

- Very compact metal cased power supplies
- High operating temperature up to 60°C
- Low no load power consumption <0.5W
- Screw terminal block
- No internal fan
- Universal AC input, full range
- Active power factor correction >0.93
- Withstand 300 VAC surge input for 5 s
- Adjustable output voltage
- 3-year product warranty



The TXM 100 series of 100 Watt is a family of enclosed AC/DC power supplies designed for cost critical applications. With a low profile metal case and screw terminal block connections, they are easy to install in any equipment. There are five models of single output voltages from 5 VDC to 48 VDC. 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.
TXM 100-105	100 W	5 VDC (3.3 - 5.5 VDC)	20'000 mA	84 %
TXM 100-112	102 W	12 VDC (10.0 - 15.0 VDC)	8'500 mA	87 %
TXM 100-115	105 W	15 VDC (13.5 - 17.0 VDC)	7'000 mA	87 %
TXM 100-124	101 W	24 VDC (21.0 - 27.0 VDC)	4'200 mA	88 %
TXM 100-148	106 W	48 VDC (43.2 - 52.8 VDC)	2'200 mA	88 %

Input Specifications

Input Voltage	- AC Range	85 - 264 VAC (Full Range)
	- DC Range	120 - 375 VDC (Designed for, no certification) (Surge voltage (5 s max): 300 VAC max.)
Input Frequency		47 - 63 Hz
Input Current	- Full Load & Vin = 115 VAC	1'500 mA max.
Power Consumption	- At no load	6'000 mW max.
Input Inrush Current	- At 230 VAC	50 A max.
	- At 115 VAC	30 A max.
Power Factor	- At 230 VAC	0.98 min. (Active Power Factor Correction)
	- At 115 VAC	0.93 min. (Active Power Factor Correction)
Recommended Input Fuse		(The need of an external fuse has to be assessed in the final application.)

Output Specifications

Output Voltage Adjustment	5 VDC model:	3.3 - 5.5 VDC
	12 VDC model:	10.0 - 15.0 VDC
	15 VDC model:	13.5 - 17.0 VDC
	24 VDC model:	21.0 - 27.0 VDC
	48 VDC model:	43.2 - 52.8 VDC (By trim potentiometer) Output power must not exceed rated power!
Voltage Set Accuracy		±1% max. (24 & 48 VDC models)
		±2 % max. (5, 12 & 15 VDC models)
Regulation	- Input Variation (Vmin - Vmax)	0.5% max.
	- Load Variation (0 - 100%)	1% max. (24 & 48 VDC models) 2% max. (5, 12 & 15 VDC models)
Ripple and Noise (20 MHz Bandwidth)		150 mVp-p max. (w/ 0.1 µF // 10 µF)
Minimum Load		Not required
Temperature Coefficient		±0.03 %/K max.
Hold-up Time	- At 230 VAC	12 ms min.
Start-up Time	- At 230 VAC	2'000 ms max.
	- At 115 VAC	4'000 ms max.
Start-up Overshoot Voltage		5% max.
Short Circuit Protection		Continuous, Automatic recovery
Output Current Limitation		110 - 150% of Iout max.
Transient Response	- Response Deviation	5% max. (75% to 100% Load Step)
	- Response Time	400 µs typ. (75% to 100% Load Step)

Safety Specifications

Safety Standards	- IT / Multimedia Equipment	EN 60950-1 EN 62368-1 IEC 60950-1 IEC 62368-1 UL 60950-1 UL 62368-1
	- Certification Documents	www.tracopower.com/overview/txm100
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 D
	- Voltage Fluctuations & Flicker	EN 61000-3-3
EMS Immunity	- Electrostatic Discharge	EN 55024 (IT Equipment)
		Air: EN 61000-4-2, ± 8 kV, perf. criteria B
		Contact: EN 61000-4-2, ± 4 kV, perf. criteria B
		EN 61000-4-3, 3 V/m, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-4, ± 1 kV, perf. criteria B
		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
		Continuous: EN 61000-4-8, 1 A/m, perf. criteria A
		230 VAC / 50 Hz: EN 61000-4-11
		30%, 25 periods, perf. criteria C
	- PF Magnetic Field	>95%, 0.5 periods, perf. criteria B
		>95%, 250 periods, perf. criteria C
	- Voltage Dips & Interruptions	

General Specifications

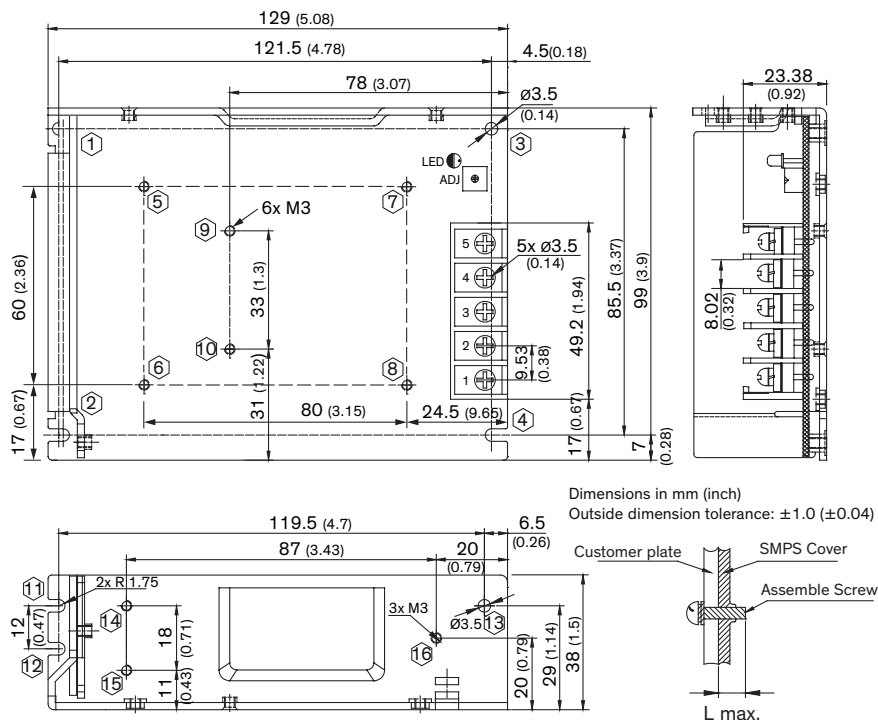
Relative Humidity		90% max. (non condensing)
Temperature Ranges	- Operating Temperature	-20°C to +60°C (with Heat Sink)
	- Storage Temperature	-30°C to +85°C
Power Derating	- High Temperature	2.5 %/K above 40°C
	- Low Input Voltage	1 %/V below 100 VAC
Cooling System		Natural convection (20 LFM)
Altitude During Operation		5'000 m max.
Switching Frequency		100 kHz typ. (PWM)
Insulation System		Reinforced Insulation
Working Voltage (rated)		360 VAC
Isolation Test Voltage	- Input to Output, 60 s	3'000 VDC
	- Input to Case or PE, 60 s	1'500 VAC
	- Output to Case or PE, 60 s	500 VAC
Creepage	- Input to Output	6.2 mm min.
Clearance	- Input to Output	6.2 mm min.
Isolation Resistance	- Input to Output, 500 VDC	100 M Ω min.
Leakage Current	- Earth Leakage Current	3500 μ A max.
	- Touch Current	250 μ A max.
Reliability	- Calculated MTBF	200'000 h (MIL-HDBK-217F, ground benign)
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight		455 g
Environmental Compliance	- REACH Declaration	www.tracopower.com/info/reach-declaration.pdf
		REACH SVHC list compliant
	- RoHS Declaration	REACH Annex XVII compliant
		www.tracopower.com/info/rohs-declaration.pdf
		Exemptions: 7a, 7c-I

Supporting Documents

Overview Link (for additional Documents)	www.tracopower.com/overview/txm100
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Outline Dimensions



Pin-Out

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

Screw Definition

Installation Method	Position No.	Screw Size	L max.	Torque max.
Bottom Installation	1-4	M3	5 (0.20)	7.0 kgfcm
	5-10	M3	3 (0.12)	6.5 kgfcm
Side Installation	11-13	M3	5 (0.20)	7.0 kgfcm
	14-16	M3	3 (0.12)	6.5 kgfcm