

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 85%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3-year product warranty



CE UKCA ErP ready cULus CB Scheme
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 018-103	10 W	3.3 VDC (3.0 - 3.6 VDC)	3'000 mA	73 %
TXLN 018-105	15 W	5 VDC (4.5 - 5.5 VDC)	3'000 mA	78 %
TXLN 018-112	18 W	12 VDC (10.8 - 13.2 VDC)	1'500 mA	83 %
TXLN 018-115		15 VDC (13.5 - 16.5 VDC)	1'200 mA	84 %
TXLN 018-124		24 VDC (21.6 - 26.4 VDC)	750 mA	85 %

Input Specifications

Input Voltage	- AC Range	Operational Range: 85 - 264 VAC (Full Range) Rated Range: 100 - 240 VAC (Full Range)
	- DC Range	Operational Range: 120 - 375 VDC (Designed for, no certification) Polarity: irrelevant
Input Frequency		Operational Range: 47 - 63 Hz Certified: 50/60 Hz
Power Consumption	- No load & $V_{in} = 230$ VAC	150 mW max. (Ready to meet ErP directive)
Input Current	- Full load & $V_{in} = 115$ VAC	500 mA max.
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Input Protection		T 2 A / 250 VAC (Internal Fuse in L)
Recommended Input Fuse		2'000 mA (slow blow) (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 ($V_{min} - V_{max}$)	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:	80 mVp-p max. (w/ 0.1 μ F 47 μ F)
	5 VDC model:	80 mVp-p max. (w/ 0.1 μ F 47 μ F)
	12 VDC model:	120 mVp-p max. (w/ 0.1 μ F 47 μ F)
	15 VDC model:	150 mVp-p max. (w/ 0.1 μ F 47 μ F)
	24 VDC model:	200 mVp-p max. (w/ 0.1 μ F 47 μ F)
Capacitive Load	3.3 VDC model:	120'000 μF max.
	5 VDC model:	12'000 μF max.
	12 VDC model:	19'800 μF max.
	15 VDC model:	14'000 μF max.
	24 VDC model:	4'000 μF max.
Minimum Load		Not required
Temperature Coefficient		±0.03 %/K max.
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% typ. of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln018
Protection Class		Class I (Prepared): Connection to PE See application note: www.tracopower.com/info/protection-class.pdf

All specifications valid at 230 VAC, resistive full load and +25°C after warm-up time, unless otherwise stated.

Pollution Degree	PD 2
Over Voltage Category	OVC II

EMC Specifications

EMI (Emissions)	- Conducted Emissions	EN 55032 class A (internal filter) EN 55032 class B (internal filter)
	- Radiated Emissions	EN 55032 class A (internal filter) 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, ± 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	0.67 %/V below 100 VAC
See application note: www.tracopower.com/overview/txln018		
Cooling System		Natural convection (20 LFM)
Altitude During Operation		2'000 m max.
Regulator Topology		Flyback Converter
Switching Frequency		90 - 110 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	10'000 pF max.
Leakage Current (at 264 VAC)	- Earth Leakage Current	500 μA max.
Distance Through Isolation		6 mm
Reliability	- Calculated MTBF	626'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminum
Housing Type		Metal Case
Mounting Type		Chassis Mount
Connection Type		Screw Terminal
Weight		130 g
Status Indicator		Indicated by green LED

All specifications valid at 230 VAC, resistive full load and +25°C after warm-up time, unless otherwise stated.

Environmental Compliance - REACH Declaration

www.tracopower.com/info/reach-declaration.pdf

- RoHS Declaration

REACH SVHC list compliant

REACH Annex XVII compliant

www.tracopower.com/info/rohs-declaration.pdf

Exemptions: No Exemptions

Additional Information

Supporting Documents

www.tracopower.com/overview/txln018

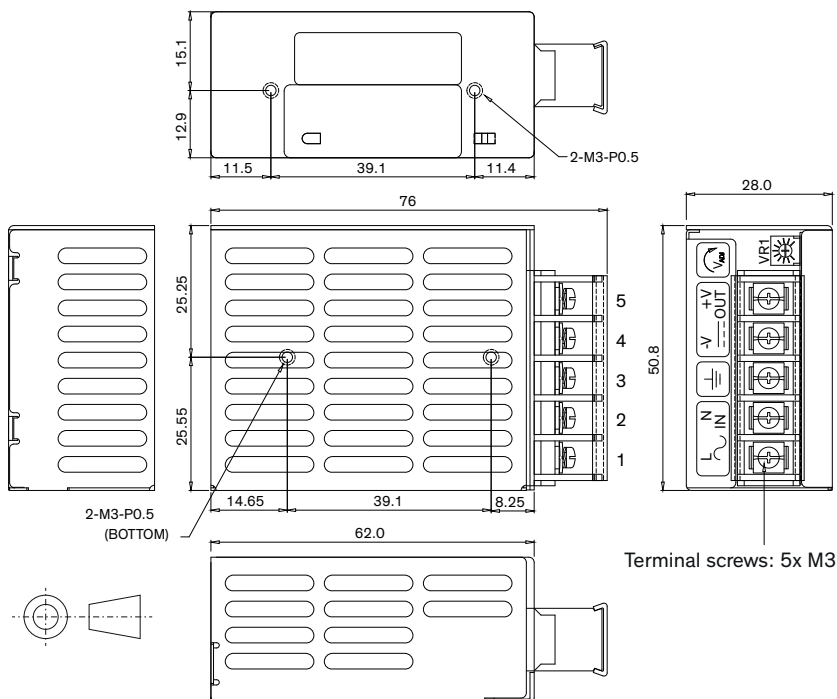
Frequently Asked Questions

www.tracopower.com/glossary-faq

Glossary

www.tracopower.com/info/glossary.pdf

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

Mounting screws

Max. screw penetration depth: 4.0

Max. screw locked torque: 0.8 Nm

Terminal screws: 5x M3