

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 88%
- 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 025-103	20 W	3.3 VDC (3.0 - 3.6 VDC)	6'000 mA	72 %
TXLN 025-105	25 W	5 VDC (4.5 - 5.5 VDC)	5'000 mA	79 %
TXLN 025-112		12 VDC (10.6 - 13.2 VDC)	2'100 mA	84 %
TXLN 025-115		15 VDC (13.5 - 16.5 VDC)	1'700 mA	85 %
TXLN 025-124	26 W	24 VDC (24.6 - 26.4 VDC)	1'100 mA	86 %
TXLN 025-148	27 W	48 VDC (43.2 - 52.8 VDC)	570 mA	88 %

### Options

<b>on demand</b> (backorder with MOQ non stocking item)	- Optional model with 7.5 VDC / 3'400 mA - Optional model with 30 VDC / 900 mA
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### 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>
Power Consumption	- No load & Vin = 230 VAC	<b>300 mW max.</b> (Ready to meet ErP directive)
Input Current	- Full load & Vin = 115 VAC	<b>650 mA max.</b>
Input Inrush Current	- At 230 VAC	<b>50 A max.</b>
	- At 115 VAC	<b>30 A max.</b>
Input Protection		<b>T 1.6 A / 250 VAC</b> (Internal Fuse)
Recommended Input Fuse		<b>1'600 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>±3% max.</b> (3.3 Vout model)
		<b>±2% max.</b> (5 Vout model)
		<b>±1% max.</b> (other models)
Regulation	- Input Variation (Vmin - Vmax)	<b>1.5% max.</b> (3.3 Vout model) <b>1% max.</b> (5 Vout model) <b>0.5% max.</b> (other models)
	- Load Variation (0 - 100%)	<b>3% max.</b> (3.3 Vout model) <b>2% max.</b> (5 Vout model) <b>1% max.</b> (other models)
		3.3 VDC model: <b>70 mVp-p max.</b> (w/ 0.1 µF    47 µF)
		5 VDC model: <b>70 mVp-p max.</b> (w/ 0.1 µF    47 µF)
Ripple and Noise (20 MHz Bandwidth)		7.5 VDC model: <b>80 mVp-p max.</b> (w/ 0.1 µF    47 µF)
		12 VDC model: <b>120 mVp-p max.</b> (w/ 0.1 µF    47 µF)
		15 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)
		30 VDC model: <b>200 mVp-p max.</b> (w/ 0.1 µF    47 µF)
		48 VDC model: <b>200 mVp-p max.</b> (w/ 0.1 µF    47 µF)
		48 VDC model: <b>200 mVp-p max.</b> (w/ 0.1 µF    47 µF)
Capacitive Load		3.3 VDC model: <b>108'000 µF max.</b>
		5 VDC model: <b>108'000 µF max.</b>
		7.5 VDC model: <b>108'000 µF max.</b>
		12 VDC model: <b>108'000 µF max.</b>
		15 VDC model: <b>108'000 µF max.</b>
		24 VDC model: <b>108'000 µF max.</b>
		30 VDC model: <b>3'000 µF max.</b>
	48 VDC model: <b>1'000 µF max.</b>	
Minimum Load		<b>Not required</b>
Temperature Coefficient		<b>±0.03 %/K max.</b>
Hold-up Time	- At 230 VAC	<b>60 ms min.</b>
	- At 115 VAC	<b>12 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 - 180% of Iout max.</b>
Oversvoltage Protection		<b>115 - 140% of Vout nom.</b>

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

### Safety Specifications

Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	<a href="http://www.tracopower.com/overview/txln025">www.tracopower.com/overview/txln025</a>
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) EN 55035 (Multimedia)
	- Electrostatic Discharge	Air: EN 61000-4-2, $\pm 8$ kV, perf. criteria A Contact: EN 61000-4-2, $\pm 4$ kV, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-3, 3 V/m, perf. criteria A
	- EFT (Burst) / Surge	EN 61000-4-4, $\pm 1$ kV, perf. criteria A L to L: EN 61000-4-5, $\pm 1$ kV, perf. criteria A L to PE: EN 61000-4-5, $\pm 2$ 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 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
		See application note: <a href="http://www.tracopower.com/overview/txln025">www.tracopower.com/overview/txln025</a>
Cooling System		Natural convection (20 LFM)
Altitude During Operation		2'000 m max.
Regulator Topology		Flyback Converter
Switching Frequency		57 - 73 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 M $\Omega$ min.
Isolation Capacitance	- Input to Output, 100 kHz, 1 V	4'700 pF max.
Leakage Current (at 264 VAC)	- Earth Leakage Current	500 $\mu$ A max.
Distance Through Isolation		6 mm
Reliability	- Calculated MTBF	450'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminum
Housing Type		Metal Case
Mounting Type		Chassis Mount
Connection Type		Screw Terminal
Weight		180 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.

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

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

- SCIP Reference Number

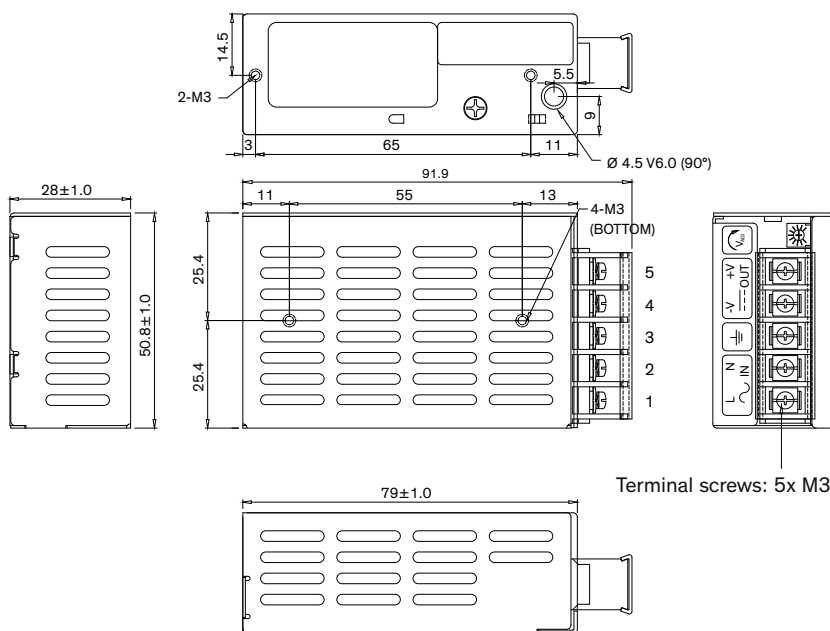
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### Supporting Documents

Overview Link (for additional Documents)

[www.tracopower.com/overview/txln025](http://www.tracopower.com/overview/txln025)

### Outline Dimensions



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	FG
4	-Vout
5	+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: 3.0  
 Max. screw locked torque: 0.8 Nm