

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 89%
- Active PFC >0.95
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3-year product warranty



The TXLN series is a family of encased power supplies designed for a wide range of cost critical applications. With a low profile metal case and screw terminal block connection, they are easy to install in any equipment. 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. |
|--------------|-------------------|----------------------------------|---------------------|-----------------|
| TXLN 200-105 | 200 W             | 5 VDC (4.5 - 5.5 VDC)            | 40'000 mA           | 83 %            |
| TXLN 200-112 |                   | 12 VDC (10.8 - 13.2 VDC)         | 16'700 mA           | 86 %            |
| TXLN 200-124 |                   | 24 VDC (21.6 - 26.4 VDC)         | 8'400 mA            | 88 %            |
| TXLN 200-148 |                   | 48 VDC (43.2 - 52.8 VDC)         | 4'200 mA            | 89 %            |

### Options

|  |   |
|--|---|
| <b>on demand</b><br>(backorder with MOQ non stocking item) | - Optional model with 36 VDC and 5'600 mA |
|--|---|

### Input Specifications

|                        |                             |  |
|------------------------|-----------------------------|--|
| Input Voltage          | - AC Range                  | Operational Range: <b>85 - 264 VAC</b> (Full Range)<br>Rated Range: <b>100 - 240 VAC</b> (Full Range)      |
|                        | - DC Range                  | Operational Range: <b>120 - 375 VDC</b> (Designed for, no certification)<br>Polarity: <b>irrelevant</b>    |
| Input Frequency        |                             | Operational Range: <b>47 - 63 Hz</b><br>Certified: <b>50/60 Hz</b>   |
| Input Current          | - Full load & Vin = 115 VAC | <b>2'600 mA max.</b>   |
| Input Inrush Current   | - At 230 VAC                | <b>50 A max.</b>   |
|                        | - At 115 VAC                | <b>25 A max.</b>   |
| Power Factor           | - At 230 VAC                | <b>0.95 min.</b> (Active Power Factor Correction)  |
|                        | - At 115 VAC                | <b>0.95 min.</b> (Active Power Factor Correction)  |
| Input Protection       |                             | <b>T 6.3 A / 250 VAC</b> (Internal Fuse)   |
| Recommended Input Fuse |                             | <b>6'300 mA</b> (slow blow)<br>(The need of an external fuse has to be assessed in the final application.) |

### Output Specifications

|  |                                 |  |
|--|---------------------------------|--|
| Output Voltage Adjustment              |                                 | <b>±10%</b> (By trim potentiometer)<br>Output power must not exceed rated power! |
| Voltage Set Accuracy                   |                                 | <b>±2% max.</b> (5 Vout model)   |
|  |                                 | <b>±1% max.</b> (other models)   |
| Regulation                             | - Input Variation (Vmin - Vmax) | <b>1% max.</b> (5 Vout model)  |
|  |                                 | <b>0.5 % max.</b> (other models)   |
|  | - Load Variation (0 - 100%)     | <b>2% max.</b> (5 Vout model)  |
|  |                                 | <b>2% max.</b> (other models)  |
| Ripple and Noise<br>(20 MHz Bandwidth) | 5 VDC model:                    | <b>150 mVp-p max.</b> (w/ 0.1 µF    47 µF)                                       |
|  | 12 VDC model:                   | <b>150 mVp-p max.</b> (w/ 0.1 µF    47 µF)                                       |
|  | 24 VDC model:                   | <b>150 mVp-p max.</b> (w/ 0.1 µF    47 µF)                                       |
|  | 36 VDC model:                   | <b>220 mVp-p max.</b> (w/ 0.1 µF    47 µF)                                       |
|  | 48 VDC model:                   | <b>240 mVp-p max.</b> (w/ 0.1 µF    47 µF)                                       |
| Capacitive Load                        | 5 VDC model:                    | <b>120'000 µF max.</b>   |
|  | 12 VDC model:                   | <b>120'000 µF max.</b>   |
|  | 24 VDC model:                   | <b>8'000 µF max.</b>   |
|  | 36 VDC model:                   | <b>38'000 µF max.</b>  |
|  | 48 VDC model:                   | <b>30'100 µF max.</b>  |
| Minimum Load                           |                                 | <b>Not required</b>  |
| Temperature Coefficient                |                                 | <b>±0.03 %/K max.</b>  |
| Hold-up Time                           | - At 230 VAC                    | <b>8 ms min.</b>   |
|  | - At 115 VAC                    | <b>8 ms min.</b>   |
| Start-up Time                          | - At 230 VAC                    | <b>1'500 ms max.</b>   |
|  | - At 115 VAC                    | <b>3'000 ms max.</b>   |
| Short Circuit Protection               |                                 | <b>Continuous, Automatic recovery</b>  |
| Output Current Limitation              |                                 | <b>105 - 150% of Iout max.</b>   |
| Overvoltage Protection                 |                                 | <b>115 - 140% of Vout nom.</b>   |

### Safety Specifications

|                       |                             |  |
|-----------------------|-----------------------------|--|
| Standards             | - IT / Multimedia Equipment | <b>EN 62368-1</b><br><b>IEC 62368-1</b><br><b>UL 62368-1</b>                                 |
|                       | - Certification Documents   | <a href="http://www.tracopower.com/overview/txln200">www.tracopower.com/overview/txln200</a> |
| Protection Class      |                             | <b>Class I</b> (Prepared): <b>Connection to PE</b>   |
| Pollution Degree      |                             | <b>PD 2</b>  |
| Over Voltage Category |                             | <b>OVC II</b>  |

All specifications valid at 230 VAC, 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 D   |
|                 | - 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 A<br>Contact: EN 61000-4-2, ±4 kV, perf. criteria A  |
|                 | - RF Electromagnetic Field       | EN 61000-4-3, 3 V/m, perf. criteria A   |
|                 | - EFT (Burst) / Surge            | EN 61000-4-4, ±1 kV, perf. criteria A<br>L to L: EN 61000-4-5, ±1 kV, perf. criteria B<br>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, 3 A/m, perf. criteria A   |
|                 | - Voltage Dips & Interruptions   | 230 VAC / 50 Hz: EN 61000-4-11<br>30%, 25 periods, perf. criteria A<br>>95%, 0.5 periods, perf. criteria A<br>>95%, 250 periods, perf. criteria B |

### General Specifications

|  |                                 |  |
|--|---------------------------------|--|
| Relative Humidity                      |                                 | 90% max. (non condensing)  |
| Temperature Ranges                     | - Operating Temperature         | -30°C to +70°C   |
|  | - Storage Temperature           | -40°C to +85°C   |
| Power Derating                         | - High Temperature              | 2.5 %/K above 50°C   |
|  | - Low Input Voltage             | 0.66 %/V below 100 VAC   |
|  | See application note:           | <a href="http://www.tracopower.com/overview/txln200">www.tracopower.com/overview/txln200</a> |
| Over Temperature Protection Switch Off | - Protection Mode               | Latch off  |
| Cooling System                         |                                 | Natural convection (20 LFM)  |
| Altitude During Operation              |                                 | 5'000 m max.   |
| Regulator Topology                     |                                 | Flyback Converter  |
| Switching Frequency                    |                                 | 90 - 110 kHz (PWM)   |
| Insulation System                      |                                 | Reinforced Insulation  |
| Isolation Test Voltage                 | - Input to Output, 60 s         | 3'000 VAC  |
|  | - Input to Case or PE, 60 s     | 1'800 VAC  |
|  | - Output to Case or PE, 60 s    | 500 VAC  |
| Isolation Resistance                   | - Input to Output, 500 VDC      | 100 MΩ min.  |
| Isolation Capacitance                  | - Input to Output, 100 kHz, 1 V | 20'000 pF max.   |
| Leakage Current<br>(at 264 VAC / 60Hz) | - Earth Leakage Current         | 1500 μA max.   |
| Distance Through Isolation             |                                 | 6 mm   |
| Reliability                            | - Calculated MTBF               | 177'300 h (MIL-HDBK-217F, ground benign)   |
| Housing Material                       |                                 | Aluminum   |
| Housing Type                           |                                 | Metal Case   |
| Mounting Type                          |                                 | Chassis Mount  |
| Connection Type                        |                                 | Screw Terminal   |
| Weight                                 |                                 | 770 g  |
| Status Indicator                       |                                 | Indicated by green LED   |

All specifications valid at 230 VAC, resistive full load and +25°C after warm-up time, unless otherwise stated.

Environmental Compliance - REACH Declaration

[www.tracopower.com/info/reach-declaration.pdf](http://www.tracopower.com/info/reach-declaration.pdf)

- RoHS Declaration

REACH SVHC list compliant

REACH Annex XVII compliant

[www.tracopower.com/info/rohs-declaration.pdf](http://www.tracopower.com/info/rohs-declaration.pdf)

Exemptions: 7a, 7c-I

(RoHS exemptions refer to the component concentration only, not to the overall concentration in the product (O5A rule))

- SCIP Reference Number

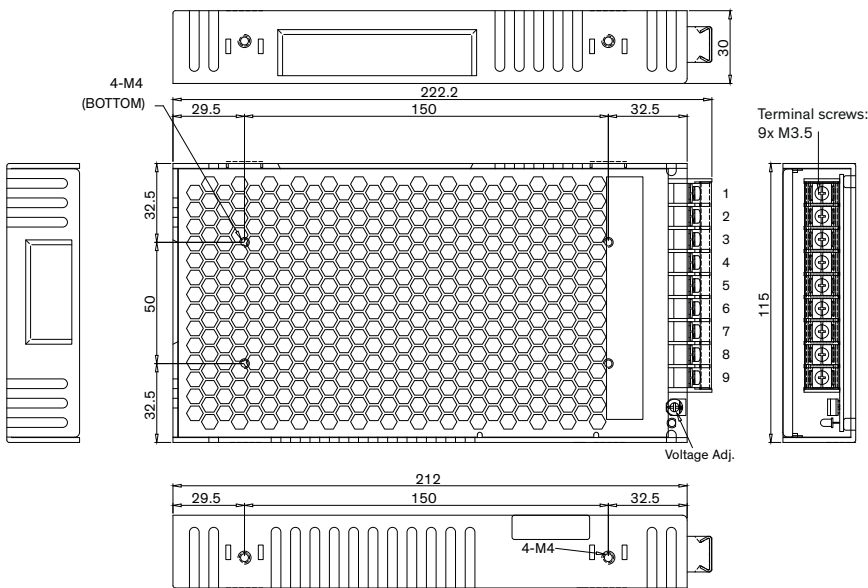
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### Supporting Documents

Overview Link (for additional Documents)

[www.tracopower.com/overview/txln200](http://www.tracopower.com/overview/txln200)

### Outline Dimensions



| Screw Terminal |          |
|----------------|----------|
| Pin            | Function |
| 1              | AC (L)   |
| 2              | AC (N)   |
| 3              | PE       |
| 4-6            | -Vout    |
| 7-9            | +Vout    |

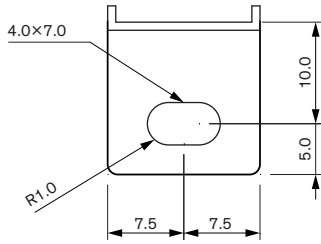
Max. terminal screw locked torque: 0.7 Nm

Dimensions in mm  
Tolerances:  
0-8: ±0.2  
8-25: ±0.3  
25-80: ±0.5  
80-250: ±0.8

Mounting screws  
Max. screw penetration depth: 4.0  
Max. screw locked torque: 0.8 Nm

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### Mounting Bracket (included)



Dimensions in mm

- Included in shipment:
- 4x Mounting Bracket
  - 4x M4 mounting screw

