

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 85%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 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 018-103	10 W	3.3 VDC (3.0 - 3.6 VDC)	3'000 mA	73 %
TXLN 018-105	15 W	5 VDC (4.5 - 5.5 VDC)	3'000 mA	78 %
TXLN 018-112	18 W	12 VDC (10.8 - 13.2 VDC)	1'500 mA	83 %
TXLN 018-115		15 VDC (13.5 - 16.5 VDC)	1'200 mA	84 %
TXLN 018-124		24 VDC (21.6 - 26.4 VDC)	750 mA	85 %

Input Specifications

Input Voltage	- AC Range	85 - 264 VAC (Full Range)
	- DC Range	120 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	500 mA max.
Power Consumption	- At no load	150 mW max. (Ready to meet ErP directive)
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Input Protection		T 2 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		2'000 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		±3% max. (3.3 Vout model)
		±2% max. (5 Vout model)
		±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1.5% max. (3.3 Vout model)
		1% max. (5 Vout model)
		0.5% max. (other models)
	- Load Variation (0 - 100%)	3% max. (3.3 Vout model)
		2% max. (5 Vout model)
		1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	3.3 VDC model:	80 mVp-p max. (w/ 0.1 µF // 47 µF)
	5 VDC model:	80 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 VDC model:	120 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:	200 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	60 ms min.
	- At 115 VAC	16 ms min.
Start-up Time	- At 230 VAC	1'000 ms max.
	- At 115 VAC	1'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105% typ. of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln018
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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

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

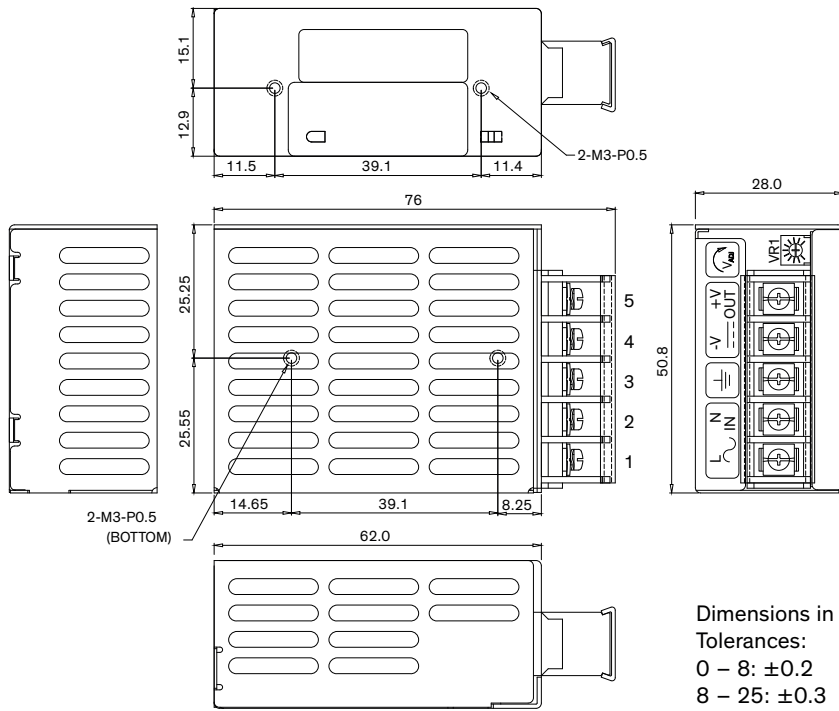
EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
	- RF Electromagnetic Field	Air: EN 61000-4-2, ± 8 kV, perf. criteria A
	- EFT (Burst) / Surge	Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
		EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
		L to PE: EN 61000-4-5, ± 2 kV, perf. criteria A
	- Conducted RF Disturbances	EN 61000-4-6, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>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	0.67 %/V below 100 VAC
Cooling System		Natural convection (20 LFM)
Altitude During Operation		2'000 m max.
Switching Frequency		90 - 110 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC)	- Earth Leakage Current	500 μ A max.
Reliability	- Calculated MTBF	626'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		130 g
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents	
Overview Link (for additional Documents)	www.tracopower.com/overview/txln018

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

Outline Dimensions



Screw Terminal

Pin	Function
1	AC (L)
2	AC (N)
3	PE
4	-Vout
5	+Vout

Dimensions in mm

Tolerances:

0 – 8: ±0.2

8 – 25: ±0.3

25 – 80: ±0.5

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 88%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/ENUL 62368-1 safety approvals
- 3 year product warranty



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 025-103	20 W	3.3 VDC (3.0 - 3.6 VDC)	6'000 mA	72 %
TXLN 025-105	25 W	5 VDC (4.5 - 5.5 VDC)	5'000 mA	79 %
TXLN 025-112		12 VDC (10.6 - 13.2 VDC)	2'100 mA	84 %
TXLN 025-115		15 VDC (13.5 - 16.5 VDC)	1'700 mA	85 %
TXLN 025-124	26 W	24 VDC (24.6 - 26.4 VDC)	1'100 mA	86 %
TXLN 025-148	27 W	48 VDC (43.2 - 52.8 VDC)	570 mA	88 %

Options

on demand (backorder with MOQ non stocking item)	- Optional model with 7.5 VDC / 3'400 mA - Optional model with 30 VDC / 900 mA
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Input Specifications

Input Voltage	- AC Range	88 - 264 VAC (Full Range)
	- DC Range	125 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	650 mA max.
Power Consumption	- At no load	300 mW max. (Ready to meet ErP directive)
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Input Protection		T 1.6 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		1'600 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		±3% max. (3.3 Vout model) ±2% max. (5 Vout model) ±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1.5% max. (3.3 Vout model) 1% max. (5 Vout model) 0.5% max. (other models)
	- Load Variation (0 - 100%)	3% max. (3.3 Vout model) 2% max. (5 Vout model) 1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	3.3 VDC model:	70 mVp-p max. (w/ 0.1 µF // 47 µF)
	5 VDC model:	70 mVp-p max. (w/ 0.1 µF // 47 µF)
	7.5 VDC model:	80 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 VDC model:	120 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)
	30 VDC model:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
	48 VDC model:	200 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	60 ms min.
	- At 115 VAC	12 ms min.
Start-up Time	- At 230 VAC	1'000 ms max.
	- At 115 VAC	1'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 180% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln025
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

All specifications valid at nominal voltage, 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	- Electrostatic Discharge	EN 55024 (IT Equipment)
		Air: EN 61000-4-2, ± 8 kV, perf. criteria A
		Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
	- EFT (Burst) / Surge	L to PE: EN 61000-4-5, ± 2 kV, perf. criteria A
		EN 61000-4-6, 3 Vrms, perf. criteria A
	- Conducted RF Disturbances	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- PF Magnetic Field	230 VAC / 50 Hz: EN 61000-4-11
	- Voltage Dips & Interruptions	30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>95%, 250 periods, perf. criteria C

General Specifications

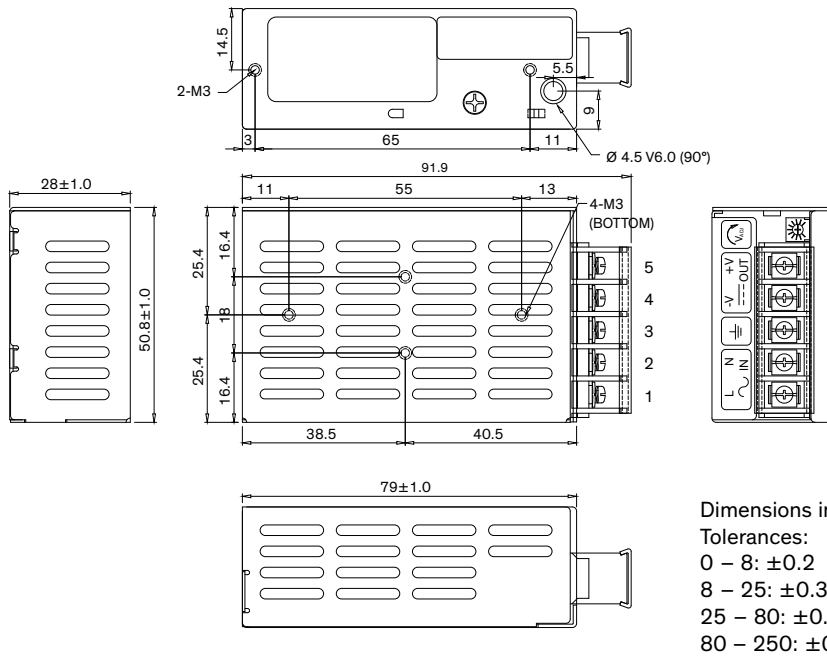
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-20°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
Cooling System		Natural convection (20 LFM)
Altitude During Operation		2'000 m max.
Switching Frequency		57 - 73 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC)	- Earth Leakage Current	500 μ A max.
Reliability	- Calculated MTBF	450'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		180 g
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txln025
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All specifications valid at nominal voltage, full load and +25°C after warm-up time unless otherwise stated.

Outline Dimensions



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4	-Vout
5	+Vout

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 86%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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	Output 1		Output 2		Efficiency
		Vnom	I _{max}	Vnom	I _{max}	
TXLN 035-103	30 W	3.3 VDC	9'000 mA			74 %
TXLN 035-105	35 W	5 VDC	7'000 mA			79 %
TXLN 035-112		12 VDC	3'000 mA			82 %
TXLN 035-115		15 VDC	2'400 mA			84 %
TXLN 035-124		24 VDC	1'500 mA			85 %
TXLN 035-148	38 W	48 VDC	800 mA			86 %
TXLN 035-212	35 W	+5 VDC	4'000 mA	+12 VDC	2'500 mA	79 %
TXLN 035-215		+5 VDC	4'000 mA	+24 VDC	1'300 mA	79 %
TXLN 035-22M2		+12 VDC	3'000 mA	-12 VDC	1'500 mA	83 %
TXLN 035-23M3		+15 VDC	2'400 mA	-15 VDC	1'500 mA	84 %

Options	
on demand (backorder with MOQ non stocking item)	- Optional model with 7.5 VDC / 4'700 mA - Optional model with 30 VDC / 1'200 mA

Note - Total output power must not exceed rated power.

Input Specifications

Input Voltage	- AC Range	88 - 264 VAC (Full Range)
	- DC Range	125 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	1'000 mA max.
Power Consumption	- At no load	500 mW max.
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Input Protection		T 2 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		2'000 mA (slow blow) (The need of an external fuse has to be assessed in the final application.)

Output Specifications

Output Voltage Adjustment		±10% (single output models only) (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy		±3% max. (3.3 Vout model) ±2% max. (5 Vout model) ±1% max. (other single output models) ±2% / ±5% max. (5/12 and 5/24 Vout models) ±1% / ±5% max. (other dual output models)
Regulation	- Input Variation (Vmin - Vmax)	single output models: 1.5% max. (3.3 Vout model) 1.0% max. (5 Vout model) 0.5% max. (other single output models)
		dual output models: 0.5% max. (Output 1, 12/-12 and 15/-15 Vout) 1.0% max. (Output 1, 5/12 and 5/24 Vout) 2.5% max (Output 2)
	- Load Variation (0 - 100%)	single output models: 3% max. (3.3 Vout model) 2% max. (5 Vout model) 1% max (other single output models)
		dual output models: 2% max. (Output 1) 5% max. (Output 2)
Ripple and Noise (20 MHz Bandwidth)	- single output	3.3 VDC model: 70 mVp-p max. (w/ 0.1 µF // 47 µF)
		5 VDC model: 70 mVp-p max. (w/ 0.1 µF // 47 µF)
		7.5 VDC model: 80 mVp-p max. (w/ 0.1 µF // 47 µF)
		12 VDC model: 120 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)
	- dual output	30 VDC model: 200 mVp-p max. (w/ 0.1 µF // 47 µF)
		48 VDC model: 200 mVp-p max. (w/ 0.1 µF // 47 µF)
		5 / 12 VDC model: 70 / 120 mVp-p max. (w/ 0.1 µF // 47 µF)
		5 / 24 VDC model: 70 / 240 mVp-p max. (w/ 0.1 µF // 47 µF)
		12 / -12 VDC model: 120 / 120 mVp-p max. (w/ 0.1 µF // 47 µF)
		15 / -15 VDC model: 150 / 150 mVp-p max. (w/ 0.1 µF // 47 µF)

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

Minimum Load	- single output	3.3 VDC model:	0 % of Iout max.
		5 VDC model:	0 % of Iout max.
		7.5 VDC model:	0 % of Iout max.
		12 VDC model:	0 % of Iout max.
		15 VDC model:	0 % of Iout max.
		24 VDC model:	0 % of Iout max.
		30 VDC model:	0 % of Iout max.
		48 VDC model:	0 % of Iout max.
	- dual output	5 / 12 VDC model:	7.5 % of Iout max.
		5 / 24 VDC model:	7.5 % of Iout max.
		12 / -12 VDC model:	10 % of Iout max.
	15 / -15 VDC model:	12.5 % of Iout max.	
	(dual output models: minimum load is required only on Output 1)		
Temperature Coefficient		±0.03 %/K max.	
Hold-up Time	- At 230 VAC	40 ms min.	
	- At 115 VAC	20 ms min.	
Start-up Time	- At 230 VAC	1'000 ms max.	
	- At 115 VAC	1'000 ms max.	
Short Circuit Protection		Continuous, Automatic recovery	
Output Current Limitation		105 - 150% of Iout max.	
Overvoltage Protection		115 - 140% of Vout nom.	
		(Output 1 only)	

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln035
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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	- Electrostatic Discharge	EN 55024 (IT Equipment)
		Air: EN 61000-4-2, ±8 kV, perf. criteria A
		Contact: EN 61000-4-2, ±4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-4, ±1 kV, perf. criteria A
		L to L: EN 61000-4-5, ±1 kV, perf. criteria A
		L to PE: EN 61000-4-5, ±2 kV, perf. criteria A
		EN 61000-4-6, 3 Vrms, perf. criteria A
	- Conducted RF Disturbances	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
		230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
	- PF Magnetic Field	>95%, 250 periods, perf. criteria C
	- Voltage Dips & Interruptions	

General Specifications

Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-20°C to +70°C
	- Storage Temperature	-40°C to +85°C

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

Power Derating	- High Temperature - Low Input Voltage	2.5 %/K above 50°C 0.83 %/V below 100 VAC
Cooling System		Natural convection (20 LFM)
Altitude During Operation		2'000 m max.
Switching Frequency		58 - 72 kHz (PWM)
Insulation System		Reinforced Insulation
Working Voltage (rated)		275 VAC
Isolation Test Voltage	- Input to Output, 60 s - Input to Case or PE, 60 s - Output to Case or PE, 60 s	3'000 VAC 1'800 VAC 500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 MΩ min.
Leakage Current (at 264 VAC)	- Earth Leakage Current	1000 µA max.
Reliability	- Calculated MTBF	400'000 h (single output models) 340'000 h (dual output models) (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight	- single output - dual output	340 g 350 g
Status Indicator		Indicated by green LED
Environmental Compliance	- REACH Declaration - RoHS Declaration	www.tracopower.com/info/reach-declaration.pdf REACH SVHC list compliant REACH Annex XVII compliant www.tracopower.com/info/rohs-declaration.pdf Exemptions: 6a, 6b, 6c, 7a, 7c-I, 7c-II

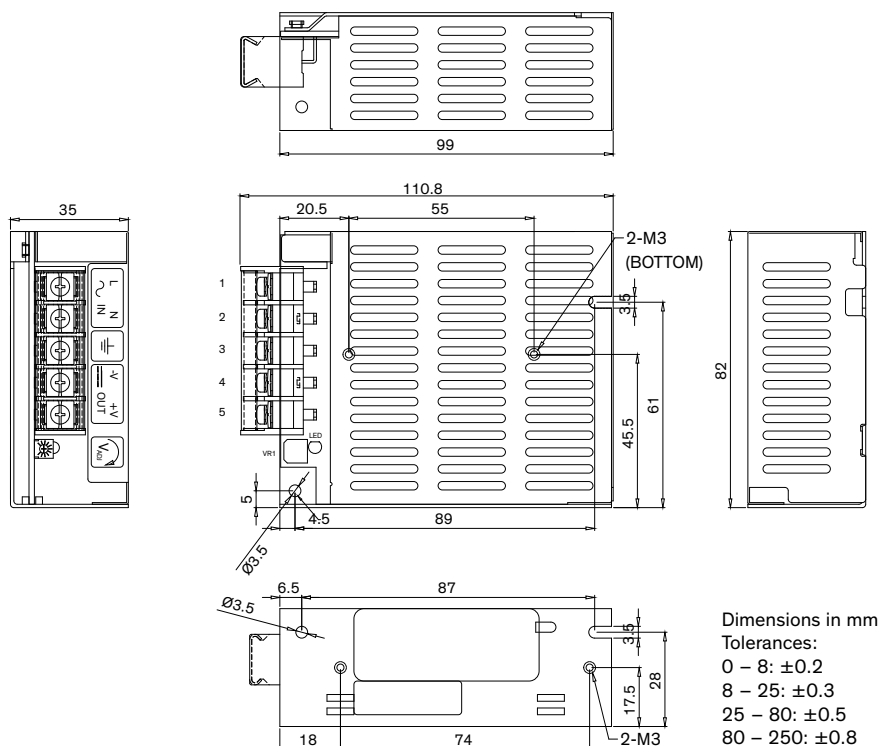
Supporting Documents

Overview Link (for additional Documents) www.tracopower.com/overview/txln035

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

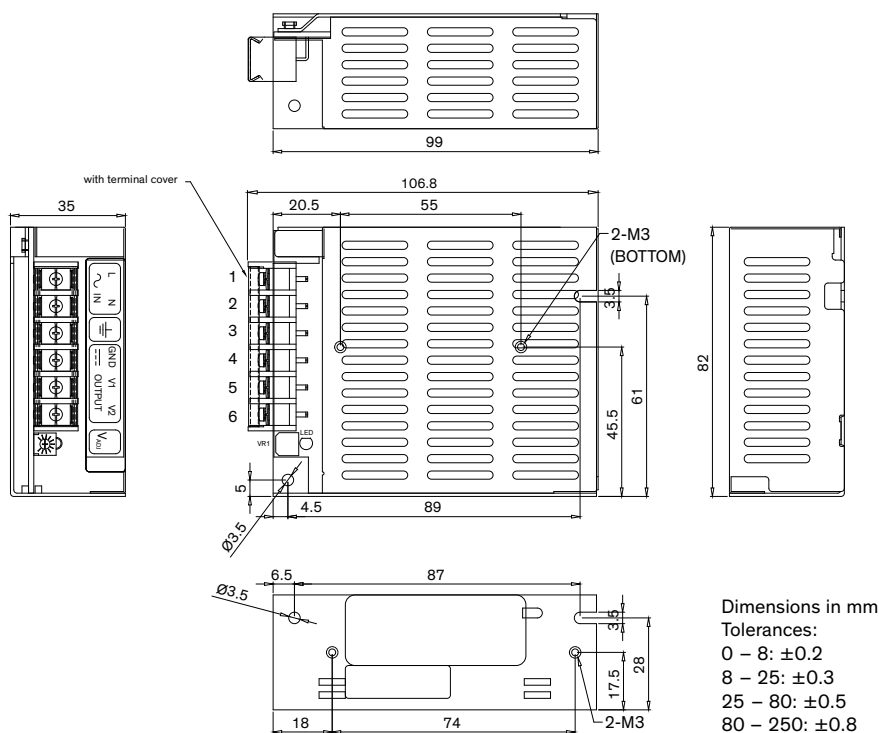
Outline Dimensions

Single Output Models



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4	–Vout
5	+Vout

Dual Output Models



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4	GND
5	Output 1
6	Output 2

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 86%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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 060-103	40 W	3.3 VDC (3.0 - 3.6 VDC)	12'000 mA	72 %
TXLN 060-105	50 W	5 VDC (4.5 - 5.5 VDC)	10'000 mA	78 %
TXLN 060-112	60 W	12 VDC (10.8 - 13.2 VDC)	5'000 mA	81 %
TXLN 060-115		15 VDC (13.5 - 16.5 VDC)	4'000 mA	83 %
TXLN 060-124		24 VDC (21.6 - 26.4 VDC)	2'500 mA	84 %
TXLN 060-148	62 W	48 VDC (43.2 - 52.8 VDC)	1'300 mA	86 %

Options	
on demand (backorder with MOQ non stocking item)	- Optional model with 7.5 VDC / 7'000 mA - Optional model with 30 VDC / 2'000 mA

Input Specifications

Input Voltage	- AC Range	88 - 264 VAC (Full Range)
	- DC Range	125 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	1'600 mA max.
Power Consumption	- At no load	500 mW max.
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Input Protection		T 2 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		2'000 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		±3% max. (3.3 Vout model)
		±2% max. (5 Vout model)
		±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1.5% max. (3.3 Vout model)
		1% max. (5 Vout model)
		0.5% max. (other models)
	- Load Variation (0 - 100%)	3% max. (3.3 Vout model)
		2% max. (5 Vout model)
		1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	3.3 VDC model:	70 mVp-p max. (w/ 0.1 µF // 47 µF)
	5 VDC model:	70 mVp-p max. (w/ 0.1 µF // 47 µF)
	7.5 VDC model:	80 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 VDC model:	120 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)
	30 VDC model:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
	48 VDC model:	200 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	60 ms min.
	- At 115 VAC	16 ms min.
Start-up Time	- At 230 VAC	1'000 ms max.
	- At 115 VAC	1'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 150% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln060
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

All specifications valid at nominal voltage, 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	- Electrostatic Discharge	EN 55024 (IT Equipment)
		Air: EN 61000-4-2, ± 8 kV, perf. criteria A
		Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
	- EFT (Burst) / Surge	L to PE: EN 61000-4-5, ± 2 kV, perf. criteria A
		EN 61000-4-6, 3 Vrms, perf. criteria A
	- Conducted RF Disturbances	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- PF Magnetic Field	230 VAC / 50 Hz: EN 61000-4-11
	- Voltage Dips & Interruptions	30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>95%, 250 periods, perf. criteria C

General Specifications

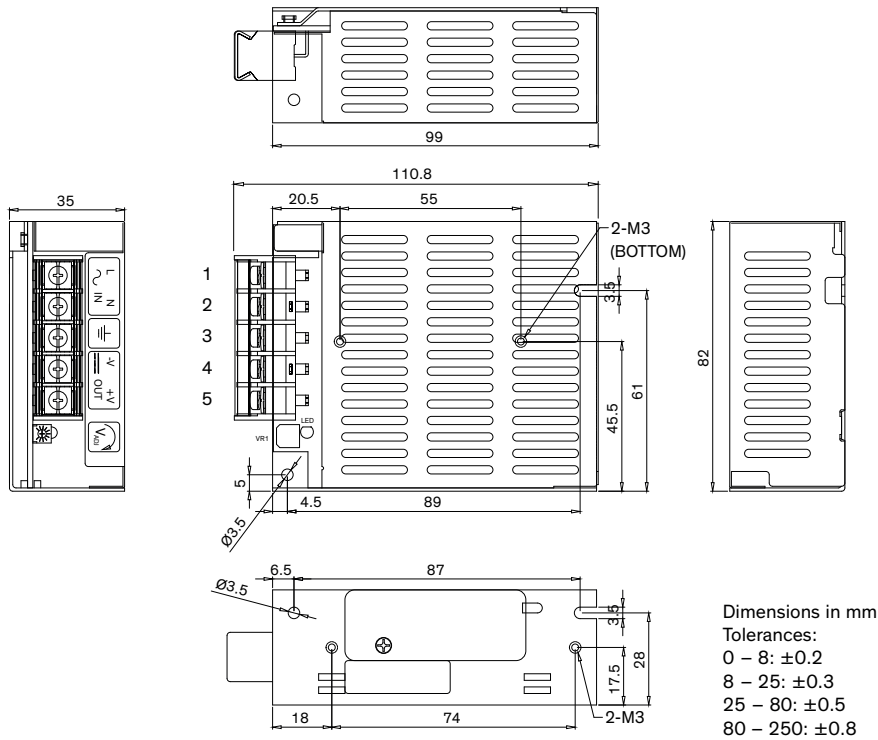
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-20°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.83 %/V below 100 VAC
Cooling System		Natural convection (20 LFM)
Altitude During Operation		2'000 m max.
Switching Frequency		58 - 72 kHz (PWM)
Insulation System		Reinforced Insulation
Working Voltage (rated)		357 VAC
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC)	- Earth Leakage Current	750 μ A max.
Reliability	- Calculated MTBF	335'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		340 g
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txln060
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All specifications valid at nominal voltage, full load and +25°C after warm-up time unless otherwise stated.

Outline Dimensions



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4	-Vout
5	+Vout

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 82%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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	Output 1		Output 2		Output 3		Efficiency typ.
		Vnom	I _{max}	Vnom	I _{max}	Vnom	I _{max}	
TXLN 080-212	80 W	+5 VDC	9'000 mA	+12 VDC	4'000 mA			79 %
TXLN 080-215		+5 VDC	9'000 mA	+24 VDC	2'000 mA			80 %
TXLN 080-312M2		+5 VDC	8'000 mA	+12 VDC	4'000 mA	-12 VDC	1'000 mA	79 %
TXLN 080-313M3		+5 VDC	8'000 mA	+15 VDC	3'500 mA	-15 VDC	1'000 mA	80 %
TXLN 080-3125		+5 VDC	8'000 mA	+12 VDC	3'500 mA	+24 VDC	1'500 mA	82 %

Note - Total output power must not exceed rated power

Input Specifications

Input Voltage	- AC Range	88 - 264 VAC (Full Range)
	- DC Range	125 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	2'500 mA max.
Input Inrush Current	- At 230 VAC	70 A max.
	- At 115 VAC	35 A max.
Input Protection		T 4 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		4'000 mA (slow blow) (The need of an external fuse has to be assessed in the final application.)

Output Specifications

Voltage Set Accuracy		±3% max. (Output 1) ±5% max. (Output 2, dual output models) ±6% max. (Output 2, triple output models) ±5% max. (Output 3)
Regulation	- Input Variation (Vmin - Vmax)	dual output models: 1.5% max. (Output 1) 2.5% max. (Output 2)
		triple output models: 1.5% max. (Output 1) 3.0% max. (Output 2) 2.5% max. (Output 3)
	- Load Variation (0 - 100%)	dual output models: 3% max. (Output 1) 5% max. (Output 2)
		triple output models: 3% max. (Output 1) 6% max. (Output 2) 5% max. (Output 3)
Ripple and Noise (20 MHz Bandwidth)	- dual output	5 / 12 VDC model: 80 / 120 mVp-p max. (w/ 0.1 // 47 µF)
		5 / 24 VDC model: 80 / 200 mVp-p max. (w/ 0.1 // 47 µF)
	- triple output	5 / 12 / -12 VDC model: 80 / 120 / 150 mVp-p max. (w/ 0.1 // 47 µF)
		5 / 15 / -15 VDC model: 80 / 150 / 200 mVp-p max. (w/ 0.1 // 47 µF)
		5 / 12 / 24 VDC model: 80 / 120 / 240 mVp-p max. (w/ 0.1 // 47 µF)
Minimum Load	- dual output	5 / 12 VDC model: 5.6 % of Iout max.
		5 / 24 VDC model: 5.6 % of Iout max.
	- triple output	5 / 12 / -12 VDC model: 6.3 % of Iout max.
		5 / 15 / -15 VDC model: 6.3 % of Iout max.
		5 / 12 / 24 VDC model: 6.3 % of Iout max.
		(minimum load is required only on Output 1)
Temperature Coefficient		±0.03 %/K max.
Hold-up Time	- At 230 VAC	50 ms min.
	- At 115 VAC	10 ms min.
Start-up Time	- At 230 VAC	1'000 ms max.
	- At 115 VAC	1'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 150% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom. (Output 1 only)

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln080
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

All specifications valid at nominal voltage, 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	- Electrostatic Discharge	EN 55024 (IT Equipment)
		Air: EN 61000-4-2, ± 8 kV, perf. criteria A
		Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
	- EFT (Burst) / Surge	L to PE: EN 61000-4-5, ± 2 kV, perf. criteria A
		EN 61000-4-6, 3 Vrms, perf. criteria A
		Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
		230 VAC / 50 Hz: EN 61000-4-11
	- Conducted RF Disturbances	30%, 25 periods, perf. criteria A
	- PF Magnetic Field	>95%, 0.5 periods, perf. criteria A
	- Voltage Dips & Interruptions	>95%, 250 periods, perf. criteria C

General Specifications

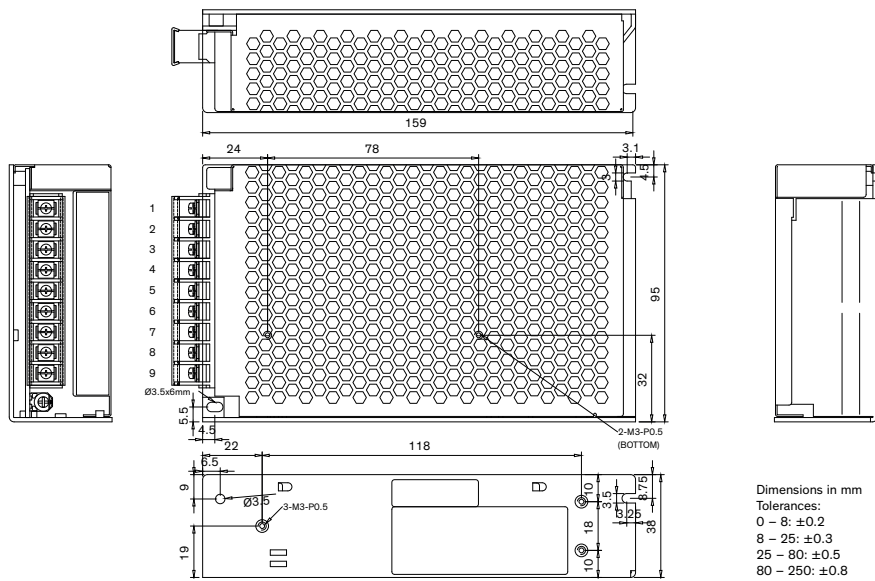
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-20°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.83 %/V below 100 VAC
Cooling System		Natural convection (20 LFM)
Altitude During Operation		3'000 m max.
Switching Frequency		61 - 69 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC)	- Earth Leakage Current	1000 μ A max.
Reliability	- Calculated MTBF	275'000 h (dual output models)
		232'000 h (triple output models)
		(MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txln080
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All specifications valid at nominal voltage, full load and +25°C after warm-up time unless otherwise stated.

Outline Dimensions



Screw Terminal		
Pin	Dual	Triple
1	AC (N)	
2	AC (L)	
3	PE	
4	NC	−Vout3
5	NC	+Vout3
6	−Vout1	−Vout1
7	+Vout1	+Vout1
8	−Vout2	−Vout2
9	+Vout2	+Vout2

- Compact metal case with screw terminal block
- Universal input 88-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 87%
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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 110-105	100 W	5 VDC (4.5 - 5.5 VDC)	20'000 mA	83 %
TXLN 110-112	110 W	12 VDC (10.8 - 13.2 VDC)	9'000 mA	85 %
TXLN 110-115		15 VDC (13.5 - 16.5 VDC)	7'300 mA	86 %
TXLN 110-124		24 VDC (21.6 - 26.4 VDC)	4'600 mA	86 %
TXLN 110-148		48 VDC (43.2 - 52.8 VDC)	2'300 mA	87 %

Input Specifications

Input Voltage	- AC Range	88 - 264 VAC (Full Range)
	- DC Range	125 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	2'800 mA max.
Power Consumption	- At no load	1'000 mW max.
Input Inrush Current	- At 230 VAC	70 A max.
	- At 115 VAC	35 A max.
Input Protection		T 4 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		4'000 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		±2% max. (5 Vout model) ±1% max. (other model)
Regulation	- Input Variation (Vmin - Vmax)	1% max. (5 Vout model) 0.5% max. (other models)
	- Load Variation (0 - 100%)	2% max. (5 Vout model) 1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	100 mVp-p max. (w/ 0.1 µF // 47 µF)
	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:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
	48 VDC model:	200 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	50 ms min.
	- At 115 VAC	10 ms min.
Start-up Time	- At 230 VAC	1'000 ms max.
	- At 115 VAC	1'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 150% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln110
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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

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

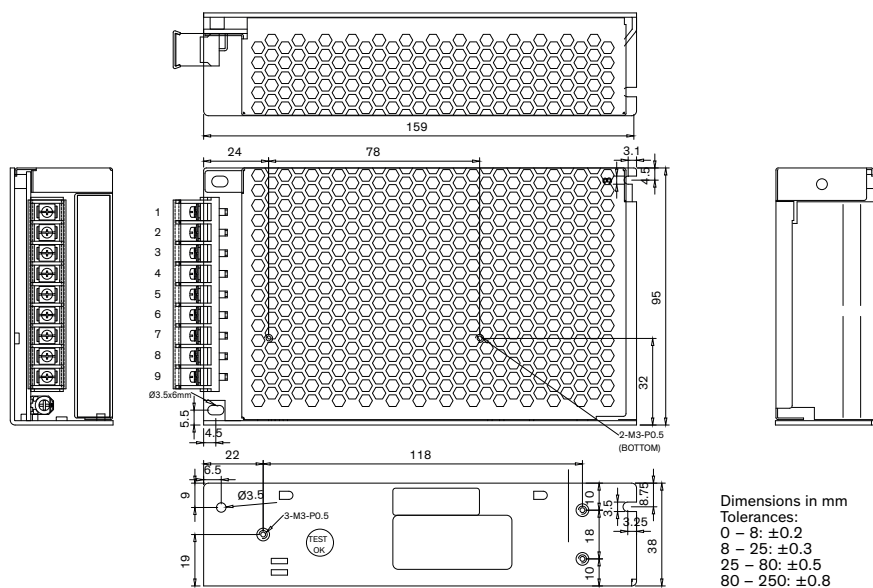
EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
	- RF Electromagnetic Field	Air: EN 61000-4-2, ± 8 kV, perf. criteria A
	- EFT (Burst) / Surge	Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
		EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
		L to PE: EN 61000-4-5, ± 2 kV, perf. criteria A
	- Conducted RF Disturbances	EN 61000-4-6, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>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	0.83 %/V below 100 VAC
Cooling System		Natural convection (20 LFM)
Altitude During Operation		3'000 m max.
Switching Frequency		61 - 69 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1000 μ A max.
Reliability	- Calculated MTBF	284'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents	
Overview Link (for additional Documents)	www.tracopower.com/overview/txln110

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

Outline Dimensions



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4-6	-Vout
7-9	+Vout

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- Convection cooled (no fan)
- 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
- 3 year product warranty



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 150-105	150 W	5 VDC (4.5 - 5.5 VDC)	30'000 mA	86 %
TXLN 150-112		12 VDC (10.8 - 13.2 VDC)	12'500 mA	88 %
TXLN 150-124		24 VDC (21.6 - 26.4 VDC)	6'300 mA	89 %
TXLN 150-148		48 VDC (43.2 - 52.8 VDC)	3'200 mA	90 %

Input Specifications

Input Voltage	- AC Range	85 - 264 VAC (Full Range)
	- DC Range	120 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	2'200 mA max.
Input Inrush Current	- At 230 VAC	45 A max.
	- At 115 VAC	25 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 3.15 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		3'150 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		±2% max. (5 Vout model)
		±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	2% max. (5 Vout model)
		1% max. (other models)
	- Load Variation (0 - 100%)	2% max. (5 Vout model)
		1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	100 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 VDC model:	100 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:	200 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	16 ms min.
	- At 115 VAC	16 ms min.
Start-up Time	- At 230 VAC	2'500 ms max.
	- At 115 VAC	2'500 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 150% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln150
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

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

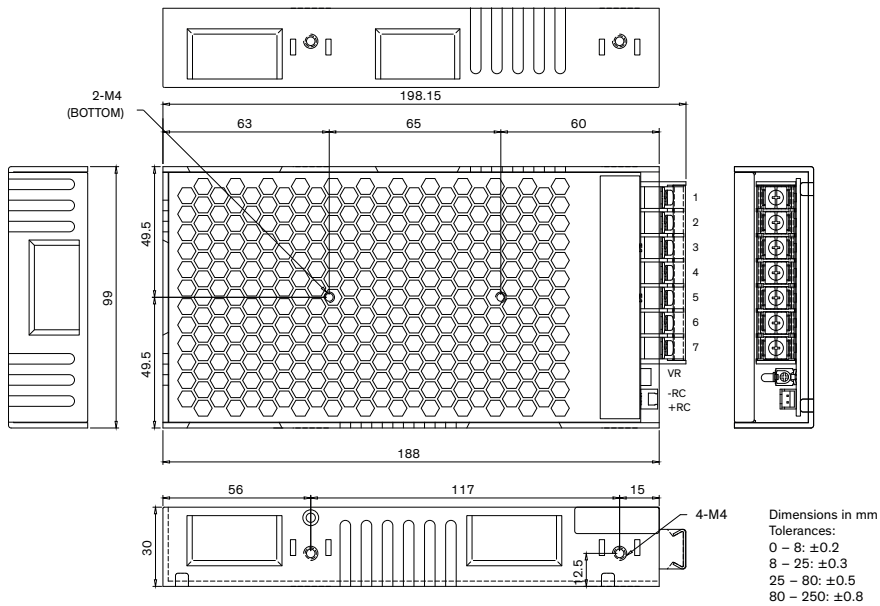
EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
	- RF Electromagnetic Field	Air: EN 61000-4-2, ± 8 kV, perf. criteria A
	- EFT (Burst) / Surge	Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
		EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
		L to PE: EN 61000-4-5, ± 2 kV, perf. criteria A
	- Conducted RF Disturbances	EN 61000-4-6, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>95%, 250 periods, perf. criteria B

General Specifications		
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-30°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.66 %/V below 100 VAC
Over Temperature Protection Switch Off	- Protection Mode	Automatic recovery
Cooling System		Natural convection (20 LFM)
Remote Control	- Voltage Controlled Remote	On: 0 to 0.8 VDC
		Off: 4 to 10 VDC
		Refers to '+Remote' and '-Remote' Pin
Altitude During Operation		5'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency		61 - 69 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1500 μ A max.
Reliability	- Calculated MTBF	162'800 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		560 g
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents	
Overview Link (for additional Documents)	www.tracopower.com/overview/txln150

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

Outline Dimensions



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4-5	-Vout
6-7	+Vout

JTS Connector	
Pin	Function
1	+Remote
2	-Remote

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- Convection cooled (no-fan)
- High efficiency up to 89%
- Active PFC >0.95
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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 200-105	200 W	5 VDC (4.5 - 5.5 VDC)	40'000 mA	83 %
TXLN 200-112		12 VDC (10.8 - 13.2 VDC)	16'700 mA	86 %
TXLN 200-124		24 VDC (21.6 - 26.4 VDC)	8'400 mA	88 %
TXLN 200-148		48 VDC (43.2 - 52.8 VDC)	4'200 mA	89 %

Options	
on demand (backorder with MOQ non stocking item)	- Optional model with 36 VDC / 5'600 mA

Input Specifications

Input Voltage	- AC Range	85 - 264 VAC (Full Range)
	- DC Range	120 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	2'600 mA max.
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	25 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 6.3 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		6'300 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		±2% max. (5 Vout model)
		±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1% max. (5 Vout model)
		0.5 % max. (other models)
	- Load Variation (0 - 100%)	2% max. (5 Vout model)
		2% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	150 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 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:	220 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	1'500 ms max.
	- At 115 VAC	3'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 150% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln200
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

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

EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
	- RF Electromagnetic Field	Air: EN 61000-4-2, ± 8 kV, perf. criteria A
	- EFT (Burst) / Surge	Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
		EN 61000-4-4, ± 1 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, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>95%, 250 periods, perf. criteria B

General Specifications

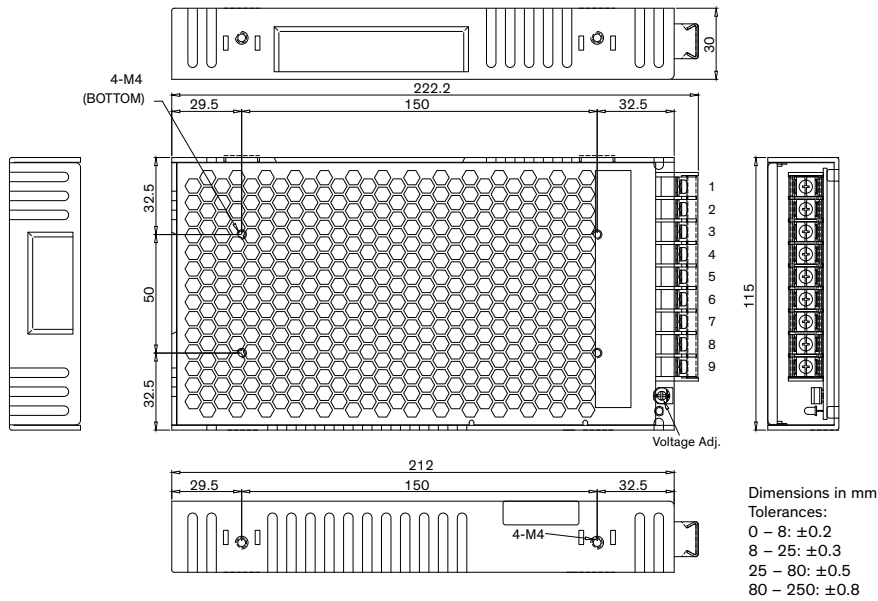
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-30°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.66 %/V below 100 VAC
Over Temperature Protection Switch Off	- Protection Mode	Latch off
Cooling System		Natural convection (20 LFM)
Altitude During Operation		5'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency		90 - 110 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1500 μ A max.
Reliability	- Calculated MTBF	177'300 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		770 g
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txln200
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All specifications valid at nominal voltage, full load and +25°C after warm-up time unless otherwise stated.

Outline Dimensions



Screw Terminal	
Pin	Function
1	AC (L)
2	AC (N)
3	PE
4-6	-Vout
7-9	+Vout

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- High efficiency up to 89%
- Active PFC >0.95
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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 320-112	320 W	12 VDC (10.8 - 13.2 VDC)	26'700 mA	86 %
TXLN 320-124		24 VDC (21.6 - 26.4 VDC)	13'400 mA	88 %
TXLN 320-148		48 VDC (43.2 - 52.8 VDC)	6'700 mA	89 %

Options

on demand (backorder with MOQ non stocking item)	- Optional model with 5 VDC / 60'000 mA - Optional model with 36 VDC / 8'900 mA
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Input Specifications

Input Voltage	- AC Range	85 - 264 VAC (Full Range)
	- DC Range	120 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	4'300 mA max.
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	25 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 6.3 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		6'300 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		±2% max. (5 Vout model) ±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1% max. (5 Vout model)
		0.5% max. (other models)
	- Load Variation (0 - 100%)	2% max. (5 Vout model)
		1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	150 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 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:	220 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.
Start-up Time	- At 230 VAC	1'500 ms max.
	- At 115 VAC	3'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 135% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln320
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

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

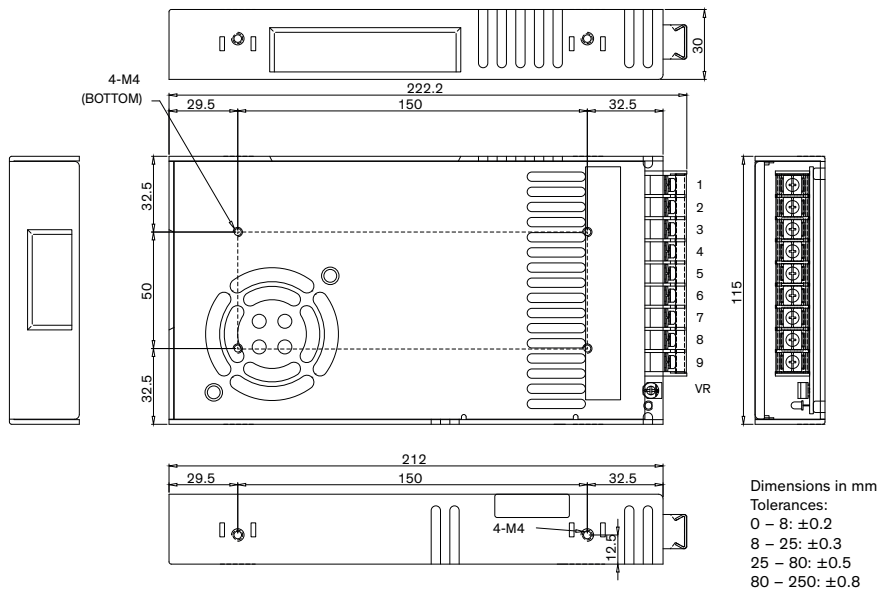
EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
	- RF Electromagnetic Field	Air: EN 61000-4-2, ± 8 kV, perf. criteria A
	- EFT (Burst) / Surge	Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
		EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria B
		L to PE: EN 61000-4-5, ± 2 kV, perf. criteria B
	- Conducted RF Disturbances	EN 61000-4-6, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>95%, 250 periods, perf. criteria B

General Specifications		
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-30°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.66 %/V below 100 VAC
Over Temperature Protection Switch Off	- Protection Mode	Latch off
Cooling System		Forced air cooling (with internal fan)
Fan Power Source	- Characteristic	Variable fan speed (temperature regulated)
	- Output Voltage	12 VDC
	- Output Current	125 mA max.
Altitude During Operation		5'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency		90 - 110 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1500 μ A max.
Reliability	- Calculated MTBF	175'900 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		850 g
Status Indicator		Indicated by green LED
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents	
Overview Link (for additional Documents)	www.tracopower.com/overview/txln320

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

Outline Dimensions



Screw Terminal

Pin	Function
1	AC (L)
2	AC (N)
3	PE
4-6	-Vout
7-9	+Vout

- Compact metal case with screw terminal block
- Universal input 85-264 VAC
- High efficiency up to 91%
- Active PFC >0.95
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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 500-112	500 W	12 VDC (10.8 - 13.2 VDC)	41'700 mA	88 %
TXLN 500-124		24 VDC (21.6 - 26.4 VDC)	21'000 mA	89 %
TXLN 500-148		48 VDC (43.2 - 52.8 VDC)	10'500 mA	91 %

Options

on demand (backorder with MOQ non stocking item)	- Optional model with 5 VDC / 90'000 mA - Optional model with 36 VDC / 14'000 mA
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Input Specifications

Input Voltage	- AC Range	85 - 264 VAC (Full Range)
	- DC Range	120 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	6'600 mA max.
Input Inrush Current	- At 230 VAC	40 A max.
	- At 115 VAC	20 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 10 A / 250 VAC (Internal Fuse)
Recommended Input Fuse		10'000 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		±2% max. (5 Vout model)
		±1% max. (other models)
Regulation	- Input Variation (Vmin - Vmax)	1% max. (5 Vout model)
		0.5% max. (other models)
	- Load Variation (0 - 100%)	2% max. (5 Vout model)
		1% max. (other models)
Ripple and Noise (20 MHz Bandwidth)	5 VDC model:	150 mVp-p max. (w/ 0.1 µF // 47 µF)
	12 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:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
	48 VDC model:	200 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	18 ms min.
	- At 115 VAC	18 ms min.
Start-up Time	- At 230 VAC	3'000 ms max.
	- At 115 VAC	3'000 ms max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		105 - 130% of Iout max.
Overvoltage Protection		115 - 140% of Vout nom.

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln500
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

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

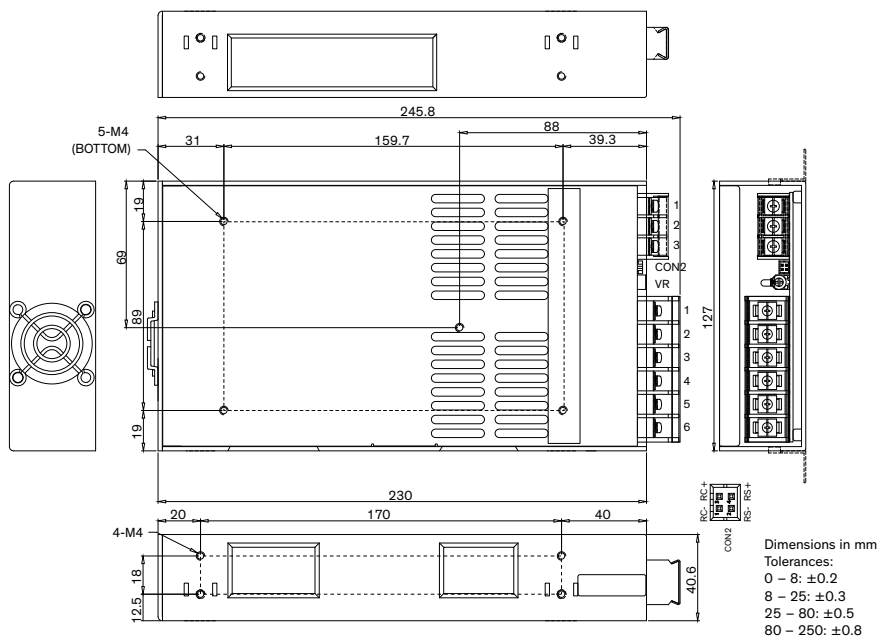
EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
	- RF Electromagnetic Field	Air: EN 61000-4-2, ± 8 kV, perf. criteria A
	- EFT (Burst) / Surge	Contact: EN 61000-4-2, ± 4 kV, perf. criteria A
		EN 61000-4-3, 3 V/m, perf. criteria A
		EN 61000-4-4, ± 1 kV, perf. criteria A
		L to L: EN 61000-4-5, ± 1 kV, perf. criteria B
		L to PE: EN 61000-4-5, ± 2 kV, perf. criteria B
	- Conducted RF Disturbances	EN 61000-4-6, 3 Vrms, perf. criteria A
	- PF Magnetic Field	Continuous: EN 61000-4-8, 3 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria A
		>95%, 0.5 periods, perf. criteria A
		>95%, 250 periods, perf. criteria B

General Specifications		
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-30°C to +70°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 50°C
	- Low Input Voltage	0.7 %/V below 100 VAC
Over Temperature Protection Switch Off	- Protection Mode	Latch off
Cooling System		Forced air cooling (with internal fan)
Fan Power Source	- Characteristic	Variable fan speed (temperature regulated)
	- Output Voltage	12 VDC
	- Output Current	92 mA max.
Remote Control	- Voltage Controlled Remote	On: 0 to 0.8 VDC Off: 4 to 10 VDC Refers to '+Remote' and '-Remote' Pin
Altitude During Operation		5'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency		60 - 80 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1500 μ A max.
Reliability	- Calculated MTBF	138'700 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		1110 g
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: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents	
Overview Link (for additional Documents)	www.tracopower.com/overview/txln500

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

Outline Dimensions



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

Output	
CN3	
Pin	Function
1-3	–Vout
4-6	+Vout

Auxiliary	
CON2	
Pin	Function
1	–Remote
2	–Sense
3	+Remote
4	+Sense

CN1:
3 pin, 9.5mm pitch
with PC cover

CN11:
6 pin, 11 mm pitch

CN3:
HRS DF11-04DP-2DS

- 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
- 3 year product warranty



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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	90 - 264 VAC (Full Range)
	- DC Range	127 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 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		Infinite
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

Safety 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
Pollution Degree		PD 2
Over Voltage Category		OVC II

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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

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

EMS Immunity		EN 55024 (IT Equipment)
	- 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
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.
Standby Power Source	- Output Voltage	12 VDC
	- Output Current	100 mA max.
Remote Control	- Voltage Controlled Remote	See application note: www.tracopower.com/overview/txln750
Altitude During Operation		4'000 m max. (The max ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
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 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1500 μ A max.
Reliability	- Calculated MTBF	107'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		2.5 kg
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)

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

Environmental Compliance - REACH Declaration

www.tracopower.com/info/reach-declaration.pdf

REACH SVHC list compliant

REACH Annex XVII compliant

www.tracopower.com/info/rohs-declaration.pdf

Exemptions: 6a, 6b, 6c, 7a, 7c-I, 7c-II

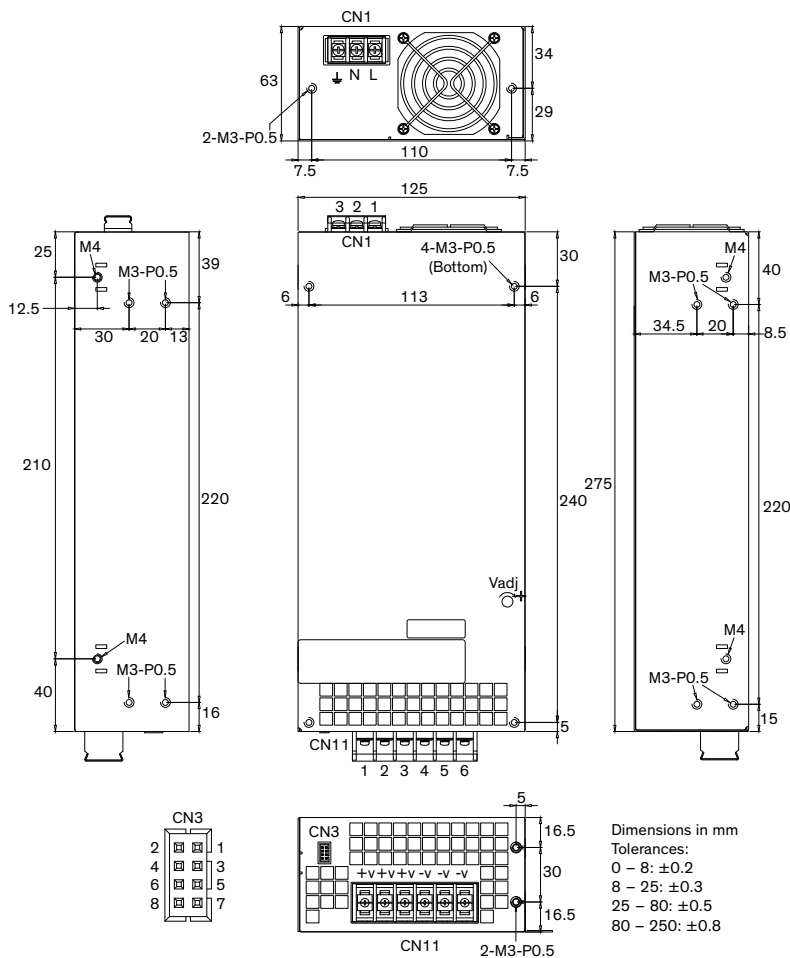
- RoHS Declaration

Supporting Documents

Overview Link (for additional Documents)

www.tracopower.com/overview/txln750

Outline Dimensions



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

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

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

CN1:
3 pin, 10mm pitch
with PC cover

CN11:
6 pin, 11 mm pitch

CN3:
HRS DF11-8DP-2DSA

- Compact metal case with screw terminal block
- Universal input 90-264 VAC
- High efficiency up to 89%
- Active PFC >0.95
- Compliance to EN 61000-3-2
- Short circuit, overvoltage and overload protection
- IEC/EN/UL 62368-1 safety approvals
- 3 year product warranty



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 960-112	960 W	12 VDC (10.8 - 13.2 VDC)	80'000 mA	87 %
TXLN 960-115		15 VDC (13.5 - 16.5 VDC)	64'000 mA	88 %
TXLN 960-124		24 VDC (21.6 - 26.4 VDC)	40'000 mA	88 %
TXLN 960-148		48 VDC (43.2 - 52.8 VDC)	20'000 mA	89 %

Input Specifications

Input Voltage	- AC Range	90 - 264 VAC (Full Range)
	- DC Range	127 - 375 VDC (Designed for, no certification)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 230 VAC	6'500 mA max.
	- Full Load & Vin = 115 VAC	10'500 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:	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:	200 mVp-p max. (w/ 0.1 µF // 47 µF)
	48 VDC model:	250 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	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/txln960
Load Share Accuracy		10%

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 62368-1 IEC 62368-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txln960
Protection Class		Class I (Prepared): Connection to PE
Pollution Degree		PD 2
Over Voltage Category		OVC II

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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3

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

EMS Immunity		EN 55024 (IT Equipment)
	- 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	See application note: www.tracopower.com/overview/txln960
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.
Standby Power Source	- Output Voltage	12 VDC
	- Output Current	300 mA max.
		(Only for remote control)
Remote Control	- Voltage Controlled Remote	See application note: www.tracopower.com/overview/txln960
Altitude During Operation		4'000 m max. (The max. ambient temperature decreases by 5 K / 1000 m when operated above 2000 m)
Switching Frequency		55 - 65 kHz (PWM)
Insulation System		Reinforced Insulation
Isolation Test Voltage	- Input to Output, 60 s	3'000 VAC
	- Input to Case or PE, 60 s	1'800 VAC
	- Output to Case or PE, 60 s	500 VAC
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current (at 264 VAC / 60Hz)	- Earth Leakage Current	1500 μ A max.
Reliability	- Calculated MTBF	84'100 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		2500 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)

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

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REACH SVHC list compliant

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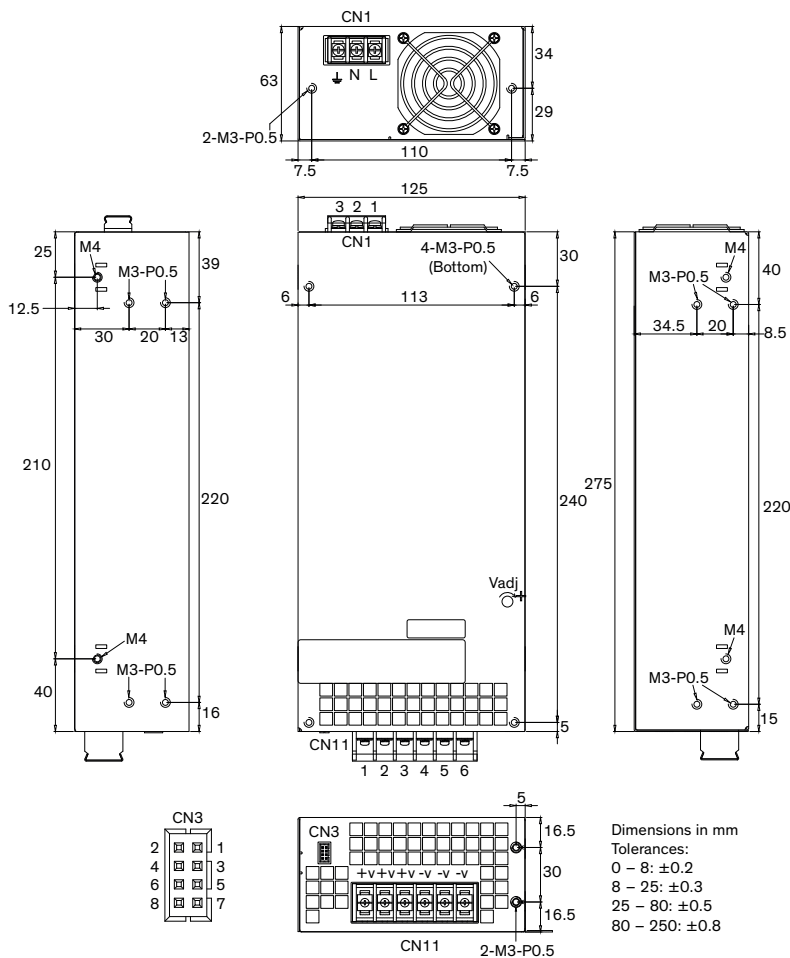
Exemptions: 6a, 6b, 6c, 7a, 7c-I, 7c-II

Supporting Documents

Overview Link (for additional Documents)

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Outline Dimensions



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

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

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

CN1:
3 pin, 10mm pitch
with PC cover

CN11:
6 pin, 11 mm pitch

CN3:
HRS DF11-8DP-2DSA