

- 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



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 typ.
		Vnom	I <sub>max</sub>	Vnom	I <sub>max</sub>	Vnom	I <sub>max</sub>	
TXLN 080-212	80 W	+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		+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

### Input Specifications

Input Voltage	- AC Range	88 - 264 VAC (Full Range)
	- DC Range	125 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & $V_{in} = 115$ 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) (The need of an external fuse has to be assessed in the final application.)

### Output Specifications

Voltage Set Accuracy		±3% max. (Output 1) ±5% max. (Output 2, dual output models) ±6% max. (Output 2, triple output models) ±5% max. (Output 3)
Regulation	- Input Variation ( $V_{min} - V_{max}$ )	dual output models: 1.5% max. (Output 1) 2.5% max. (Output 2)
		triple output models: 1.5% max. (Output 1) 3.0% max. (Output 2) 2.5% max. (Output 3)
	- Load Variation (0 - 100%)	dual output models: 3% max. (Output 1) 5% max. (Output 2)
		triple output models: 3% max. (Output 1) 6% max. (Output 2) 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 $\mu$ F) 5 / 24 VDC model: 80 / 200 mVp-p max. (w/ 0.1 // 47 $\mu$ F)
	- triple output	5 / 12 / -12 VDC model: 80 / 120 / 150 mVp-p max. (w/ 0.1 // 47 $\mu$ F)
		5 / 15 / -15 VDC model: 80 / 150 / 200 mVp-p max. (w/ 0.1 // 47 $\mu$ F)
		5 / 12 / 24 VDC model: 80 / 120 / 240 mVp-p max. (w/ 0.1 // 47 $\mu$ F)
Minimum Load	- dual output	5 / 12 VDC model: 5.6 % of I <sub>out</sub> max. 5 / 24 VDC model: 5.6 % of I <sub>out</sub> max.
	- triple output	5 / 12 / -12 VDC model: 6.3 % of I <sub>out</sub> max.
		5 / 15 / -15 VDC model: 6.3 % of I <sub>out</sub> max.
		5 / 12 / 24 VDC model: 6.3 % of I <sub>out</sub> 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 I <sub>out</sub> max.
Overvoltage Protection		115 - 140% of V <sub>out</sub> nom. (Output 1 only)

### Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	<a href="http://www.tracopower.com/overview/txln080">www.tracopower.com/overview/txln080</a>
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

All specifications valid at nominal voltage, 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 A
	- Voltage Fluctuations & Flicker	EN 61000-3-3
EMS Immunity	- Electrostatic Discharge	Air: EN 55024 (IT Equipment) 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 30%, 25 periods, perf. criteria A >95%, 0.5 periods, perf. criteria A >95%, 250 periods, perf. criteria C

## General Specifications

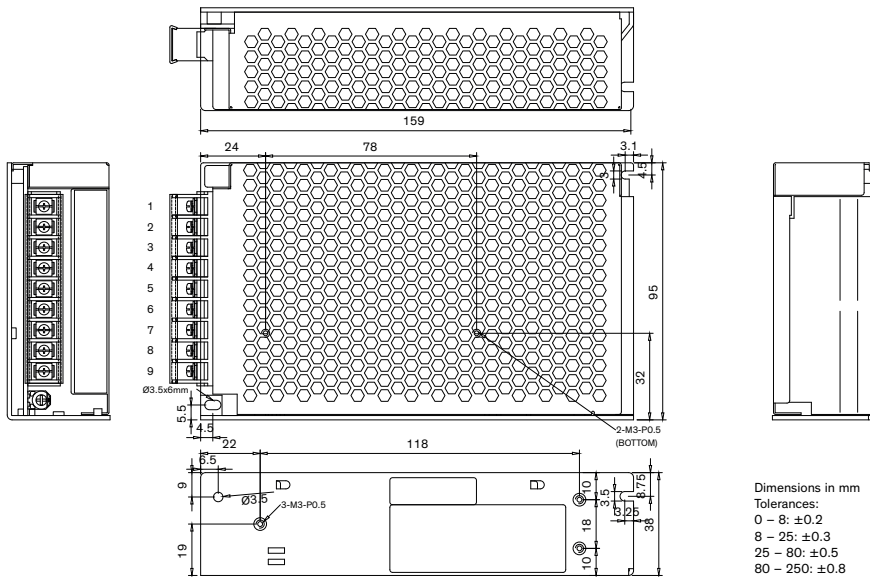
Relative Humidity	90% max. (non condensing)	
Temperature Ranges	- Operating Temperature	-20°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.83 %/V below 100 VAC
Cooling System	Natural convection (20 LFM)	
Altitude During Operation	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.
Leakage Current (at 264 VAC)	- Earth Leakage Current	1000 μA max.
Reliability	- Calculated MTBF	275'000 h (dual output models)
		232'000 h (triple output models)
		(MIL-HDBK-217F, ground benign)
Housing Material	Aluminium	
Connection Type	Screw Terminal	
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

## Supporting Documents

Overview Link (for additional Documents)	<a href="http://www.tracopower.com/overview/txln080">www.tracopower.com/overview/txln080</a>
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**Outline Dimensions**



Screw Terminal		
Pin	Dual	Triple
1	AC (N)	
2	AC (L)	
3	PE	
4	NC	-Vout3
5	NC	+Vout3
6	-Vout1	-Vout1
7	+Vout1	+Vout1
8	-Vout2	-Vout2
9	+Vout2	+Vout2