TRACO POWER

AC/DC Enclosed Power Supply

TXL 750 Series, 750 Watt

- **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**

ErP ready CE CB Scheme cULus UL 60950-1

The TRACOPOWER 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: 48 Vout model: – measured with external capacitors:	200 mVp-p typ. 240 mVp-p typ. 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	3000 VAC 1500 VAC 500 VAC
Isolation resistance (at 500 VDC)		100 MOhm 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		
	– Conducted and Radiated emissions	EN 55032 class B, FCC Part 15 level B
	– Harmonic current emissions	IEC / EN 61000-3-2, class D
	– Voltage flicker	IEC / EN 61000-3-3
Electromagnets compatibility (EMC), immunity		according EN 55024
	– Electrostatic discharge ESD	IEC / EN 61000-4-2, 4kV/8kV, perf. criteria A
	– RF field immunity	IEC / EN 61000-4-3, 20V/m, perf. criteria A
	– Electrical fast transients/burst immunity	IEC / EN 61000-4-4, ±2kV, perf. criteria A
	– Surge	IEC / EN 61000-4-5, 1kV/2kV, perf. criteria A
	– Conducted RF	IEC / EN 61000-4-6, 3 Vrms perf. criteria A
	– Magnetic field	IEC / EN 61000-4-8, 3 A/m perf. criteria A
	– Voltage dip	IEC / EN 61000-4-11
Safety standards		UL 60950-1, IEC/EN 60950-1
Safety approvals	– UL/cUL	www.ul.com → certifications → File: e188913
	– CB report	www.tracopower.com/overview/txl
Environmental compliance	– Reach	www.tracopower.com/products/reach-declaration.pdf
	– RoHS	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

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

Mating connector:
– Housing: HRS DF11-08DS-2C
– Crimp: HRS DF11-EP22SCB

Included in shipment:
– 4× 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]

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