

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- High efficiency up to 91%
- Active PFC >0.95
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- Remote On/Off and Remote Sense
- 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 500-112	500 W	12 VDC (10.8 - 13.2 VDC)	41'700 mA	88 %
TXLN 500-124		24 VDC (21.6 - 26.4 VDC)	21'000 mA	89 %
TXLN 500-148		48 VDC (43.2 - 52.8 VDC)	10'500 mA	91 %

Options	
on demand (backorder with MOQ non stocking item)	- Optional model with 5 VDC / 90'000 mA - Optional model with 36 VDC / 14'000 mA

Input Specifications		
Input Voltage	- AC Range	Operational Range: <b>85 - 264 VAC</b> (Full Range) Rated Range: <b>100 - 240 VAC</b> (Full Range)
	- DC Range	Operational Range: <b>120 - 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 & $V_{in} = 115 \text{ VAC}$	<b>6'600 mA max.</b>
Input Inrush Current	- At 230 VAC	<b>40 A max.</b>
	- At 115 VAC	<b>20 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 10 A / 250 VAC</b> (Internal Fuse)
Recommended Input Fuse		<b>10'000 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 models)
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>150 mVp-p max.</b> (w/ 0.1 $\mu\text{F}$    47 $\mu\text{F}$ )
	12 VDC model:	<b>150 mVp-p max.</b> (w/ 0.1 $\mu\text{F}$    47 $\mu\text{F}$ )
	24 VDC model:	<b>150 mVp-p max.</b> (w/ 0.1 $\mu\text{F}$    47 $\mu\text{F}$ )
	36 VDC model:	<b>200 mVp-p max.</b> (w/ 0.1 $\mu\text{F}$    47 $\mu\text{F}$ )
	48 VDC model:	<b>200 mVp-p max.</b> (w/ 0.1 $\mu\text{F}$    47 $\mu\text{F}$ )
Minimum Load		<b>Not required</b>
Temperature Coefficient		<b>±0.03 %/K max.</b>
Hold-up Time	- At 230 VAC	<b>18 ms min.</b>
	- At 115 VAC	<b>18 ms min.</b>
Start-up Time	- At 230 VAC	<b>3'000 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 - 130% 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/txln500">www.tracopower.com/overview/txln500</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 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 D
	- 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 EN 61000-4-3, 3 V/m, perf. criteria A EN 61000-4-4, $\pm 1$ kV, perf. criteria A
	- RF Electromagnetic Field	L to L: EN 61000-4-5, $\pm 1$ kV, perf. criteria B L to PE: EN 61000-4-5, $\pm 2$ kV, perf. criteria B EN 61000-4-6, 3 Vrms, perf. criteria A
	- EFT (Burst) / Surge	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A 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 B
	- Conducted RF Disturbances	
	- PF Magnetic Field	
	- Voltage Dips & Interruptions	

## 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	0.7 %/V below 100 VAC
		See application note: <a href="http://www.tracopower.com/overview/txln500">www.tracopower.com/overview/txln500</a>
Over Temperature Protection Switch Off	- Protection Mode	Latch off
Cooling System		Forced air cooling (with internal fan)
Fan Power Source	- Characteristic	Variable fan speed (temperature regulated)
	- Output Voltage	12 VDC
	- Output Current	92 mA max.
Remote Control	- Voltage Controlled Remote	On: 0 to 0.8 VDC Off: 4 to 10 VDC Refers to '+Remote' and '-Remote' Pin
Altitude During Operation		5'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency		60 - 80 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 / 60Hz)	- Earth Leakage Current	1500 $\mu$ A max.
Distance Through Isolation		6 mm
Reliability	- Calculated MTBF	138'700 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminum
Housing Type		Metal Case
Mounting Type		Chassis Mount
Connection Type		Screw Terminal
Weight		1'110 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.

Sense Function

(to be done)

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

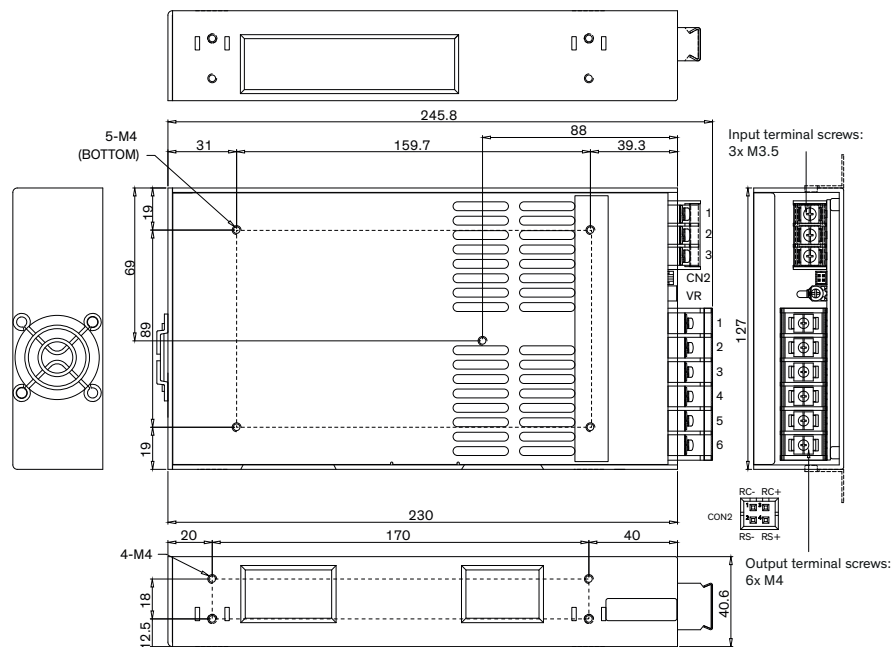
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## Supporting Documents

Overview Link (for additional Documents)

[www.tracopower.com/overview/txln500](http://www.tracopower.com/overview/txln500)

## Outline Dimensions



Input	
CN1	
Pin	Function
1	AC (L)
2	AC (N)
3	PE

Output	
CN3	
Pin	Function
1-3	-Vout
4-6	+Vout

Auxiliary	
CN2	
Pin	Function
1	-Remote
2	-Sense
3	+Remote
4	+Sense

**CN1:**  
3 pin, 9.5mm pitch with PC cover

**CN3:**  
6 pin, 11 mm pitch

**CN2 Housing Type:**  
HRS DF11-04DP-2DS

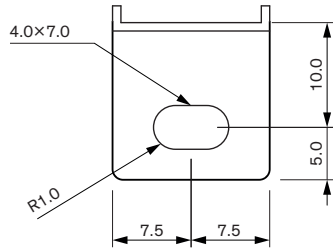
**CN2 Mating Housing:**  
HRS DF11-4DS

**CN2 Crimp Contact:**  
HRS DF11-\*\*SC

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: 0.8 Nm

**Mounting Bracket (included)**



Dimensions in mm

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

