AC/DC Power Supply

TXLN 750 Series, 750 Watt

- **Compact metal case with screw terminal block**
- **Universal input 90-264 VAC**
- **High efficiency up to 90%**
- **Active PFC >0.95**
- **Compliance to EN 61000-3-2**
- **Short circuit, overvoltage and overload protection**
- **IEC/EN/UL 62368-1 safety approvals**
- **Remote On/Off and Remote Sense**
- **Standard features: Power Good Signal, Load Sharing, 12 V Standby Output**
- **3-year product warranty**

UL 62368-1 IEC 62368-1

The TXLN 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	Output Power max.	Output Voltage nom. (adjustable)	Output Current max.	Efficiency typ.
TXLN 750-112	750 W	12 VDC (10.8 - 13.2 VDC)	62'500 mA	88 %
TXLN 750-124		24 VDC (21.6 - 26.4 VDC)	31'300 mA	88 %
TXLN 750-148		48 VDC (43.2 - 52.8 VDC)	15'800 mA	90 %

Input Specifications

Input Voltage	- AC Range	Operational Range:	90 - 264 VAC (Full Range)
		Rated Range:	100 - 240 VAC (Full Range)
	- DC Range	Operational Range:	127 - 375 VDC (Designed for, no certification)
		Polarity:	irrelevant
Input Frequency		Operational Range:	47 - 63 Hz
		Certified:	50/60 Hz
Input Current	- Full load & Vin = 115 VAC		9'800 mA max.
Input Inrush Current	- At 230 VAC		90 A max.
	- At 115 VAC		50 A max.
Power Factor	- At 230 VAC		0.95 min. (Active Power Factor Correction)
	- At 115 VAC		0.95 min. (Active Power Factor Correction)
Input Protection			T 12 A / 250 VAC (Internal Fuse)
Recommended Input Fuse			12'000 mA (slow blow) (The need of an external fuse has to be assessed in the final application.)

Output Specifications

Output Voltage Adjustment			±10% (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 (0 - 100%)		1% max.
Ripple and Noise (20 MHz Bandwidth)		12 VDC model:	120 mVp-p max. (w/ 0.1 µF || 47 µF)
		24 VDC model:	200 mVp-p max. (w/ 0.1 µF || 47 µF)
		48 VDC model:	240 mVp-p max. (w/ 0.1 µF || 47 µF)
Capacitive Load			108'000 µF max.
Minimum Load			Not required
Temperature Coefficient			±0.03 %/K max.
Hold-up Time	- At 230 VAC		16 ms min.
	- At 115 VAC		16 ms min.
Start-up Time	- At 230 VAC		2'000 ms max.
Short Circuit Protection			Continuous, Automatic recovery
Output Current Limitation			105 - 135% of Iout max.
Overvoltage Protection			115 - 140% of Vout nom.
Load Share Function	- Refer to application note		www.tracopower.com/overview/txln750
Load Share Accuracy			10%

Safety Specifications

Standards	- IT / Multimedia Equipment		EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents		www.tracopower.com/overview/txln750
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

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

EMC Specifications

EMI (Emissions)	- Conducted Emissions		EN 55032 class A (internal filter)
			EN 55032 class B (internal filter)
	- Radiated Emissions		EN 55032 class A (internal filter)
			EN 55032 class B (internal filter)
	- Harmonic Current Emissions		EN 61000-3-2, class D
	- Voltage Fluctuations & Flicker		EN 61000-3-3
EMS (Immunity)			EN 55024 (IT Equipment)
			EN 55035 (Multimedia)
	- Electrostatic Discharge	Air:	EN 61000-4-2, ±8 kV, perf. criteria A
		Contact:	EN 61000-4-2, ±4 kV, perf. criteria A
	- 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, ±2 kV, perf. criteria B
		L to PE:	EN 61000-4-5, ±4 kV, perf. criteria B
	- Conducted RF Disturbances		EN 61000-4-6, 10 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous:	EN 61000-4-8, 30 A/m, perf. criteria A
		1 s:	EN 61000-4-8, 300 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

General Specifications

Relative Humidity			90% max. (non condensing)
Temperature Ranges	- Operating Temperature		−20°C to +70°C
	- Storage Temperature		−40°C to +85°C
Power Derating	- High Temperature		2.5 %/K above 50°C
	- Low Input Voltage		1 %/V below 100 VAC
		See application note:	www.tracopower.com/overview/txln750
Over Temperature Protection Switch Off	- Protection Mode		90°C min. / 95°C typ. / 100°C max. (Automatic recovery)
Cooling System			Forced air cooling (with internal fan)
Fan Power Source	- Characteristic		Constant fan speed (continuous)
	- Output Voltage		12 VDC
	- Output Current		480 mA max.
			(6'800 RPM / 38 CFM)
Standby Power Source	- Output Voltage		12 VDC
	- Output Current		300 mA max.
Remote Control	- Voltage Controlled Remote	See application note:	www.tracopower.com/overview/txln750
Altitude During Operation			4'000 m max.
Regulator Topology			Flyback Converter
Switching Frequency			55 - 65 kHz (PWM)
Insulation System			Reinforced Insulation
Working Voltage (rated)			291 VAC
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.
Isolation Capacitance	- Input to Output, 100 kHz, 1 V		20'000 pF max.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current		1500 µA max.
Distance Through Isolation			6 mm
Reliability	- Calculated MTBF		107'000 h (MIL-HDBK-217F, ground benign)
Housing Material			Aluminum
Housing Type			Metal Case

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

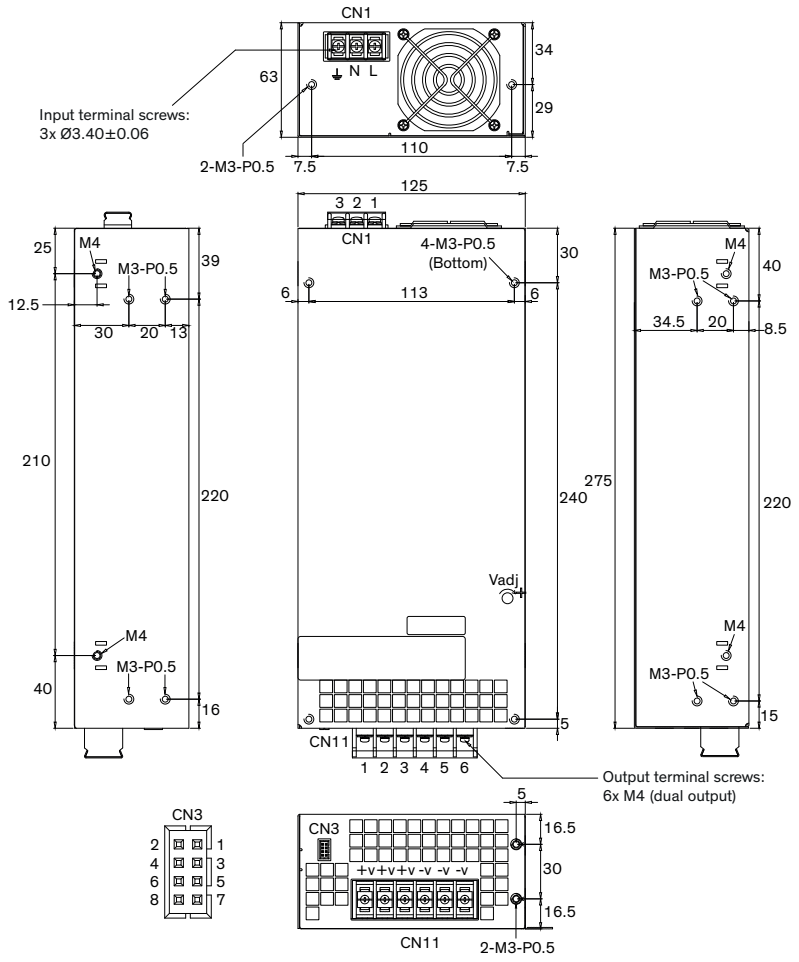
Mounting Type		Chassis Mount
Connection Type		Screw Terminal
Weight		2'500 g
Power OK Signal		Voltage source output
	- Power OK	High level
	- Power Off	Low level
		(Refers to 'PG' and 'GND' Pin)
Status Indicator		Indicated by green LED
Sense Function		(to be done)
Environmental Compliance	- REACH Declaration	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	552395cf-3028-43ab-b613-08eaec8df079

Additional Information

Supporting Documents	www.tracopower.com/overview/txln750
Frequently Asked Questions	www.tracopower.com/glossary-faq
Glossary	www.tracopower.com/info/glossary.pdf

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

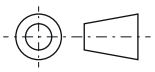
Outline Dimensions



Dimensions in mm
Tolerances:
0-8: ±0.2
8-25: ±0.3
25-80: ±0.5
80-250: ±0.8

Mounting screws
Max. screw penetration depth: 3.0
Max. screw locked torque M3: 0.8 Nm
Max. screw locked torque M4: 1.6 Nm

Included in shipment:
- 6x M3 mounting screw



Input	
CN1	
Pin	Function
1	AC (L)
2	AC (N)
3	PE

Signal	
CN3	
Pin	Function
1	LS
2	PG
3	+Sense
4	–Sense
5	–Remote
6	+Remote
7	Standby
8	GND

CN3 Housing Type:
HRS DF11-8DP-2DSA

CN3 Mating Housing:
HRS DF11-8DS-2C

CN3 Crimp Contact:
HRS DF11-EP22SCB

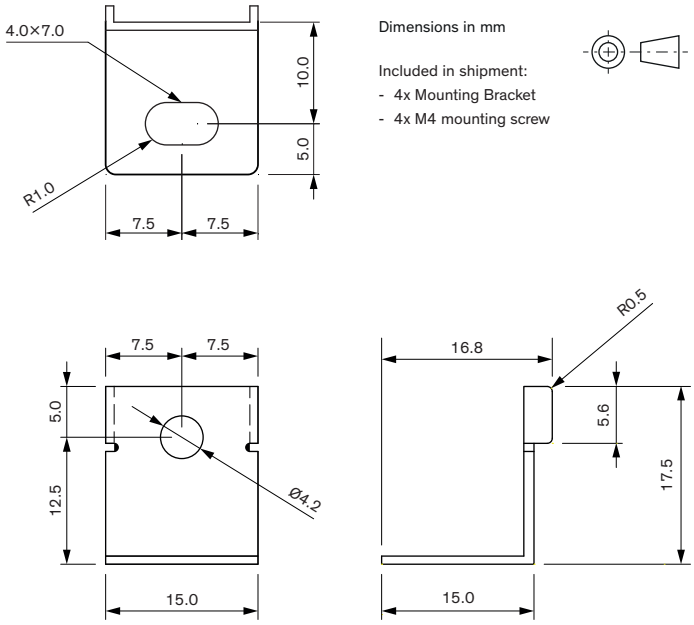
Output	
CN11	
Pin	Function
1-3	+ Vout
4-6	– Vout

CN1:
3 pin, 10mm pitch
with PC cover
Max. terminal screw locked
torque: 0.7 Nm

CN11:
6 pin, 11 mm pitch
Max. terminal screw locked
torque: 0.7 Nm

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

Mounting Bracket (included)



Dimensions in mm

Included in shipment:
- 4x Mounting Bracket
- 4x M4 mounting screw