

- 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



The TXN 350 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 350 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 350-112 | 325 W | 12 VDC (10.0 - 13.2 VDC) | 27'000 mA | 86 % |
| TXN 350-115 | 330 W | 15 VDC (13.5 - 15.5 VDC) | 22'000 mA | 87 % |
| TXN 350-124 | 350 W | 24 VDC (20.0 - 26.4 VDC) | 14'600 mA | 88 % |
| TXN 350-148 | | 48 VDC (41.0 - 56.0 VDC) | 7'400 mA | 89 % |

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 | 2.2 A max. |
| | - Full load & Vin = 115 VAC | 4.5 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 |
| | | 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) |
| | 48 VDC model: | 240 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 | 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. |
| Overvoltage 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/overview/txn350 |
| Protection Class | | Class I (Prepared): Connection to PE |
| Pollution Degree | | PD 2 |
| Over Voltage Category | | OVC II |

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, ±4 kV, perf. criteria B |
| | - RF Electromagnetic Field | EN 61000-4-3, 10 V/m, perf. criteria A |
| | - EFT (Burst) / Surge | 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 |
| | - 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 |
| | - Voltage Dips & Interruptions | 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 |

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 | 2 %/K above 50°C |
| | - Low Input Voltage | 1 %/V below 110 VAC |
| | | See application note: www.tracopower.com/overview/txn350 |
| Over Temperature Protection Switch Off | - Protection Mode | Automatic recovery |
| | - Measurement Point | Internal IC temperature |
| Cooling System | | Forced air cooling (with internal fan) |
| Remote Control | - Voltage Controlled Remote (passive = on) | Off: 4 to 10 VDC Refers to '+Remote' and '-Remote' Pin |
| | - Remote Pin Input Current | On: < 0.6 VDC or open circuit or short circuit 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 | - 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 |
| Isolation Resistance | - Input to Output, 500 VDC | 100 MΩ min. |
| Leakage Current (at 240 VAC / 60 Hz) | - Earth Leakage Current | 3.5 mA max. |
| Reliability | - Calculated MTBF | 230'600 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 |
| Housing Material | | Aluminum (Chassis) |
| Housing Type | | Metal Case |
| Mounting Type | | Chassis Mount |
| Connection Type | | Screw Terminal |
| Weight | | 800 g |
| Status Indicator | | Indicated by green LED |
| Sense Function | | 0.2% max. of Vout nom. |

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

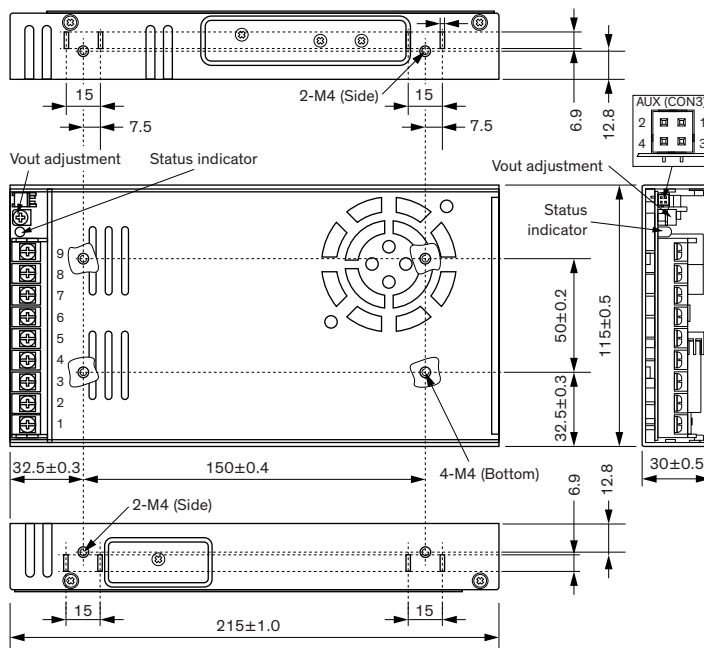
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Supporting Documents

Overview Link (for additional Documents)

www.tracopower.com/overview/txn350

Outline Dimensions

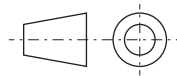


Dimensions in mm

Terminal screw tightening torque: Max. 1.2 Nm

Mounting screw tightening torque: Max. 0.8 Nm

Mounting screw penetration depth: Max. 4 mm



Pin connectors

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

Input/Output:

Wire dimension range: 22 - 12 AWG
0.324 - 3.31 mm²

AUX:

mating connector: YL028-106-004, 2mm pitch