

- Compact metal case with screw terminal block
- Universal input 90-264 VAC
- High efficiency up to 86%
- No active PFC
- 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	100 W	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 (44.16 - 51.84 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 (Designed for, no certification) 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 L)
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)
Capacitive Load	5 VDC model:	6'100 µF max.
	12 VDC model:	19'800 µF max.
	15 VDC model:	19'800 µF max.
	24 VDC model:	6'100 µF max.
	36 VDC model:	500 µF max.
	48 VDC model:	400 µF max.
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
	- Certification Documents	www.tracopower.com/overview/txn100

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

Protection Class	Class I (Prepared): Connection to PE
Pollution Degree	PD 2
Over Voltage Category	OVC II

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	EN 55035 (Multimedia) Air: EN 61000-4-2, ±8 kV, perf. criteria B Contact: EN 61000-4-2, ±4 kV, perf. criteria B EN 61000-4-3, 10 V/m, perf. criteria B EN 61000-4-4, ±2 kV, perf. criteria B	
	- RF Electromagnetic Field	L to L: EN 61000-4-5, ±1 kV, perf. criteria B L to PE: EN 61000-4-5, ±2 kV, perf. criteria B	
	- EFT (Burst) / Surge	EN 61000-4-6, 10 Vrms, perf. criteria A	
	- Conducted RF Disturbances	Continuous: EN 61000-4-8, 30 A/m, perf. criteria A	
	- PF Magnetic Field	230 VAC / 50 Hz: EN 61000-4-11	
	- Voltage Dips & Interruptions	30%, 25 periods, perf. criteria C >95%, 0.5 periods, perf. criteria B >95%, 250 periods, perf. criteria B	
	EMC / Environmental	- Certification Documents	www.tracopower.com/overview/txn100

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
Working Voltage (rated)		664 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
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 MΩ 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	380'000 h (MIL-HDBK-217F, ground benign)
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

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

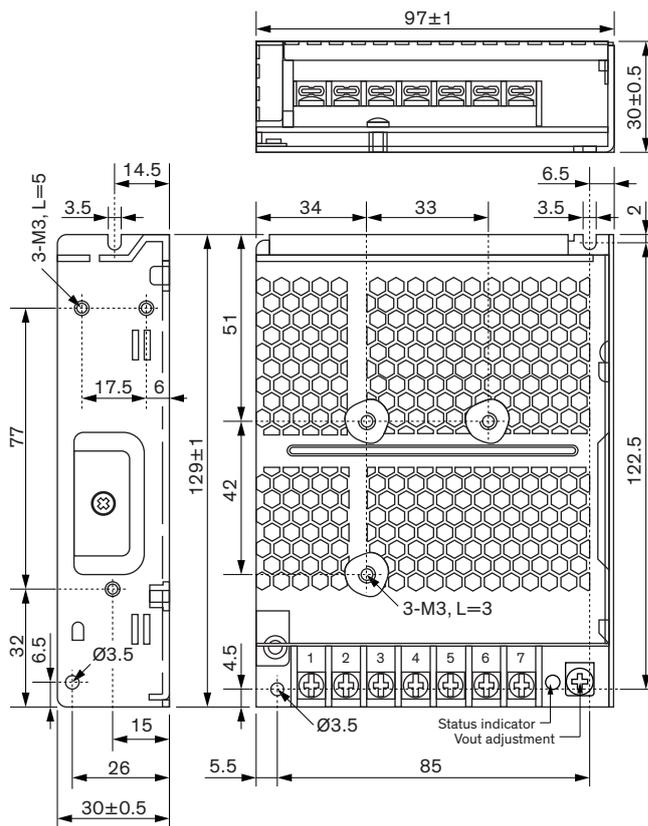
Housing Material	Aluminum (Chassis)
Housing Type	Metal Case
Mounting Type	Chassis Mount
Connection Type	Screw Terminal
Weight	300 g
Status Indicator	Indicated by green LED
Environmental Compliance	- REACH Declaration www.tracopower.com/info/reach-declaration.pdf REACH SVHC list compliant REACH Annex XVII compliant - RoHS Declaration www.tracopower.com/info/rohs-declaration.pdf Exemptions: 7(a), 7(c)-I (RoHS exemptions refer to the component concentration only, not to the overall concentration in the product (O5A rule.)) - SCIP Reference Number 1bd6e5af-9967-4a4d-97a6-2a8727e52447

Supporting Documents

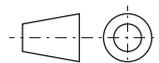
Overview Link (for additional Documents)

www.tracopower.com/overview/txn100

Outline Dimensions



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



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

Wiring: Conductor cross section 0.5 .. 3 mm²