

- **Compact metal case with screw terminal block**
- **Universal input 85 - 264 Vac**
- **EMI/EMC compliance with EN 61000-6-3 and EN 61000-6-1**
- **Compliance to EN 61000-3-2**
- **Active power factor correction**
- **Short circuit and overvoltage protection**
- **International safety approvals**
- **3 year product warranty**



IEC 60950-1 UL 60950-1
IEC 62368-1 UL 62368-1

The TRACO POWER TXL series is a family of encased power supplies designed for a wide range of cost critical applications. With a low profile metal case and screw terminal block connection, they are easy to install in any equipment.

These power supplies have universal input and comply with European EMC standards and the Low Voltage Directive (LVD).

| Models | | | | |
|-------------------|-------------------|----------------------------|----------------------------|------------------------|
| Order Code | Power max. | Output voltage nom. | Output current max. | Efficiency typ. |
| TXL 750-24S | 751 W | 24 VDC | 31.3 A | 88 % |
| TXL 750-48S | 758 W | 48 VDC | 15.8 A | 90 % |

Input Specifications

| | | |
|---|---|---|
| Input voltage range | – nominal – AC range (universal input) – DC range | 100 – 240 VAC 90 – 264 VAC 127 – 375 VDC (Designed for, no certification) |
| Input frequency | | 47 – 63 Hz |
| Input current at full load | – at 100 VAC | 9.8 A max. |
| Input inrush current | – at 115 VAC / 230 VAC | 50 A max. / 90 A max. |
| Power Factor Correction (PFC) | | PF > 0.95 |
| Recommended circuit breaker (characteristic C or slow bow fuse) | | 16 A |

Output Specifications

| | | |
|--|---|--|
| Output voltage adjustment range | | ±10 % |
| Regulation | – Input variation – Load variation (20 – 100%) | 0.5 % max. 0.5 % max. |
| Minimum load | | not required |
| Temperature coefficient | | 0.02 %/K |
| Start-up time | | 2.0 s max. |
| Rise time | | 40 ms max. |
| Hold-up time | – at 230 VAC | 16 ms min. |
| Ripple and noise (20Mhz Bandwidth) | | 24 Vout model: 200 mVp-p typ. 48 Vout model: 240 mVp-p typ. – measured with external capacitors: 0.1 µF and 47 µF parallel capacitor |
| Overload protection by current limitation | | 105 – 135 % of Iout max. |
| Short circuit protection | | hiccup mode (automatic recovery) |
| Overvoltage protection (Latch off, recovery after restart) | | 115 – 140 % of nominal Vout |
| Capacitive load | | www.tracopower.com/products/txl-capload.pdf |

General Specifications

| | | |
|-----------------------------------|---|---|
| Temperature ranges | – Operating – Storage | –20°C to +70°C (with derating) –40°C to +85°C |
| Output power derating | – Temperature – Low input voltage | 2.5 %/K above +50°C 1.0 %/V below 100 VAC |
| Cooling | | forced airflow cooling with DC fan |
| Over Temperature Protection | | over 90°C thermal shutdown, auto. recovery |
| Humidity (non condensing) | | 20 – 90 % rel. H max. |
| Altitude during operation | | 4000 m |
| Isolation voltage (60 sec.) | – Input / Output – Input / PE – Output / PE | 4'000 VDC 2'877 VDC 500 VDC |
| Isolation resistance (at 500 VDC) | | 100 MΩ min. |
| Leakage current (at 264 VAC/60Hz) | | 1.5 mA max. |
| Remote Sense | | open or connected to the load (RS+, RS-) |
| Remote on/off | – Power On: – Power Off: – Off idle current | 0 – 0.7 VDC 3 – 10 VDC 3 – 10 mA |
| Auxiliary power | | 12 V / 0.1 A (only for remote control on/off) |
| Power good Signal | – DC-OK / DC-OFF: – Signal High (Power OK) | High level TTL signal release (3 mA max.) 3.3 – 5.6 VDC / 0 – 1 VDC Power supply is above 20% of rated Vout |

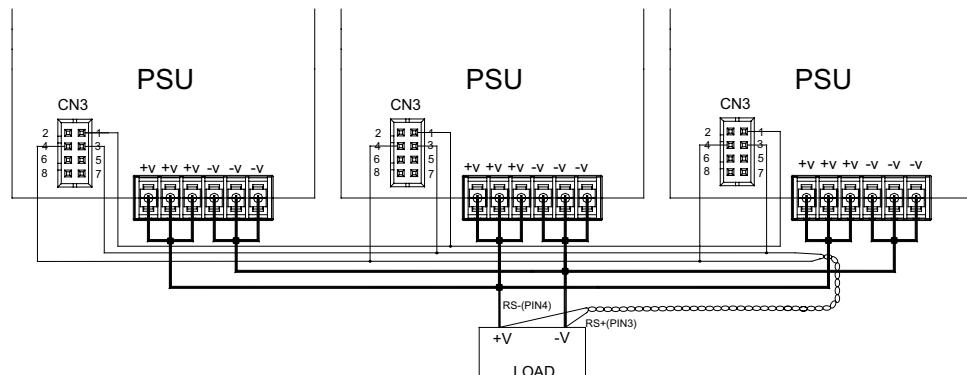
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

General Specifications (continued)

| | |
|--|--|
| Switching frequency | 65 kHz typ. (pulse width modulation) |
| Reliability (calculated MTBF) | > 110'000 h |
| Electromagnetic compatibility (EMC), emissions | <ul style="list-style-type: none"> – Conducted and Radiated emissions – Harmonic current emissions – Voltage flicker |
| | EN 55032 class B, FCC Part 15 level B IEC / EN 61000-3-2, class D IEC / EN 61000-3-3 |
| Electromagnets compatibility (EMC), immunity | <ul style="list-style-type: none"> – Electrostatic discharge ESD – RF field immunity – Electrical fast transients/burst immunity – Surge – Conducted RF – Magnetic field – Voltage dip |
| | according EN 55024 & EN 55035 IEC / EN 61000-4-2, 4kV/8kV, perf. criteria A IEC / EN 61000-4-3, 20V/m, perf. criteria A IEC / EN 61000-4-4, ±2kV, perf. criteria A IEC / EN 61000-4-5, 1kV/2kV, perf. criteria A IEC / EN 61000-4-6, 3 Vrms perf. criteria A IEC / EN 61000-4-8, 3 A/m perf. criteria A IEC / EN 61000-4-11 |
| Safety standards | UL 62368-1, IEC/EN 62368-1 UL 60950-1, IEC/EN 60950-1 |
| Safety approvals | <ul style="list-style-type: none"> – UL/cUL – CB report |
| | www.ul.com → certifications → File: e188913 www.tracopower.com/overview/txl |
| Environmental compliance | <ul style="list-style-type: none"> – Reach – RoHS |
| | www.tracopower.com/products/reach-declaration.pdf RoHS directive 2011/65/EU |
| Casing material | aluminium (chassis and cover) |
| Weight | 2.5 kg |

Application Note (Parallel operation, Remote Control)

Parallel operation:



CN3 pin consideration:

Pin 1: Current sharing to interconnect up to 3 units at parallel operation
Max power = units x 0.9, max deviation of voltage adjustment among units = 100mV

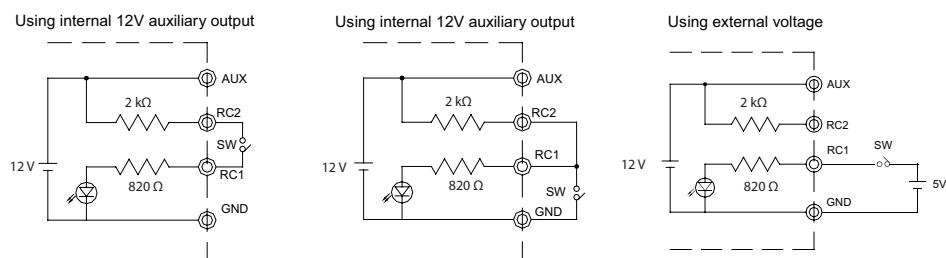
Pin 2: Power Good Signal. TTL (3mA max.): 0–1 VDC = DC-Off, 3.3–5.6 VDC = DC-OK

Pin 3/4: Remote sense to be connected at load side under regard of polarity

Pin 5/6: Remote control input RC1 & RC2

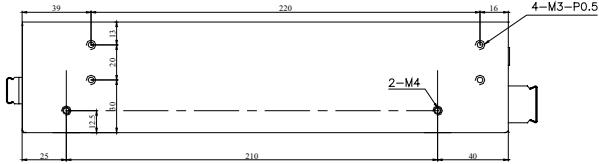
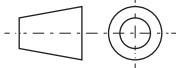
Pin 7/8: Auxillary output 12 VDC / 0.1 A for remote control function (see below)

Remote Control On/Off:

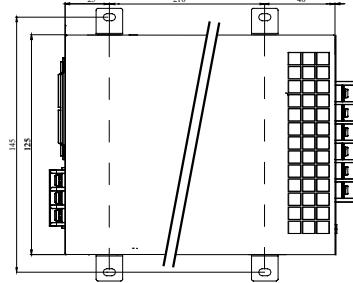
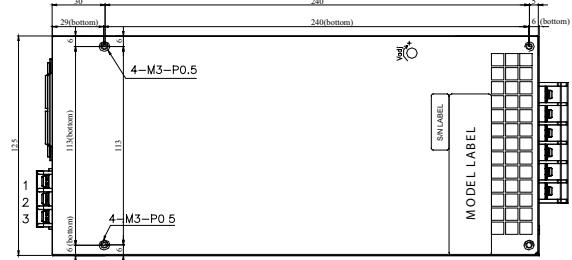
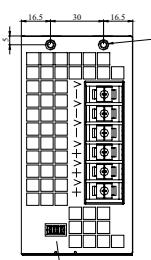


All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Outline Dimensions



| Screw Terminal | |
|----------------|------------|
| Pin | Connection |
| 1 | AC L |
| 2 | AC N |
| 3 | PE |



Max. terminal screw locked torque: 0.7 Nm
Max. mounting screw locked torque M3: 0.8 Nm
Max. mounting screw locked torque M4: 1.6 Nm

Max. mounting screw penetration depth: 3.0 (0.118)

Dimensions in [mm], () = Inch
Tolerances ± 0.5 (± 0.02)

Mating connector:

- Housing: HRS DF11-08DS-2C
- Crimp: HRS DF11-EP22SCB

Included in shipment:

- 4x TXL-CMB chassis mount brackets included in shipment
- Connection cable with 500mm leads

| Chassis Mount Brackets | |
|------------------------|------------------------------------|
| Order Code | TXL-CMB |
| Package | contains 4 pcs brackets and screws |
| Material | S.P.C.C. |
| Thickness | 8 mm |
| Treatment | Nickel plated |
| Dimensions | Unit in [mm] |

