

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 87%
- 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 max.	Output Voltage nom. (adjustable)	Output Current max.	Efficiency typ.
TXLN 110-105	100 W	5 VDC (4.5 - 5.5 VDC)	20'000 mA	83 %
TXLN 110-112	110 W	12 VDC (10.8 - 13.2 VDC)	9'000 mA	85 %
TXLN 110-115		15 VDC (13.5 - 16.5 VDC)	7'300 mA	86 %
TXLN 110-124		24 VDC (21.6 - 26.4 VDC)	4'600 mA	86 %
TXLN 110-148		48 VDC (43.2 - 52.8 VDC)	2'300 mA	87 %

### Input Specifications

Input Voltage	- AC Range	Operational Range: <b>88 - 264 VAC</b> (Full Range) Rated Range: <b>100 - 240 VAC</b> (Full Range)
	- DC Range	Operational Range: <b>125 - 375 VDC</b> (Designed for, no certification) Polarity: <b>irrelevant</b>
Input Frequency		Operational Range: <b>47 - 63 Hz</b> Certified: <b>50/60 Hz</b>
Input Current	- Full Load & $V_{in} = 115$ VAC	<b>2'800 mA max.</b>
Power Consumption	- No load & $V_{in} = 230$ VAC	<b>1'000 mW max.</b>
Input Inrush Current	- At 230 VAC	<b>70 A max.</b>
	- At 115 VAC	<b>35 A max.</b>
Input Protection		<b>T 4 A / 250 VAC</b> (Internal Fuse)
Recommended Input Fuse		<b>4'000 mA</b> (slow blow) (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) Output power must not exceed rated power!
Voltage Set Accuracy		<b>±2% max.</b> (5 Vout model)
		<b>±1% max.</b> (other model)
Regulation	- Input Variation ( $V_{min} - V_{max}$ )	<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>1% max.</b> (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	<b>100 mVp-p max.</b> (w/ 0.1 $\mu$ F    47 $\mu$ F)
	12 VDC model:	<b>150 mVp-p max.</b> (w/ 0.1 $\mu$ F    47 $\mu$ F)
	15 VDC model:	<b>150 mVp-p max.</b> (w/ 0.1 $\mu$ F    47 $\mu$ F)
	24 VDC model:	<b>200 mVp-p max.</b> (w/ 0.1 $\mu$ F    47 $\mu$ F)
	48 VDC model:	<b>200 mVp-p max.</b> (w/ 0.1 $\mu$ F    47 $\mu$ F)
Minimum Load		<b>Not required</b>
Temperature Coefficient		<b>±0.03 %/K max.</b>
Hold-up Time	- At 230 VAC	<b>50 ms min.</b>
	- At 115 VAC	<b>10 ms min.</b>
Start-up Time	- At 230 VAC	<b>1'000 ms max.</b>
	- At 115 VAC	<b>1'000 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

Safety Standards	- IT / Multimedia Equipment	<b>EN 62368-1</b> <b>IEC 62368-1</b> <b>UL 62368-1</b>
	- Certification Documents	<a href="http://www.tracopower.com/overview/txln110">www.tracopower.com/overview/txln110</a>
Protection Class		<b>Class I (Prepared): Connection to PE</b>
Pollution Degree		<b>PD 2</b>
Over Voltage Category		<b>OVC II</b>

### EMC Specifications

EMI Emissions	- Conducted Emissions	<b>EN 55032 class B</b> (internal filter)
	- Radiated Emissions	<b>EN 55032 class B</b> (internal filter)
	- Harmonic Current Emissions	<b>EN 61000-3-2, class A</b>
	- Voltage Fluctuations & Flicker	<b>EN 61000-3-3</b>

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

<b>EMS Immunity</b>		EN 55024 (IT Equipment) EN 55035 (Multimedia)
- Electrostatic Discharge	Air:	EN 61000-4-2, ±8 kV, perf. criteria A
- RF Electromagnetic Field	Contact:	EN 61000-4-2, ±4 kV, perf. criteria A EN 61000-4-3, 3 V/m, perf. criteria A EN 61000-4-4, ±1 kV, perf. criteria A
- EFT (Burst) / Surge	L to L:	EN 61000-4-5, ±1 kV, perf. criteria A
- Conducted RF Disturbances	L to PE:	EN 61000-4-5, ±2 kV, perf. criteria A 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 30%, 25 periods, perf. criteria A >95%, 0.5 periods, perf. criteria A >95%, 250 periods, perf. criteria C

## General Specifications

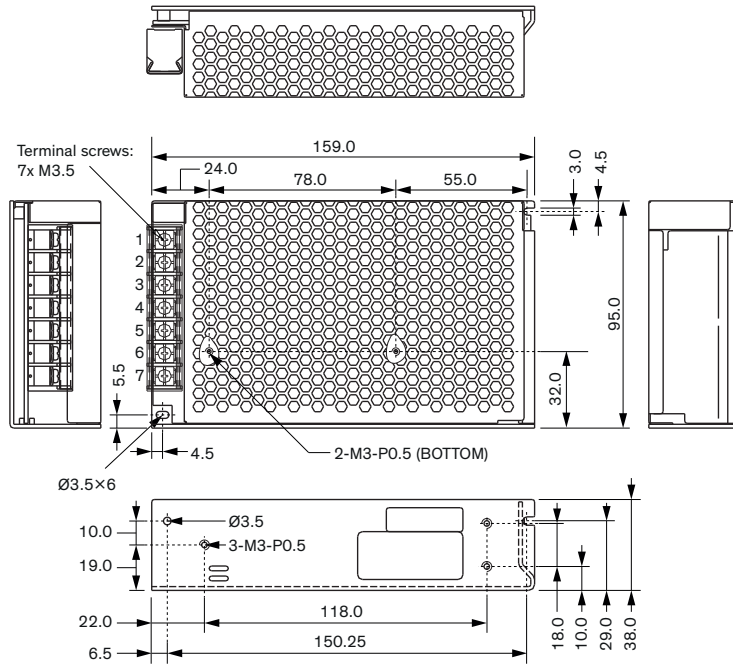
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-20°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.83 %/V below 100 VAC
	See application note:	<a href="http://www.tracopower.com/overview/txln110">www.tracopower.com/overview/txln110</a>
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 / 60Hz)	- Earth Leakage Current	1000 μA max.
Distance Through Isolation		6 mm
Reliability	- Calculated MTBF	284'000 h (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
Environmental Compliance	- REACH Declaration	<a href="http://www.tracopower.com/info/reach-declaration.pdf">www.tracopower.com/info/reach-declaration.pdf</a> REACH SVHC list compliant REACH Annex XVII compliant
	- RoHS Declaration	<a href="http://www.tracopower.com/info/rohs-declaration.pdf">www.tracopower.com/info/rohs-declaration.pdf</a> 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	927e0663-312a-47e6-b696-63da21fa1425

## Supporting Documents

Overview Link (for additional Documents)	<a href="http://www.tracopower.com/overview/txln110">www.tracopower.com/overview/txln110</a>
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## 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	Function
1	AC (L)
2	AC (N)
3	FG
4-5	-Vout
6-7	+Vout