

- Compact metal case with screw terminal block
- Universal input 90-264 VAC
- High efficiency up to 86%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3-year product warranty



The new TXN line comprises a series of cost efficient, metal enclosed AC/DC power supplies and is designed for industrial applications. With a low-profile metal case and screw terminal block connection, they are easy to install in any equipment. The TXN power supplies are completely convection cooled. Internal EMC filter, high IO-isolation and wide temperature range qualify them for numerous industrial applications. These power supplies have universal input and comply with the latest industrial standard IEC/EN/UL 62368-1, European EMC standards and the Low Voltage Directive (LVD).

Models				
Order Code	Output Power max.	Output Voltage nom. (adjustable)	Output Current max.	Efficiency typ.
TXN 100-105	80 W	5 VDC (4.5 - 5.5 VDC)	16'000 mA	83 %
TXN 100-112		12 VDC (10.8 - 13.2 VDC)	8'400 mA	85 %
TXN 100-115		15 VDC (13.5 - 16.5 VDC)	6'700 mA	85 %
TXN 100-124		24 VDC (21.6 - 26.4 VDC)	4'200 mA	85 %
TXN 100-148	105 W	48 VDC (44.0 - 52.0 VDC)	2'200 mA	86 %

Options	
on demand (backorder with MOQ non stocking item)	- Optional model with 36 VDC and 2'800 mA

Input Specifications

Input Voltage	- AC Range	Operational Range: 90 - 264 VAC (Full Range) Rated Range: 100 - 240 VAC (Full Range)
	- DC Range	Operational Range: 140 - 340 VDC Polarity: +DC: L / -DC: N
Input Frequency		Operational Range: 47 - 63 Hz Certified: 50/60 Hz
Power Consumption	- No load & Vin = 230 VAC	1 W max.
	- No load & Vin = 115 VAC	1 W max.
Input Current	- Full load & Vin = 230 VAC	1.2 A max.
	- Full load & Vin = 115 VAC	1.9 A max.
Input Inrush Current	- At 230 VAC	60 A max.
	- At 115 VAC	30 A max.
Input Protection		T 3.15 A / 250 VAC (Internal Fuse in TODO)
Recommended Input Fuse		(The need of an external fuse has to be assessed in the final application.)

Output Specifications

Output Voltage Adjustment		±8% (36 & 48 Vout output models) ±10% (other output models) (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy		±2% max. (5 Vout model) ±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	0.5% max.
	- Load Variation (0 - 100%)	2% max. (5 Vout model) 1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	100 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:	120 mVp-p max. (w/ 0.1 µF 47 µF)
	24 VDC model:	150 mVp-p max. (w/ 0.1 µF 47 µF)
	36 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
Temperature Coefficient		±0.03 %/K max.
Hold-up Time	- At 230 VAC	20 ms min.
	- At 115 VAC	25 ms min.
Start-up Time	- At 230 VAC	2.5 s max.
	- At 115 VAC	1.6 s max.
Start-up Overshoot Voltage		5% max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		110 - 160% of Iout max.
Overvoltage Protection		110 - 130% of Vout nom.

Safety Specifications

Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC III

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 A
	- Voltage Fluctuations & Flicker	EN 61000-3-3
EMS (Immunity)		EN 55035 (Multimedia)
	- Electrostatic Discharge	Air: EN 61000-4-2, ± 8 kV, perf. criteria B Contact: EN 61000-4-2, ± 6 kV, perf. criteria B
	- RF Electromagnetic Field	EN 61000-4-3, 10 V/m, perf. criteria B
	- EFT (Burst) / Surge	EN 61000-4-4, ± 2 kV, perf. criteria B
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria B L to PE: EN 61000-4-5, ± 2 kV, perf. criteria B
	- Conducted RF Disturbances	EN 61000-4-6, 10 Vrms, perf. criteria B
	- PF Magnetic Field	Continuous: EN 61000-4-8, 30 A/m, perf. criteria A

General Specifications

Relative Humidity		95% max. (non condensing)
Temperature Ranges	- Operating Temperature	-30°C to +70°C
	- Storage Temperature	-30°C to +80°C
Power Derating	- High Temperature	2 %/K above 50°C (High Temperature) 2.0 %/K below -25°C (Low Temperature)
	- Low Input Voltage	0.8 %/V below 115 VAC
		See application note: www.tracopower.com/overview/txn100
Cooling System		Natural convection (20 LFM)
Altitude During Operation		5'000 m max.
Regulator Topology		Flyback Converter
Switching Frequency		65 kHz typ. (PWM)
Insulation System		Reinforced Insulation
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
Creepage	- Input to Output	7.1 mm min.
	- Input to Case or PE	2.6 mm min.
	- Output to Case or PE	2 mm min.
Clearance	- Input to Output	7.1 mm min.
	- Input to Case or PE	2.6 mm min.
	- Output to Case or PE	2 mm min.
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Isolation Capacitance	- Input to Output, 100 kHz, 1 V	4'700 pF typ.
Leakage Current (at 240 VAC / 60 Hz)	- Earth Leakage Current	1 mA max.
Reliability	- Calculated MTBF	(tbd)
Washing Process		Not allowed
Environment	- Vibration	2 g, 3 axis, 60 min, 10-500 Hz, 10 min/cycle
	- Mechanical Shock	20 g, 3 axis, 3 shocks
Housing Material		Aluminum (Chassis)
Housing Type		Metal Case
Mounting Type		Chassis Mount
Connection Type		Screw Terminal
Weight		300 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

- RoHS Declaration

REACH SVHC list compliant

REACH Annex XVII compliant

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

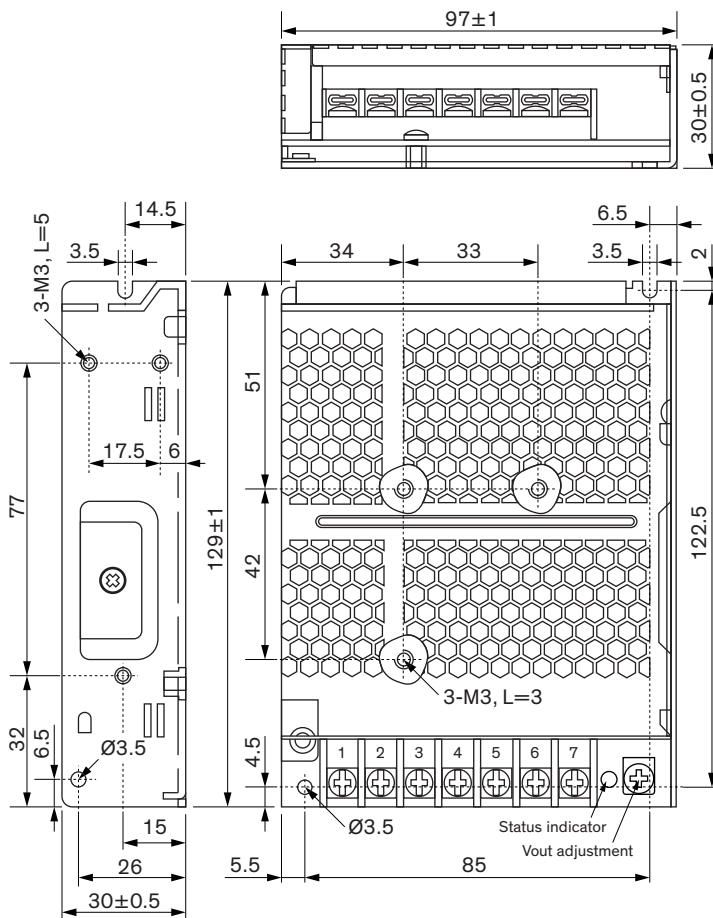
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Supporting Documents

Overview Link (for additional Documents)

www.tracopower.com/overview/txn100

Outline Dimensions



Pinout	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4	-Vout
5	
6	
7	+Vout

Wiring: Conductor cross section 0.5 .. 3 mm²

Dimensions in mm (inch)

Terminal screw tightening torque: Max. 1.0 Nm
 Mounting screw tightening torque: Max. 0.8 Nm
 Mounting screw penetration depth: Max. 3 mm
 Mounting screw length: Max. 5 mm

