TRACO POWER

Switching Power Supplies

TZL Series 60 - 300 Watt

Features

- Compact Metal Case with Screw Terminal Block
- Models with 60W, 100W, 150W and 300W
- Wide 2:1 Input Range
- I/O-Isolation 1500VDC
- Input polarity reverse protection
- Soft Start, low Inrush Current
- Overload and Short Circuit Protection
- EMC Compliance with EN 61000-6-1 and EN 50082-1
- Adjustable Output Voltage
- 3 Year Product Warranty

This new range of boxed DC/DC converter are designed for all applications, where high reliability and long lifetime are important. They provide excellent electric specifications and full compliance to the European EMC and Low Voltage Directive. International safety approvals qualify these converter for worldwide use. With their low profile case and screw terminal block they are easy to install in any equipment.

Models with Single Output

Order Code	Power	Input Voltage	Output Voltage nom.	Output Current max.
TZL 060-2412	60 Watt	18 – 36 VDC	12 VDC	5.0 A
TZL 060-2424	60 Watt	18 – 36 VDC	24 VDC	2.5 A
TZL 060-4812	60 Watt	36 – 72 VDC	12 VDC	5.0 A
TZL 060-4824	60 Watt	36 – 72 VDC	24 VDC	2.5 A
TZL 100-2412	100 Watt	19 – 36 VDC	12 VDC	8.5 A
TZL 100-2424	100 Watt	19 – 36 VDC	24 VDC	4.2 A
TZL 100-4812	100 Watt	36 – 72 VDC	12 VDC	8.5 A
TZL 100-4824	100 Watt	36 – 72 VDC	24 VDC	4.2 A
TZL 150-2412	150 Watt	19 – 32 VDC	12 VDC	12.5 A
TZL 150-2424	150 Watt	19 – 32 VDC	24 VDC	6.3 A
TZL 150-4812	150 Watt	36 – 72 VDC	12 VDC	12.5 A
TZL 150-4824	150 Watt	36 – 72 VDC	24 VDC	6.3 A
TZL 300-4812	300 Watt	36 – 72 VDC	12 VDC	26.7 A
TZL 300-4824	300 Watt	36 – 72 VDC	24 VDC	13.4 A

Input Specifications

Input voltage range	24VDC input models:	18/19 - 32/36VDC	
	48VDC input models:	36-72VDC	
Input current (at full load)		19(24)Vin	36(48)Vin
	TZL 060 models	4.6A	2.4A
	TZL 100 models	8.0A	4.0A
	TZL 150 models	12A	6.3A
	TZL 300 models	--	13.2A
Input current (at no load)		19(24)Vin	36(48)Vin
	TZL 060 models	max. 0.3A	max. 0.2A
	TZL 100 models	max. 0.2A	max. 0.15A
	TZL 150 models	max. 0.2A	max. 0.2A
	TZL 300 models	--	max. 0.15A

Output Specifications

Output voltage adjustment range		±10%
Regulation	– Input variation	1 % max.
	– Load variation (10 – 100%)	1 % max.
Ripple and noise (20Mhz Bandwidth)	12VDC output	< 100mV
	24VDC output	< 150mV
Output current limitation		105 % – 150% of Iout max.
Overload protection mode		Fold back, automatic recovery
Over voltage protection		115 % – 140 % of Vout nom.
Capacitive load, max.	TZL 060: 12VDC /24VDC output model	11'000µF / 2'000µF
	TZL 100: 12VDC /24VDC output model	14'200µF / 1'000µF
	TZL 150: 12VDC /24VDC output models	8'600µF / 470µF
	TZL 300: 12VDC /24VDC output models	2'700µF / 1'000µF

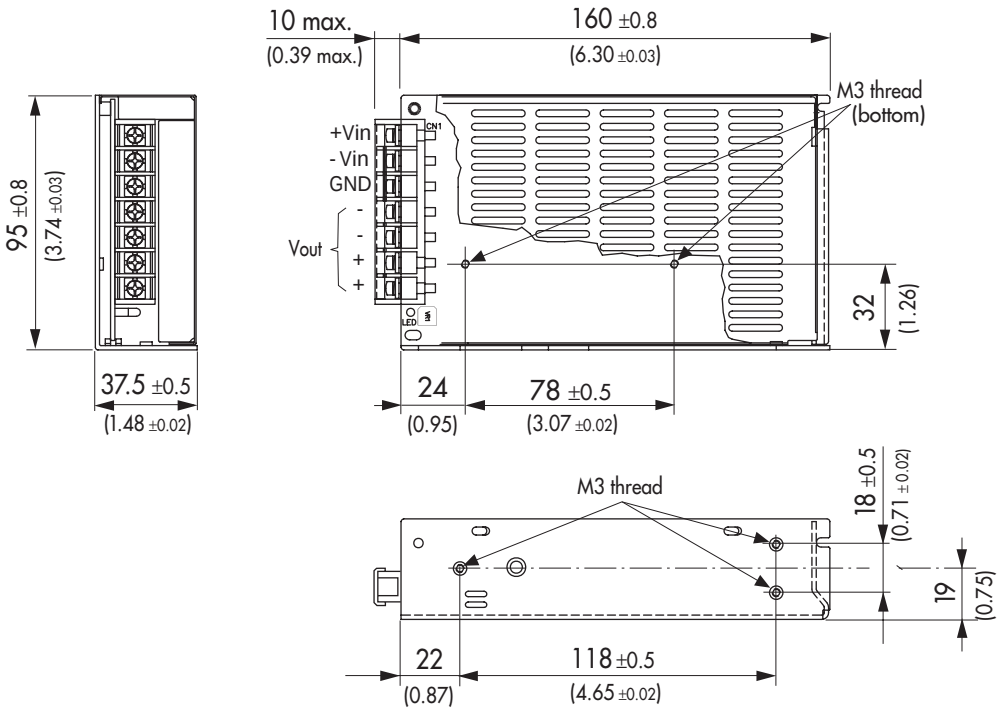
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

General Specifications

Temperature ranges	– Operating	– 10 °C...+70 °C
	– Load derating above 45°C	2% /°K
	– Storage (non operating)	– 10 °C...+75 °C
Temperature coefficient		0.03 % / °C
Efficiency		70 – 80 % (depending on model)
Humidity (non condensing)		85 % rel max. (non condensing)
Switching frequency		50 kHz typ. (pulse width modulation)
Isolation voltage	– Input / output	1'500 VDC
	– Input / case	1'500 VDC
	– Output / case	500 VDC
Reliability /calculated MTBF (MIL-HDBK-217F)		> 250'000 h @ 25°C typ.
Electromagnetic compatibility (EMC), conducted emission		EN 61000-4-2 (8kV/4kV perf. criteria A) EN 61000-4-3 (3V/m perf. criteria A) EN 61000-4-4 (1kV perf. criteria A) EN 61000-4-6 (3V/m perf. criteria A) EN 61000-4-8 (3V/m; 900 Mhz) EN 50204 (3V/m; 900 Mhz)
Electromagnets compatibility (EMC), radiated emission		EN 55022, class B
Safety standards		meets UL/IEC/EN60950
Case material	Cover:	nickel plated steel
	Chassis:	natural aluminum

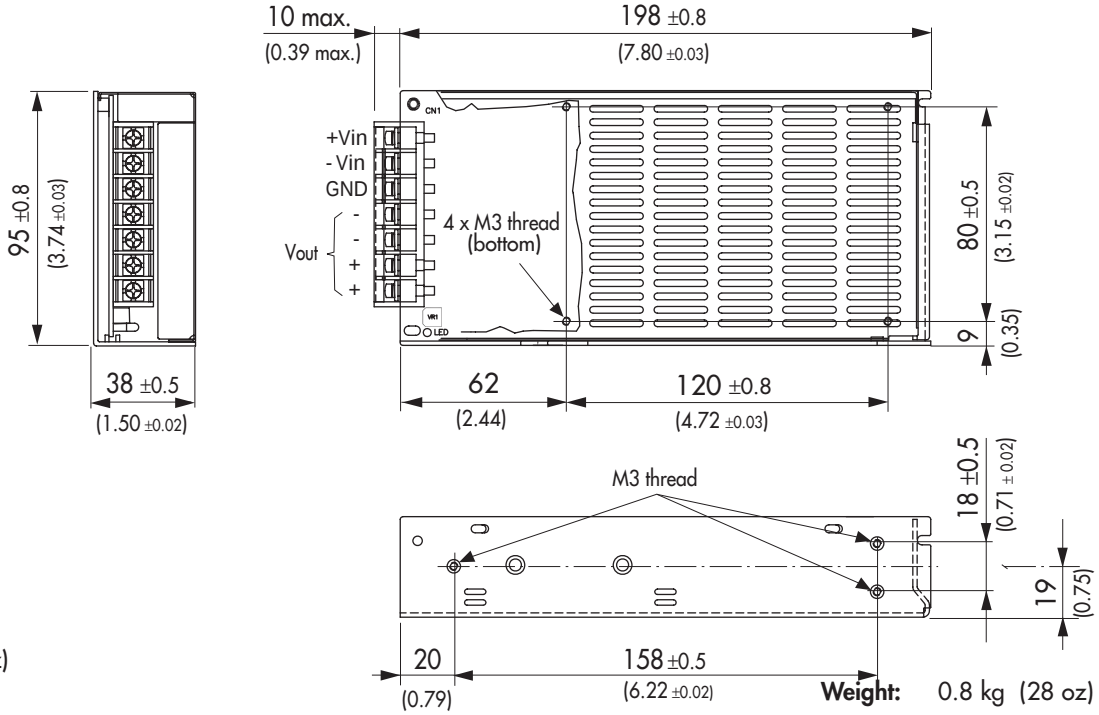
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TZL 060 - Series



Weight: 0.6 kg (20 oz)

TZL 100 - Series

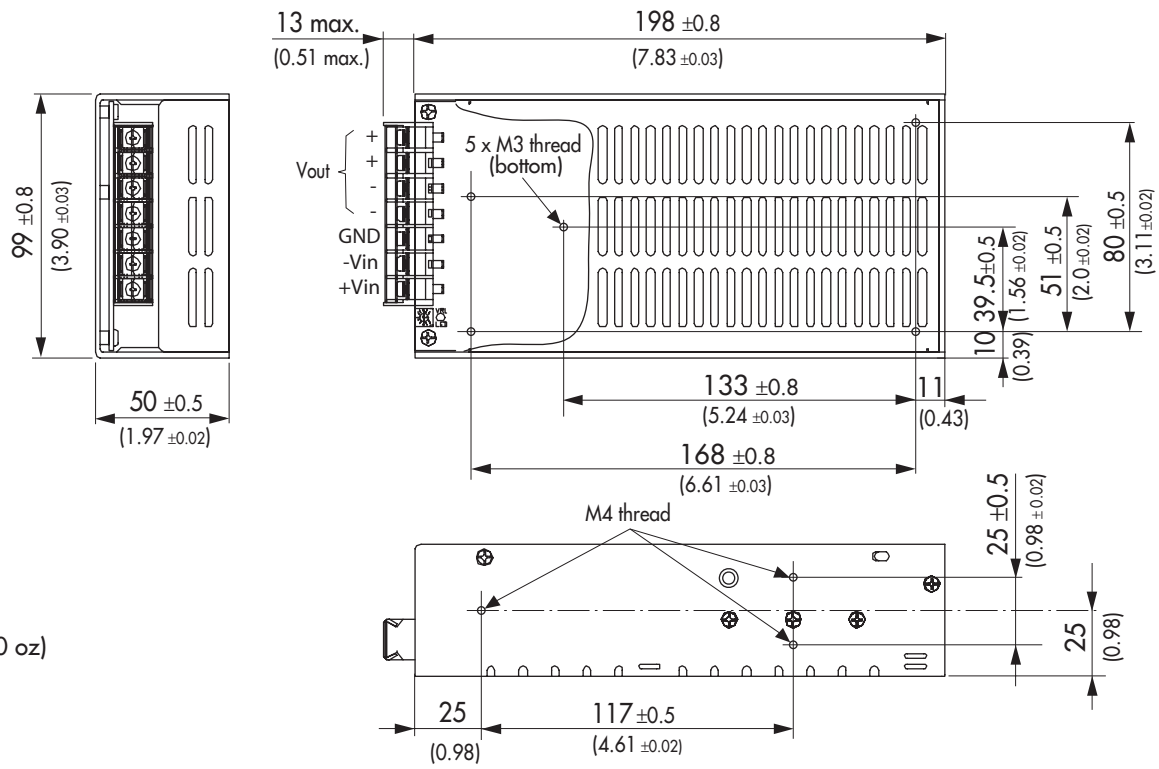


Weight: 0.7 kg (25 oz)

Weight: 0.8 kg (28 oz)

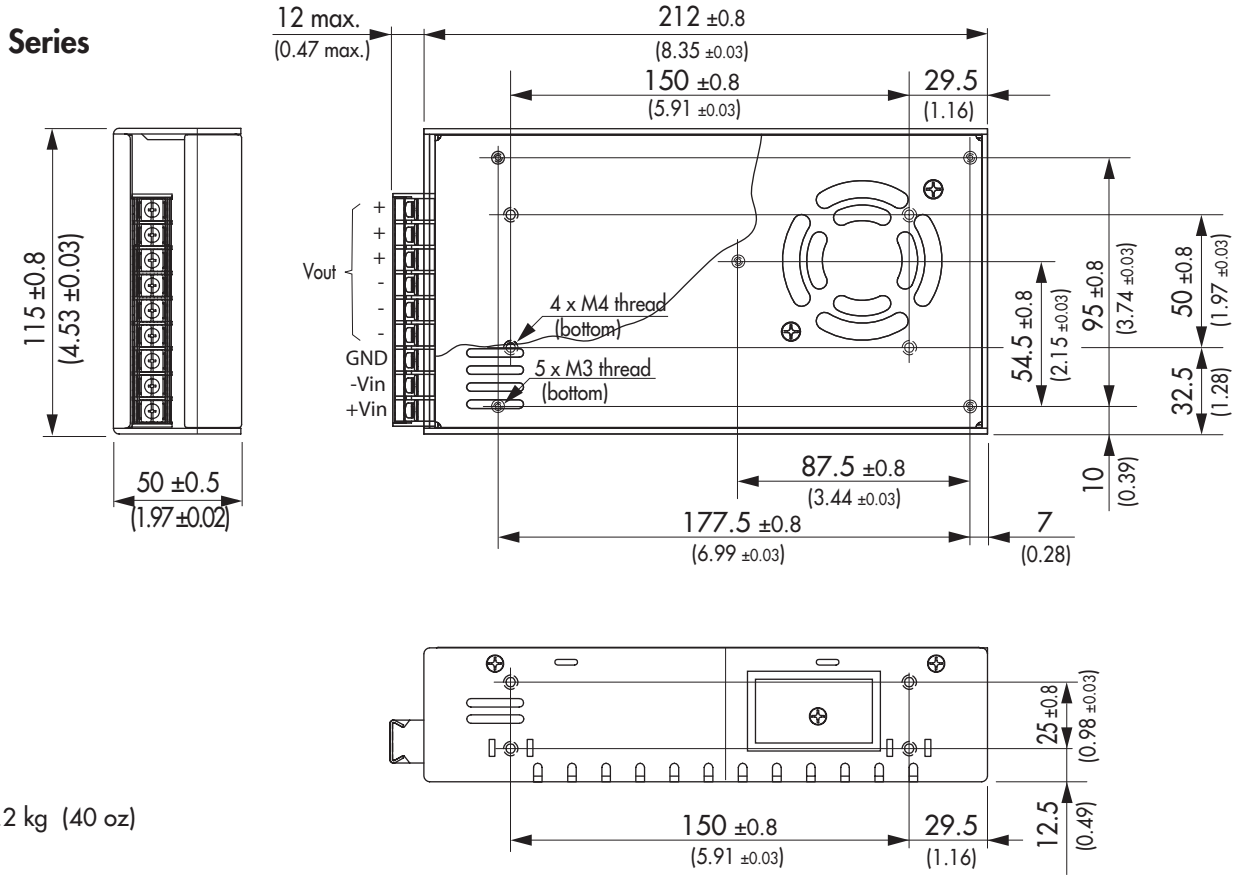
Specifications can be changed without notice

TZL 150 - Series



Weight: 0.9 kg (30 oz)

TZL 300 - Series



Weight: 1.2 kg (40 oz)

Specifications can be changed without notice

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