

TPIPU16B SERIES

15W Desk Top Switching Power Supplies For Industrial Equipment

Description:

The 16B series of AC/DC switching mode power supplies provide 15 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. All model 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-C8 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- Splash proof
- Class II
- Operating temperature -20~70°C
- 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 | | | 15 | 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 | | | 0.26 | 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 | 72 | | 85 | % | |
| REG-i | Line Regulation | Io=Full Load | | 0.5 | 1 | % | |
| REG-o | Load Regulation | Vin=230VAC | | 3 | 10 | % | |
| OVP | Over Voltage Protection | | Nil | | | % | |
| OCP | Over Current Protection | Nil. But, Output protected to short circuit conditions | | | | | % |
| Ttr | Time of Transient Response | Io=Full Load to Half Load, Vin=100VAC | | | 4 | mS | |
| Thold | Hold-Up Time | Io=Full Load, Vin=110VAC | 5 | | | 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 | |
| Pno | No-Load Power Consumption | No load, Vin=240VAC | 0 | 0.4 | 0.5 | W | |

* Note: The Ripple & Noise which is under 3.3VCD at 2% max

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 | | 0.1M | | | Hrs |
| Pd | Derate linearly from 100% load at 40°C to 50% load at 70°C | | | | | |

TPIPU16B SERIES

15W 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 |
| 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 |

Output Voltage And Current Rating Chart (Single Output) :

| Model Number | Output Voltage | Output Current | Total Regulation | Maximum Output Power |
|----------------|----------------|----------------|------------------|----------------------|
| TPIPU16B-101 | 3 ~ 5 VDC | 2.50 A max | 7% | 12W |
| TPIPU16B-102 | 5 ~ 6 VDC | 2.50 ~ 2.00 A | 5% | 12W |
| TPIPU16B-103 | 6 ~ 8 VDC | 2.00 ~ 1.50 A | 5% | 12W |
| * TPIPU16B-104 | 8 ~ 11 VDC | 1.87 ~ 1.36 A | 5% | 15W |
| * TPIPU16B-105 | 11 ~ 13 VDC | 1.36 ~ 1.15 A | 5% | 15W |
| * TPIPU16B-106 | 13 ~ 16 VDC | 1.15 ~ 0.94 A | 5% | 15W |
| * TPIPU16B-107 | 16 ~ 21 VDC | 0.94 ~ 0.72 A | 5% | 15W |
| * TPIPU16B-108 | 21 ~ 27 VDC | 0.72 ~ 0.55 A | 5% | 15W |
| * TPIPU16B-109 | 27 ~ 33 VDC | 0.55 ~ 0.45 A | 5% | 15W |
| * TPIPU16B-110 | 33 ~ 40 VDC | 0.45 ~ 0.37 A | 3% | 15W |
| * TPIPU16B-111 | 40 ~ 48 VDC | 0.37 ~ 0.31 A | 3% | 15W |

Mark " * " means approved by CEC level V.

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

Mechanical Specifications :

Note:

1. Dimensions are shown in mm.
2. Weight: 165gs approx.
3. Optional output connector: See page Appendix.

