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# TRACO POWER

## AC/DC Power Supply

## TXLN 080 Series, 80 Watt

- **Compact metal case with screw terminal block**
- **Universal input 88-264 VAC**
- **Convection cooled (no-fan)**
- **High efficiency up to 82%**
- **Compliance to EN 61000-3-2**
- **Short circuit, overvoltage and overload protection**
- **IEC/EN/UL 62368-1 safety approvals**
- **3 year product warranty**



UL 62368-1 IEC 62368-1

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 | Output 1 | | Output 2 | | Output 3 | | Efficiency |
|---|---|---|---|---|---|---|---|---|
| | | Vnom | Imax | Vnom | Imax | Vnom | Imax | typ. |
| **TXLN 080-212** | | +5 VDC | 9'000 mA | +12 VDC | 4'000 mA | | | 79 % |
| **TXLN 080-215** | | +5 VDC | 9'000 mA | +24 VDC | 2'000 mA | | | 80 % |
| **TXLN 080-312M2** | 80 W | +5 VDC | 8'000 mA | +12 VDC | 4'000 mA | −12 VDC | 1'000 mA | 79 % |
| **TXLN 080-313M3** | | +5 VDC | 8'000 mA | +15 VDC | 3'500 mA | −15 VDC | 1'000 mA | 80 % |
| **TXLN 080-3125** | | +5 VDC | 8'000 mA | +12 VDC | 3'500 mA | +24 VDC | 1'500 mA | 82 % |

Note - Total output power must not exceed rated power

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## Input Specifications

| | | | |
|---|---|---|---|
| Input Voltage | - AC Range | Operational Range: | 88 - 264 VAC (Full Range) |
| | | Rated Range: | 100 - 240 VAC (Full Range) |
| | - DC Range | Operational Range: | 125 - 375 VDC (Designed for, no certification) |
| | | Polarity: | irrelevant |
| Input Frequency | | Operational Range: | 47 - 63 Hz |
| | | Certified: | 50/60 Hz |
| Input Current | - Full Load & Vin = 115 VAC | | 2'500 mA max. |
| Input Inrush Current | - At 230 VAC | | 70 A max. |
| | - At 115 VAC | | 35 A max. |
| Input Protection | | | T 4 A / 250 VAC (Internal Fuse) |
| Recommended Input Fuse | | | 4'000 mA (slow blow)<br>(The need of an external fuse has to be assessed in the final application.) |

## Output Specifications

| | | | |
|---|---|---|---|
| Voltage Set Accuracy | | | ±3% max. (Output 1)<br>±5% max. (Output 2, dual output models)<br>±6% max. (Output 2, triple output models)<br>±5% max. (Output 3) |
| Regulation | - Input Variation (Vmin - Vmax) | dual output models: | 1.5% max. (Output 1)<br>2.5% max. (Output 2) |
| | | triple output models: | 1.5% max. (Output 1)<br>3.0% max. (Output 2)<br>2.5% max. (Output 3) |
| | - Load Variation (0 - 100%) | dual output models: | 3% max. (Output 1)<br>5% max. (Output 2) |
| | | triple output models: | 3% max. (Output 1)<br>6% max. (Output 2)<br>5% max. (Output 3) |
| Ripple and Noise (20 MHz Bandwidth) | - dual output | 5 / 12 VDC model: | 80 / 120 mVp-p max. (w/ 0.1 \|\| 47 µF) |
| | | 5 / 24 VDC model: | 80 / 200 mVp-p max. (w/ 0.1 \|\| 47 µF) |
| | - triple output | 5 / 12 / -12 VDC model: | 80 / 120 / 150 mVp-p max. (w/ 0.1 \|\| 47 µF) |
| | | 5 / 15 / -15 VDC model: | 80 / 150 / 200 mVp-p max. (w/ 0.1 \|\| 47 µF) |
| | | 5 / 12 / 24 VDC model: | 80 / 120 / 240 mVp-p max. (w/ 0.1 \|\| 47 µF) |
| Minimum Load | - dual output | 5 / 12 VDC model: | 5.6 % of Iout max. |
| | | 5 / 24 VDC model: | 5.6 % of Iout max. |
| | - triple output | 5 / 12 / -12 VDC model: | 6.3 % of Iout max. |
| | | 5 / 15 / -15 VDC model: | 6.3 % of Iout max. |
| | | 5 / 12 / 24 VDC model: | 6.3 % of Iout max. |
| | | | (minimum load is required only on Output 1) |
| Temperature Coefficient | | | ±0.03 %/K max. |
| Hold-up Time | - At 230 VAC | | 50 ms min. |
| | - At 115 VAC | | 10 ms min. |
| Start-up Time | - At 230 VAC | | 1'000 ms max. |
| | - At 115 VAC | | 1'000 ms max. |
| Short Circuit Protection | | | Continuous, Automatic recovery |
| Output Current Limitation | | | 105 - 150% of Iout max. |
| Overvoltage Protection | | | 115 - 140% of Vout nom.<br>(only Output 1) |

## Safety Specifications

| | | |
|---|---|---|
| Safety Standards | - IT / Multimedia Equipment | EN 62368-1<br>IEC 62368-1<br>UL 62368-1 |
| | - Certification Documents | www.tracopower.com/overview/txln080 |

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

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| | | |
|---|---|---|
| Protection Class | | Class I (Prepared): Connection to PE |
| Pollution Degree | | PD 2 |
| Over Voltage Category | | OVC II |

## 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)<br>EN 55035 (Multimedia) |
| | - Electrostatic Discharge | Air: | EN 61000-4-2, ±8 kV, perf. criteria A |
| | | 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 |
| | | L to L: | EN 61000-4-5, ±1 kV, perf. criteria A |
| | | L to PE: | EN 61000-4-5, ±2 kV, perf. criteria A |
| | - 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 C |

## General Specifications

| | | | |
|---|---|---|---|
| Relative Humidity | | | 90% max. (non condensing) |
| Temperature Ranges | - Operating Temperature | | –20°C to +70°C |
| | - Storage Temperature | | –40°C to +85°C |
| Power Derating | - High Temperature | | 2.5 %/K above 50°C |
| | - Low Input Voltage | | 0.83 %/V below 100 VAC |
| | | See application note: | www.tracopower.com/overview/txln080 |
| Cooling System | | | Natural convection (20 LFM) |
| Altitude During Operation | | | 3'000 m max. |
| Switching Frequency | | | 61 - 69 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 (at 264 VAC) | - Earth Leakage Current | | 1000 µA max. |
| Distance Through Isolation | | | 6 mm |
| Reliability | - Calculated MTBF | | 275'000 h (dual output models)<br>232'000 h (triple output models)<br>(MIL-HDBK-217F, ground benign) |
| Housing Material | | | Aluminum |
| Housing Type | | | Metal Case |
| Mounting Type | | | Chassis Mount |
| Connection Type | | | Screw Terminal |
| Weight | | | 550 g |
| Status Indicator | | | Indicated by green LED |

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

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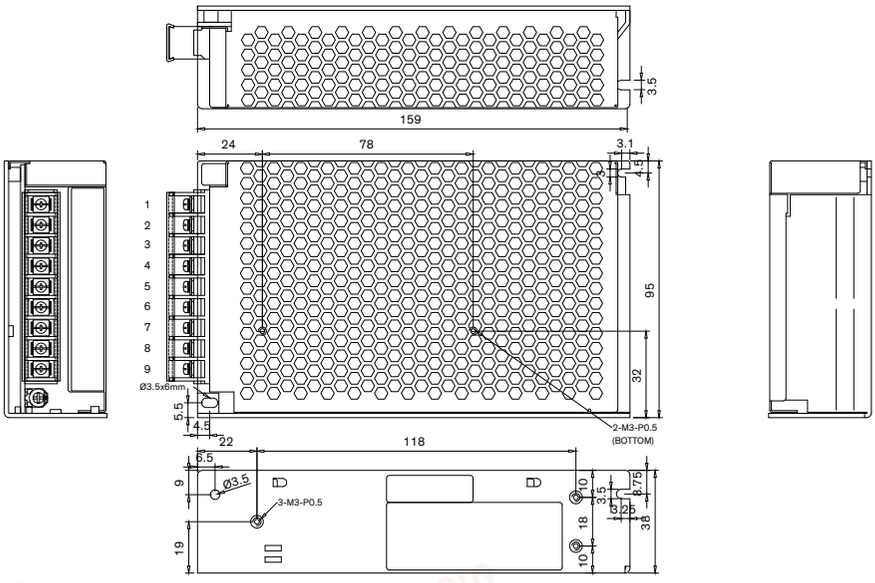


| | | |
|---|---|---|
| Environmental Compliance | - REACH Declaration | www.tracopower.com/info/reach-declaration.pdf<br>REACH SVHC list compliant<br>REACH Annex XVII compliant |
| | - RoHS Declaration | www.tracopower.com/info/rohs-declaration.pdf<br>Exemptions: 7a, 7c-I<br>(RoHS exemptions refer to the component concentration only, not to the overall concentration in the product (O5A rule). The SCIP number is provided on request.) |

## Supporting Documents

| | |
|---|---|
| Overview Link (for additional Documents) | www.tracopower.com/overview/txln080 |

## Outline Dimensions




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: 5.0
Max. screw locked torque: 0.5 Nm

| Screw Terminal | | | |
|---|---|---|---|
| Pin | Dual | Triple | |
| | | TXLN 080-31xMx | TXLN 080-3125 |
| 1 | AC (L) | | |
| 2 | AC (N) | | |
| 3 | PE | | |
| 4 | NC | +Vout3 | –Vout3 |
| 5 | NC | –Vout3 | +Vout3 |
| 6 | –Vout1 | –Vout1 | |
| 7 | +Vout1 | +Vout1 | |
| 8 | –Vout2 | –Vout2 | |
| 9 | +Vout2 | +Vout2 | |

NC: Not connected

Outputs are isolated to each other.

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