~ 1.53 A	4%	20W
* TPIPU20A-106	13 ~ 16 VDC	1.53 ~ 1.25 A	4%	20W
* TPIPU20A-108	21 ~ 27 VDC	0.95 ~ 0.74 A	3%	20W
* TPIPU20A-109	27 ~ 33 VDC	0.74 ~ 0.60 A	3%	20W
* TPIPU20A-111	40 ~ 48 VDC	0.50 ~ 0.41 A	3%	20W

* The output voltage under 30V had been approved by TUV/PSE.

① The total regulation on each model is required to use AWG#18/4FT output cable.
The regulation will be changed by modified output cable.

Mechanical Specifications :

Note:

1. Dimensions are shown in mm.
2. Weight: 170gs approx.
3. Optional output connector:
See page Appendix.

