

- Very compact metal cased power supplies
- High operating temperature up to 60°C
- Screw terminal block
- No internal fan
- Universal AC input, full range
- Active power factor correction >0.93
- Withstand 300 VAC surge input for 5 s
- Adjustable output voltage
- 3-year product warranty



The TXM 100 series of 100 Watt is a family of enclosed AC/DC power supplies designed for cost critical applications. With a low profile metal case and screw terminal block connections, they are easy to install in any equipment. There are five models of single output voltages from 5 VDC to 48 VDC. These power supplies have universal input and comply with European EMC standards and the Low Voltage Directive (LVD).

| Models | | | | |
|-------------|-------------------|----------------------------------|---------------------|-----------------|
| Order Code | Output Power max. | Output Voltage nom. (adjustable) | Output Current max. | Efficiency typ. |
| TXM 100-105 | 100 W | 5 VDC (3.3 - 5.5 VDC) | 20'000 mA | 84 % |
| TXM 100-112 | 102 W | 12 VDC (10.0 - 15.0 VDC) | 8'500 mA | 87 % |
| TXM 100-115 | 105 W | 15 VDC (13.5 - 17.0 VDC) | 7'000 mA | 87 % |
| TXM 100-124 | 101 W | 24 VDC (21.0 - 27.0 VDC) | 4'200 mA | 88 % |
| TXM 100-148 | 106 W | 48 VDC (43.2 - 52.8 VDC) | 2'200 mA | 88 % |

Input Specifications

| | | |
|------------------------|-----------------------------|---|
| Input Voltage | - AC Range | Operational Range: 85 - 264 VAC (Full Range) Rated Range: 100 - 240 VAC (Full Range) |
| | - DC Range | Operational Range: 120 - 375 VDC (Designed for, no certification) Polarity: irrelevant (Surge voltage (5 s max.): 300 VAC max.) |
| Input Frequency | | Operational Range: 47 - 63 Hz Certified: 50/60 Hz |
| Power Consumption | - No load & Vin = 230 VAC | 5'100 mW max. |
| | - No load & Vin = 115 VAC | 5'000 mW max. |
| Input Current | - Full load & Vin = 115 VAC | 1'500 mA max. |
| Input Inrush Current | - At 230 VAC | 50 A max. |
| | - At 115 VAC | 30 A max. |
| Power Factor | - At 230 VAC | 0.98 min. (Active Power Factor Correction) |
| | - At 115 VAC | 0.93 min. (Active Power Factor Correction) |
| Recommended Input Fuse | | (The need of an external fuse has to be assessed in the final application.) |

Output Specifications

| | | |
|--|---------------------------------|---|
| Output Voltage Adjustment | | 5 VDC model: 3.3 - 5.5 VDC 12 VDC model: 10.0 - 15.0 VDC 15 VDC model: 13.5 - 17.0 VDC 24 VDC model: 21.0 - 27.0 VDC 48 VDC model: 43.2 - 52.8 VDC (By trim potentiometer) Output power must not exceed rated power! |
| Voltage Set Accuracy | | ±1% max. (24 & 48 VDC models) ±2 % max. (5, 12 & 15 VDC models) |
| Regulation | - Input Variation (Vmin - Vmax) | 0.5% max. |
| | - Load Variation (0 - 100%) | 1% max. (24 & 48 VDC models) 2% max. (5, 12 & 15 VDC models) |
| Ripple and Noise (20 MHz Bandwidth) | | 150 mVp-p max. (w/ 0.1 µF 10 µF) |
| Minimum Load | | Not required |
| Temperature Coefficient | | ±0.03 %/K max. |
| Hold-up Time | - At 230 VAC | 12 ms min. |
| Start-up Time | - At 230 VAC | 2'000 ms max. |
| | - At 115 VAC | 4'000 ms max. |
| Start-up Overshoot Voltage | | 5% max. |
| Short Circuit Protection | | Continuous, Automatic recovery |
| Output Current Limitation | | 110 - 150% of Iout max. |
| Transient Response | - Response Deviation | 5% max. (75% to 100% Load Step) |
| | - Response Time | 400 µs typ. (75% to 100% Load Step) |

Safety Specifications

| | | |
|-----------------------|-----------------------------|--|
| Standards | - IT / Multimedia Equipment | EN 60950-1 EN 62368-1 IEC 60950-1 IEC 62368-1 UL 60950-1 UL 62368-1 |
| | - Certification Documents | www.tracopower.com/overview/txm100 |
| Protection Class | | Class I (Prepared): Connection to PE |
| Pollution Degree | | PD 2 |
| Over Voltage Category | | OVC II |

All specifications valid at nominal voltage, resistive full load and +25°C after warm-up time, unless otherwise stated.

EMC Specifications

| | | |
|-----------------|----------------------------------|---|
| EMI (Emissions) | - Conducted Emissions | EN 55032 class B (internal filter) |
| | - Radiated Emissions | EN 55032 class B (internal filter) |
| | - Harmonic Current Emissions | EN 61000-3-2, class A |
| | - Voltage Fluctuations & Flicker | EN 61000-3-3 |
| EMS (Immunity) | | EN 55024 (IT Equipment) |
| | | EN 55035 (Multimedia) |
| | - Electrostatic Discharge | Air: EN 61000-4-2, ±8 kV, perf. criteria B Contact: EN 61000-4-2, ±4 kV, perf. criteria B |
| | - RF Electromagnetic Field | EN 61000-4-3, 3 V/m, perf. criteria A |
| | - EFT (Burst) / Surge | EN 61000-4-4, ±1 kV, perf. criteria B L to L: EN 61000-4-5, ±1 kV, perf. criteria B L to PE: EN 61000-4-5, ±2 kV, perf. criteria B |
| | - Conducted RF Disturbances | EN 61000-4-6, 3 Vrms, perf. criteria A |
| | - PF Magnetic Field | Continuous: EN 61000-4-8, 1 A/m, perf. criteria A |
| | - Voltage Dips & Interruptions | 230 VAC / 50 Hz: EN 61000-4-11 30%, 25 periods, perf. criteria C >95%, 0.5 periods, perf. criteria B >95%, 250 periods, perf. criteria C |

General Specifications

| | | |
|---------------------------|------------------------------|--|
| Relative Humidity | | 90% max. (non condensing) |
| Temperature Ranges | - Operating Temperature | -20°C to +60°C |
| | - Storage Temperature | -30°C to +85°C |
| Power Derating | - High Temperature | 2.5 %/K above 40°C |
| | - Low Input Voltage | 1 %/V below 100 VAC |
| Cooling System | | Natural convection (20 LFM) |
| Altitude During Operation | | 5'000 m max. |
| Regulator Topology | | Forward Converter |
| Switching Frequency | | 100 kHz typ. (PWM) |
| Insulation System | | Reinforced Insulation |
| Working Voltage (rated) | | 360 VAC |
| Isolation Test Voltage | - Input to Output, 60 s | 3'000 VDC |
| | - Input to Case or PE, 60 s | 1'500 VAC |
| | - Output to Case or PE, 60 s | 500 VAC |
| Creepage | - Input to Output | 6.2 mm min. |
| Clearance | - Input to Output | 6.2 mm min. |
| Isolation Resistance | - Input to Output, 500 VDC | 100 MΩ min. |
| Leakage Current | - Earth Leakage Current | 3500 μA max. |
| | - Touch Current | 250 μA max. |
| Reliability | - Calculated MTBF | 200'000 h (MIL-HDBK-217F, ground benign) |
| Housing Material | | Aluminum |
| Housing Type | | Metal Case |
| Mounting Type | | Chassis Mount |
| Connection Type | | Screw Terminal |
| Weight | | 455 g |
| Environmental Compliance | - REACH Declaration | www.tracopower.com/info/reach-declaration.pdf REACH SVHC list compliant REACH Annex XVII compliant |
| | - RoHS Declaration | www.tracopower.com/info/rohs-declaration.pdf Exemptions: 7a, 7c-l (RoHS exemptions refer to the component concentration only, not to the overall concentration in the product (O5A rule).) |
| | - SCIP Reference Number | a85f760c-f4c2-42fe-92c4-6e293a206f51 |

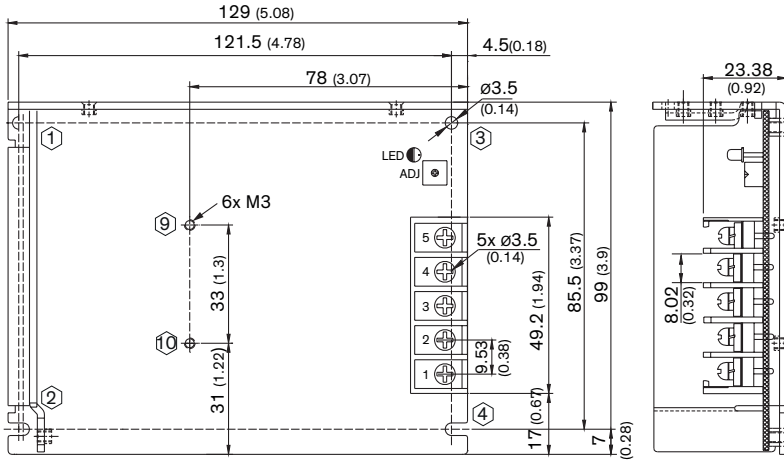
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Supporting Documents

Overview Link (for additional Documents)

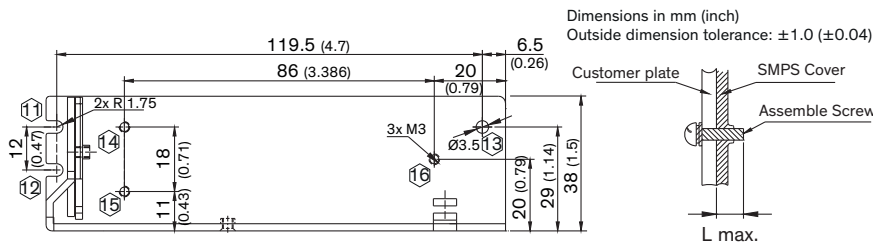
www.tracopower.com/overview/txm100

Outline Dimensions



| Pin-Out | |
|---------|----------|
| Pin | Function |
| 1 | AC (L) |
| 2 | AC (N) |
| 3 | PE |
| 4 | - Vout |
| 5 | + Vout |

Screw locked torque:
8.0 kgfcm (0.78 Nm) max.



| Screw Definition | | | | |
|---------------------|--------------|------------|----------|-------------|
| Installation Method | Position No. | Screw Size | L max. | Torque max. |
| Bottom Installation | 1-4 | M3 | 5 (0.20) | 7.0 kgfcm |
| | 9-10 | M3 | 3 (0.12) | 6.5 kgfcm |
| Side Installation | 11-13 | M3 | 5 (0.20) | 7.0 kgfcm |
| | 14-16 | M3 | 3 (0.12) | 6.5 kgfcm |