TRACO POWER

AC/DC Power Supply

TXLN 060 Series, 60 Watt

- **Compact metal case with screw terminal block**
- **Universal input 88-264 VAC**
- **Convection cooled (no-fan)**
- **High efficiency up to 86%**
- **EMI/EMC compliance with EN 61000-6-3 and EN 61000-6-1**
- **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

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 060-103	40 W	3.3 VDC (3.0 - 3.6 VDC)	12'000 mA	72 %
TXLN 060-105	50 W	5 VDC (4.5 - 5.5 VDC)	10'000 mA	78 %
TXLN 060-112	60 W	12 VDC (10.8 - 13.2 VDC)	5'000 mA	81 %
TXLN 060-115		15 VDC (13.5 - 16.5 VDC)	4'000 mA	83 %
TXLN 060-124		24 VDC (21.6 - 26.4 VDC)	2'500 mA	84 %
TXLN 060-148	62 W	48 VDC (43.2 - 52.8 VDC)	1'300 mA	86 %

Options

on demand (backorder with MOQ non stocking item)	- Optional model with 7.5 VDC / 7'000 mA - Optional model with 30 VDC / 2'000 mA

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 & Vin = 115 VAC	1'600 mA max.
Power Consumption	- At no load	500 mW max. (Ready to meet ErP directive)
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Recommended Input Fuse		(The need of an external fuse has to be assessed in the final application.)

Output Specifications

Output Voltage Adjustment		±10% (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy		±3% max. (3.3 Vout model) ±2% max. (5 Vout model) ±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1.5% max. (3.3 Vout model) 1% max. (5 Vout model) 0.5% max. (other models)
	- Load Variation (0 - 100%)	3% max. (3.3 Vout model) 2% max. (5 Vout model) 1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	3.3 VDC model:	70 mVp-p max. (w/ 0.1 µF // 47 µF)
	5 VDC model:	70 mVp-p max. (w/ 0.1 µF // 47 µF)
	7.5 VDC model:	80 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 VDC model:	120 mVp-p max. (w/ 0.1 µF // 47 µF)
	15 VDC model:	150 mVp-p max. (w/ 0.1 µF // 47 µF)
	24 VDC model:	150 mVp-p max. (w/ 0.1 µF // 47 µF)
	30 VDC model:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
	48 VDC model:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
Minimum Load		Not required
Hold-up Time	- At 230 VAC	60 ms min.
	- At 115 VAC	16 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.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln060
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

EMC Specifications

EMI Emissions		EN 61000-6-3 (Generic Residential)
	- 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

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

EMS Immunity			EN 55024 (IT Equipment)
	- 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, ±2 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		2'000 m max.
Switching Frequency		65 kHz typ. (PWM)
Insulation System		Reinforced Insulation
Working Voltage (rated)		357 VAC
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'500 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	750 µA max.
Reliability	- Calculated MTBF	335'000 h
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		340 g
Status Indicator		Indicated by green LED
Environmental Compliance	- REACH Declaration	www.tracopower.com/info/reach-declaration.pdf
		REACH SVHC list compliant
		REACH Annex XVII compliant
	- RoHS Declaration	www.tracopower.com/info/rohs-declaration.pdf
		Exemptions: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txln060

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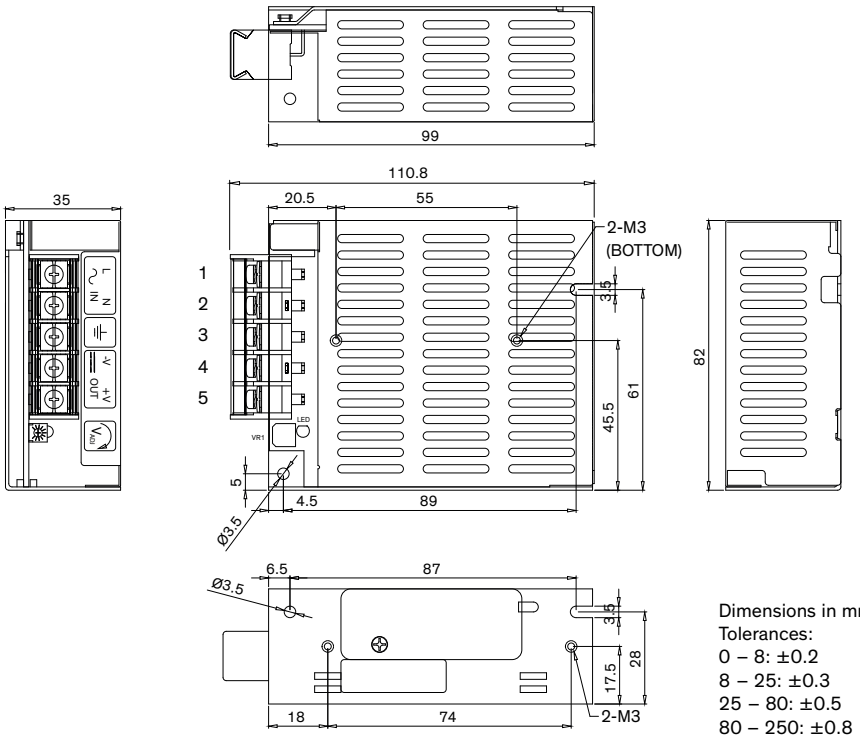
Outline Dimensions



Dimensions in mm
Tolerances:
0 – 8: ±0.2
8 – 25: ±0.3
25 – 80: ±0.5
80 – 250: ±0.8

Screw Terminal	
Pin	**Function**
1	AC (L)
2	AC (N)
3	PE
4	–Vout
5	+Vout