

- 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
- IEC/EN/UL 62368-1 safety approvals
- 3-year product warranty



UL 62368-1 IEC 62368-1

The TXN 200 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 200 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 200-112	200 W	12 VDC (10.0 - 13.2 VDC)	16'600 mA	87 %
TXN 200-115		15 VDC (13.5 - 15.5 VDC)	13'300 mA	87 %
TXN 200-124		24 VDC (20.0 - 26.4 VDC)	8'300 mA	88 %
TXN 200-148		48 VDC (41.0 - 56.0 VDC)	4'200 mA	89 %

Options

TXN-AUX2	- Optional Cable: www.tracopower.com/overview/txn-aux2
on demand (backorder with MOQ non stocking item)	- Optional model with 36 VDC and 5'500 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	6 W max.
	- No load & Vin = 115 VAC	6 W max.
Input Current	- Full load & Vin = 230 VAC	1.3 A max.
	- Full load & Vin = 115 VAC	3 A max.
Input Inrush Current	- At 230 VAC	60 A max.
	- At 115 VAC	30 A max.
Power Factor	- At 230 VAC	0.9 min. (Active Power Factor Correction)
	- At 115 VAC	0.95 min. (Active Power Factor Correction)
Input Protection		T 6.3 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	12 VDC model:	10.0 - 13.2 VDC
	15 VDC model:	13.5 - 15.5 VDC
	24 VDC model:	20.0 - 26.4 VDC
	36 VDC model:	32.4 - 39.6 VDC
	48 VDC model:	41.0 - 56.0 VDC (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy		±1% max.
Regulation	- Input Variation (Vmin - Vmax)	0.5% max.
	- Load Variation (10 - 90%)	1% max.
Ripple and Noise (20 MHz Bandwidth)	12 VDC model:	150 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)
	36 VDC model:	240 mVp-p max. (w/ 0.1 µF 47 µF)
	48 VDC model:	240 mVp-p max. (w/ 0.1 µF 47 µF)
Capacitive Load	12 VDC model:	42'300 µF max.
	15 VDC model:	19'800 µF max.
	24 VDC model:	6'100 µF max.
	36 VDC model:	4'100 µF max.
	48 VDC model:	2'000 µF max.
Minimum Load		Not required
Temperature Coefficient		±0.03 %/K max.
Hold-up Time	- At 230 VAC	8 ms min.
	- At 115 VAC	8 ms min.
Start-up Time	- At 230 VAC	1.5 s max.
	- At 115 VAC	1.5 s max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		110 - 160% of Iout max.
Oversvoltage Protection		110 - 140% of Vout nom.

Safety Specifications

Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/txn200-safety-cert

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: www.tracopower.com/info/protection-class.pdf
Pollution Degree	PD 2
Over Voltage Category	OVC II

EMC Specifications

EMI (Emissions)	<ul style="list-style-type: none"> - Conducted Emissions - Radiated Emissions - Harmonic Current Emissions - Voltage Fluctuations & Flicker 	EN 55032 class B (internal filter) EN 55032 class B (internal filter) EN 61000-3-2, class A EN 61000-3-3
EMS (Immunity)	<ul style="list-style-type: none"> - Electrostatic Discharge - RF Electromagnetic Field - EFT (Burst) / Surge - Conducted RF Disturbances - PF Magnetic Field - Voltage Dips & Interruptions 	Air: EN 61000-4-2, ± 8 kV, perf. criteria B Contact: EN 61000-4-2, ± 6 kV, perf. criteria B EN 61000-4-3, 10 V/m, perf. criteria A EN 61000-4-4, ± 2 kV, perf. criteria A L to L: EN 61000-4-5, ± 1 kV, perf. criteria B L to PE: EN 61000-4-5, ± 2 kV, perf. criteria B EN 61000-4-6, 10 Vrms, perf. criteria B Continuous: EN 61000-4-8, 30 A/m, perf. criteria A 230 VAC / 50 Hz: EN 61000-4-11 30%, 25 periods, perf. criteria C >95%, 0.5 periods, perf. criteria B >95%, 250 periods, perf. criteria C
EMC / Environmental	- Certification Documents	www.tracopower.com/txn200-emc-cert

General Specifications

Relative Humidity		95% max. (non condensing)
Temperature Ranges	<ul style="list-style-type: none"> - Operating Temperature - Storage Temperature 	-30°C to +70°C -40°C to +80°C
Power Derating	<ul style="list-style-type: none"> - High Temperature - Low Input Voltage 	2 %/K above 50°C 1 %/V below 110 VAC See application note: www.tracopower.com/txn200-cc
Over Temperature Protection Switch Off	<ul style="list-style-type: none"> - Protection Mode - Measurement Point 	Automatic recovery Internal IC temperature
Cooling System		Natural convection (20 LFM)
Remote Control	<ul style="list-style-type: none"> - Voltage Controlled Remote (passive = on) - Remote Pin Input Current 	On: < 0.6 VDC or open circuit or short circuit Off: 4 to 10 VDC Refers to '+Remote' and '-Remote' Pin 0.5 to 2.5 mA
Altitude During Operation		5'000 m max.
Regulator Topology		Forward Converter
Switching Frequency		75 kHz typ. (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	<ul style="list-style-type: none"> - Input to Output, 60 s - Input to Case or PE, 60 s - Output to Case or PE, 60 s 	4'000 VDC 2'500 VDC 750 VDC
Isolation Resistance	- Input to Output, 500 VDC	10 M Ω min.
Leakage Current (at 240 VAC / 60 Hz)	- Earth Leakage Current	3.5 mA max.
Reliability	- Calculated MTBF	225'800 h (MIL-HDBK-217F, ground benign)
Washing Process		Not allowed
Environment	<ul style="list-style-type: none"> - Vibration - Mechanical Shock 	2 g, 3 axis, 60 min, 10-500 Hz, 10 min/cycle 20 g, 3 axis, 3 shocks
Housing Material		Aluminum (Chassis)
Housing Type		Metal Case

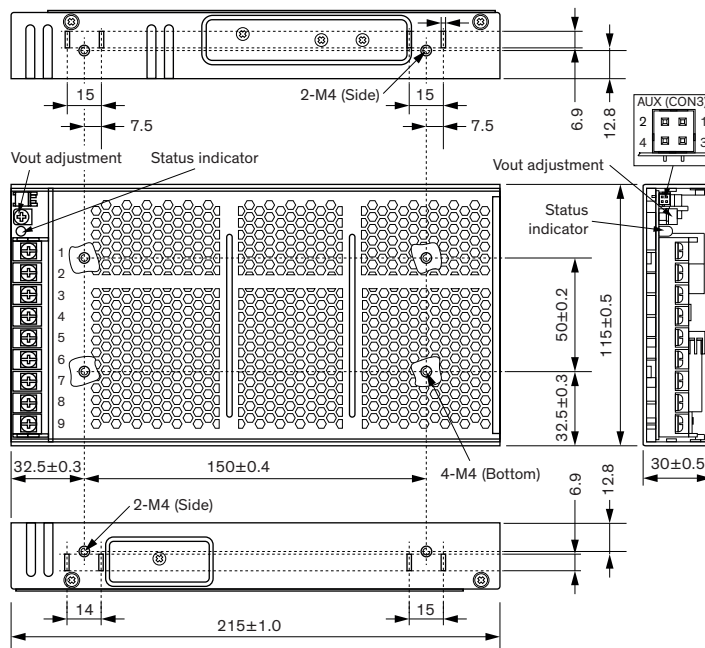
All specifications valid at 230 VAC, resistive full load and +25°C after warm-up time, unless otherwise stated.

Mounting Type	Chassis Mount
Connection Type	Screw Terminal
Weight	800 g
Status Indicator	Indicated by green LED
Sense Function	(0.2 V max.)
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
	www.tracopower.com/info/reach-declaration.pdf www.tracopower.com/info/rohs-declaration.pdf 10d38219-6664-4b19-bdba-f0841289695e

Additional Information

Supporting Documents	www.tracopower.com/overview/txn200
Frequently Asked Questions	www.tracopower.com/glossary-faq
Glossary	www.tracopower.com/info/glossary.pdf

Outline Dimensions



Pin connectors

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

Input/Output:
Wire dimension range: 22 - 12 AWG
0.324 - 3.31 mm²

Dimensions in mm
Terminal screw tightening torque: Max. 1.2 Nm
Mounting screw tightening torque: Max. 0.8 Nm
Mounting screw penetration depth: Max. 4 mm

