

- Compact metal case with screw terminal block
- Universal input 90-264 VAC
- I/O reinforced isolation 3000 VAC
- Active power factor correction >0.9
- Internal EN 55032 class B filter
- High efficiency up to 89%
- Operating temperature range -30°C to 70+°C
- Short circuit, overvoltage and overload protection  
Remote ON/OFF function
- IEC/EN/UL 62368-1 safety approvals
- 3-year product warranty



The TXN 100PF is a cost efficient, metal enclosed AC/DC power supplies series 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. Active PFC (>0.9), internal EMC filter, high IO-isolation and wide temperature range qualify them for numerous industrial applications. All models within the TXN 100PF series have universal input (90-264 VAC) 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 100PF-112	100 W	12 VDC (10.8 - 13.2 VDC)	8'500 mA	86 %
TXN 100PF-115		15 VDC (13.5 - 16.5 VDC)	6'700 mA	89 %
TXN 100PF-124		24 VDC (21.6 - 26.4 VDC)	4'200 mA	87 %
TXN 100PF-148		48 VDC (43.2 - 52.8 VDC)	2'100 mA	88 %

Options	
TXN-AUX1	- Optional Cable: <a href="http://www.tracopower.com/overview/txn-aux1">www.tracopower.com/overview/txn-aux1</a>
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: <b>90 - 264 VAC</b> (Full Range) Rated Range: <b>100 - 240 VAC</b> (Full Range)
	- DC Range	Operational Range: <b>140 - 340 VDC</b> (Designed for, no certification) Polarity: <b>+DC: L / -DC: N</b>
Input Frequency		Operational Range: <b>47 - 63 Hz</b> Certified: <b>50/60 Hz</b>
Power Consumption	- No load & Vin = 230 VAC	<b>2'000 mW max.</b>
	- No load & Vin = 115 VAC	<b>2'000 mW max.</b>
Input Current	- Full load & Vin = 230 VAC	<b>550 mA max.</b>
	- Full load & Vin = 115 VAC	<b>1'100 mA max.</b>
Input Inrush Current	- At 230 VAC	<b>30 A max.</b>
	- At 115 VAC	<b>20 A max.</b>
Power Factor	- At 230 VAC	<b>0.9 min.</b> (Active Power Factor Correction)
	- At 115 VAC	<b>0.95 min.</b> (Active Power Factor Correction)
Input Protection		<b>T 2.5 A / 250 VAC</b> (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		<b>±8%</b> (36 Vout model) <b>±10% of Vout nom.</b> (other models) (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy		<b>±1% max.</b>
Regulation	- Input Variation (Vmin - Vmax)	<b>0.5% max.</b>
	- Load Variation (10 - 90%)	<b>1% max.</b>
Ripple and Noise (20 MHz Bandwidth)	12 VDC model:	<b>100 mVp-p typ.</b> (w/ 0.1 µF    47 µF)
	15 VDC model:	<b>150 mVp-p typ.</b> (w/ 0.1 µF    47 µF)
	24 VDC model:	<b>150 mVp-p typ.</b> (w/ 0.1 µF    47 µF)
	36 VDC model:	<b>200 mVp-p typ.</b> (w/ 0.1 µF    47 µF)
	48 VDC model:	<b>250 mVp-p typ.</b> (w/ 0.1 µF    47 µF)
Capacitive Load	12 VDC model:	<b>62'100 µF max.</b>
	15 VDC model:	<b>6'100 µF max.</b>
	24 VDC model:	<b>6'100 µF max.</b>
	36 VDC model:	<b>4'100 µF max.</b>
	48 VDC model:	<b>2'000 µF max.</b>
Minimum Load		<b>Not required</b>
Temperature Coefficient		<b>±0.03 %/K max.</b>
Hold-up Time	- At 230 VAC	<b>16 ms min.</b>
	- At 115 VAC	<b>16 ms min.</b>
Start-up Time	- At 230 VAC	<b>1'000 ms max.</b>
	- At 115 VAC	<b>1'000 ms max.</b>
Short Circuit Protection		<b>Automatic recovery</b>
Output Current Limitation		<b>105 - 135% of Iout max.</b>
Overvoltage Protection		<b>110 - 140% of Vout nom.</b>
Transient Response	- Response Deviation	<b>3% typ. / 5% max.</b> (50% to 100% Load Step)
	- Response Time	<b>300 µs typ. / 500 µs max.</b> (50% to 100% Load Step)

### Safety Specifications

Standards	- IT / Multimedia Equipment	<b>EN 62368-1</b> <b>IEC 62368-1</b> <b>UL 62368-1</b>
	- Certification Documents	<a href="http://www.tracopower.com/overview/txn100pf">www.tracopower.com/overview/txn100pf</a>

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
	See application note: <a href="http://www.tracopower.com/info/protection-class.pdf">www.tracopower.com/info/protection-class.pdf</a>
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	Air: EN 55035 (Multimedia) EN 61000-4-2, $\pm 8$ kV, perf. criteria B Contact: EN 61000-4-2, $\pm 4$ kV, perf. criteria B EN 61000-4-3, 10 V/m, perf. criteria A EN 61000-4-4, $\pm 2$ kV, perf. criteria B L to L: EN 61000-4-5, $\pm 1$ kV, perf. criteria B L to PE: EN 61000-4-5, $\pm 2$ kV, perf. criteria B EN 61000-4-6, 10 Vrms, perf. criteria A Continuous: EN 61000-4-8, 30 A/m, perf. criteria A 230 VAC / 50 Hz: EN 61000-4-11 30%, 25 periods, perf. criteria B >95%, 0.5 periods, perf. criteria C >95%, 250 periods, perf. criteria B	
	- RF Electromagnetic Field		
	- EFT (Burst) / Surge		
	- Conducted RF Disturbances		
	- PF Magnetic Field		
	- Voltage Dips & Interruptions		
	EMC / Environmental	- Certification Documents	<a href="http://www.tracopower.com/overview/txn100pf">www.tracopower.com/overview/txn100pf</a>

### General Specifications

Relative Humidity		95% max. (non condensing)
Temperature Ranges	- Operating Temperature	-30°C to +70°C
	- Storage Temperature	-40°C to +80°C
Power Derating	- High Temperature	Depending on model
	- Low Input Voltage	Depending on model
		See application note: <a href="http://www.tracopower.com/overview/txn100pf">www.tracopower.com/overview/txn100pf</a>
Over Temperature Protection Switch Off	- Protection Mode - Measurement Point	105°C typ. (Automatic recovery at 75°C typ.) Transformer
Cooling System		Natural convection (20 LFM)
Remote Control	- Voltage Controlled Remote (passive = on)	On: < 1.0 VDC or open circuit or short circuit Off: 4 to 10 VDC Refers to '+Remote' and '-Remote' Pin
	- Off Idle Input Current	10 mA max.
	- Remote Pin Input Current	0.5 to 2.5 mA
Altitude During Operation		5'000 m max.
Regulator Topology		Forward Converter
Switching Frequency		62 - 68 kHz (PWM) 65 kHz typ. (PWM)
Insulation System		Reinforced Insulation
Working Voltage (rated)		235 VAC
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	2'500 VDC
	- Output to Case or PE, 60 s	500 VAC
Creepage	- Input to Output	7.1 mm min.
	- Input to Case or PE	3 mm min.
	- Output to Case or PE	2 mm min.
Clearance	- Input to Output	7.1 mm min.
	- Input to Case or PE	3 mm min.
	- Output to Case or PE	2 mm min.

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

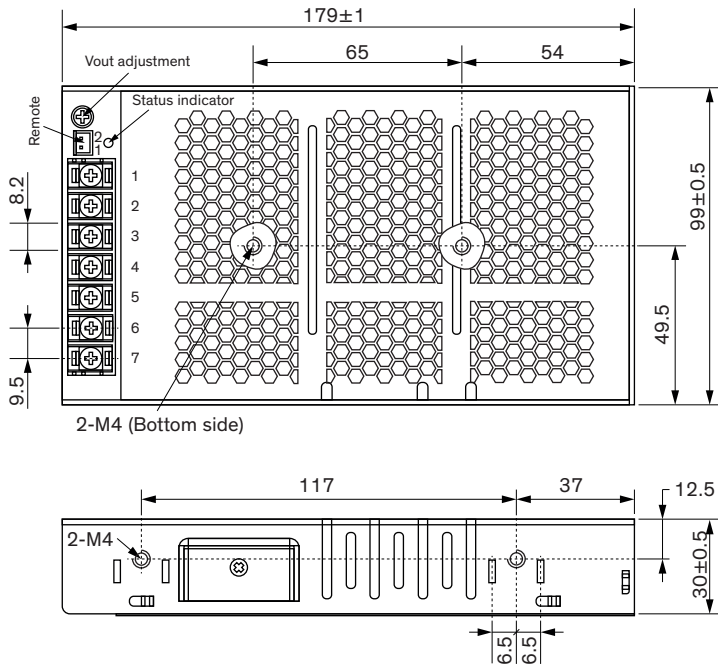
Isolation Resistance	- Input to Output, 500 VDC	100 M $\Omega$ min.
Isolation Capacitance	- Input to Output, 100 kHz, 1 V	1'100 pF typ.
Leakage Current	- Earth Leakage Current - Touch Current	1000 $\mu$ A max. 2000 $\mu$ A max.
Distance Through Isolation		7.2 mm
Reliability	- Calculated MTBF	290'000 h (MIL-HDBK-217F, ground benign)
Washing Process		Not allowed
Environment	- Vibration - Mechanical Shock	2 g, 3 axis, 60 min, 10-500 Hz, 10 min/cycle 20 g, 3 axis, 3 shocks
Case Ingress Protection		IP 20 (acc. IEC 60529)
Housing Material		Metal Aluminum (Chassis)
Housing Type		Metal Case
Mounting Type		Chassis Mount
Connection Type		Screw Terminal
Weight		430 g
Status Indicator		Indicated by green LED
Environmental Compliance	- REACH Declaration  - RoHS Declaration  - SCIP Reference Number	<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 <a href="http://www.tracopower.com/info/rohs-declaration.pdf">www.tracopower.com/info/rohs-declaration.pdf</a> Exemptions: 7(a), 7(c)-I (RoHS exemptions refer to the component concentration only, not to the overall concentration in the product (O5A rule).) 3c760ef3-004b-4631-af86-6480b31d25f5

### Additional Information

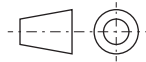
Supporting Documents	<a href="http://www.tracopower.com/overview/txn100pf">www.tracopower.com/overview/txn100pf</a>
Frequently Asked Questions	<a href="http://www.tracopower.com/glossary-faq">www.tracopower.com/glossary-faq</a>
Glossary	<a href="http://www.tracopower.com/info/glossary.pdf">www.tracopower.com/info/glossary.pdf</a>

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### Outline Dimensions



Dimensions in mm (inch)  
 Mounting screw tightening torque: Max. 0.8 Nm  
 Mounting screw penetration depth: Max. 3 mm



### Pin connectors

Input/Output		Remote	
Pin	Function	Pin	Function
1	+Vout	1	-Remote
2		2	+Remote
3	-Vout		
4			
5	PE		
6	AC (N)		
7	AC (L)		

**Input/Output:** Screw terminal, M4x7  
 Terminal screw tightening torque: Max. 1.2 Nm