Switching Power Supplies

TXL Series 25 - 600 Watt

Features

- Compact Metal Case with Screw Terminal Block
- Single, Dual and Triple Output Models
- Universal Input 85-264 VAC, 50/60 Hz
- EMI / EMC Compliance with EN 50081-1 and EN 50082-1
- Compliance to EN 61000-3-2 (PFC)
- Short Circuit and Overvoltage Protection
- High Efficiency
- International Safety Approvals
- Industrial Grade Components
- 3 Year Product Warranty

NEW Models

35 Watt dual Output
300 & 600 Watt
Compact Case for 50/60 Watt

This new range of very compact switching power supplies 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. Universal input and international safety approvals qualify these power supplies 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	Case	Output Power	Output Voltage nom.	Output Current max.
TXL 025-3.3S	C	25 Watt	3.3 VDC	6.0 A
TXL 025-05S			5 VDC	5.0 A
TXL 025-12S			12 VDC	2.1 A
TXL 025-15S			15 VDC	1.7 A
TXL 025-24S			24 VDC	1.1 A
TXL 025-48S			48 VDC	0.57 A
TXL 035-3.3S	D	35 Watt	3.3 VDC	9.0 A
TXL 035-05S			5 VDC	7.0 A
TXL 035-12S			12 VDC	3.0 A
TXL 035-15S			15 VDC	2.4 A
TXL 035-24S			24 VDC	1.5 A
TXL 035-48S			48 VDC	0.75 A
TXL 050-05S		50 / 60 Watt	5 VDC	10.0 A
TXL 060-12S			12 VDC	5.0 A
TXL 060-15S			15 VDC	4.0 A
TXL 060-24S			24 VDC	2.5 A
TXL 060-3.3S	E	60 / 70 Watt	3.3 VDC	15.0 A
TXL 060-05S			5 VDC	12.0 A
TXL 070-12S			12 VDC	6.0 A
TXL 070-15S			15 VDC	4.8 A
TXL 070-24S			24 VDC	3.0 A
TXL 070-48S			48 VDC	1.5 A

Models with Single Output

Order Code	Case	Output Power	Output Voltage nom.	Output Current max.
TXL 100-3.3S	J	100 Watt	3.3 VDC	25.0 A
TXL 100-05S			5 VDC	20.0 A
TXL 100-12S			12 VDC	8.5 A
TXL 100-15S			15 VDC	6.8 A
TXL 100-24S			24 VDC	4.5 A
TXL 100-48S			48 VDC	2.1 A
TXL 150-05S	K	150 Watt	5 VDC	30.0 A
TXL 150-12S			12 VDC	12.5 A
TXL 150-24S			24 VDC	6.3 A
TXL 150-48S			48 VDC	3.2 A
TXL 220-12S	N	220 Watt	12 VDC	18.4 A
TXL 220-24S			24 VDC	9.2 A
TXL 220-48S			48 VDC	4.6 A
TXL 300-24S	O	300 Watt	24 VDC	12.5 A
TXL 300-48S			48 VDC	6.5 A
TXL 600-24S	P	600 Watt	24 VDC	25.0 A
TXL 600-48S			48 VDC	12.5 A

Models with Multiple Output

Order Code	Case	Output Power max.	* Output1	* Output 2	* Output 3
TXL 035-0512D	D	35 Watt	+5 VDC/ 4.0 A	+12 VDC/ 1.5 A	
TXL 035-0524D			+5 VDC/ 4.0 A	+24 VDC/ 1.3 A	
TXL 035-1212D			+12 VDC/ 1.5 A	–12 VDC/ 1.5 A	
TXL 035-1515D			+15 VDC/ 1.3 A	–15 VDC/ 1.3 A	
TXL 060-0512D	E	60 Watt	+5 VDC/ 8.0 A	+12 VDC/ 4.0 A	
TXL 060-0524D			+5 VDC/ 6.0 A	+24 VDC/ 2.2 A	
TXL 060-0521T			+5 VDC/ 8.0 A	+12 VDC/ 3.5 A	–5 VDC/ 1.0 A
TXL 060-0522T			+5 VDC/ 7.0 A	+12 VDC/ 3.5 A	–12 VDC/ 1.0 A
TXL 060-0533T			+5 VDC/ 7.0 A	+15 VDC/ 3.0 A	–15 VDC/ 1.0 A
TXL 060-0534T			+5 VDC/ 6.0 A	+12 VDC/ 1.5 A	+24 VDC/ 1.2 A
TXL 100-0512D	J	100 Watt	+5 VDC/ 12.0 A	+12 VDC/ 5.0 A	
TXL 100-0524D			+5 VDC/ 10.0 A	+24 VDC/ 3.0 A	
TXL 100-0521T			+5 VDC/ 12.0 A	+12 VDC/ 5.0 A	–5 VDC/ 1.5 A
TXL 100-0522T			+5 VDC/ 12.0 A	+12 VDC/ 5.0 A	–12 VDC/ 1.5 A
TXL 100-0533T			+5 VDC/ 12.0 A	+15 VDC/ 3.0 A	–15 VDC/ 1.5 A
TXL 100-0534T			+5 VDC/ 12.0 A	+12 VDC/ 3.0 A	+24 VDC/ 2.0 A

* Total power must not exceed specified output power

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

Input Specifications

Input voltage range		85 – 264 VAC 88 – 264 VAC (TXL 100 & TXL 300 models)	
Input frequency		47 – 63 Hz	
Input current (at full load)		Vin = 115 VAC	Vin = 230 VAC
	TXL 025 models	0.54 A typ.	0.22 A typ.
	TXL 035 models	0.70 A typ.	0.42 A typ.
	TXL 060/ 070 models	1.00 A typ.	0.60 A typ.
	TXL 100 models	1.65 A typ.	0.95 A typ.
	TXL 150 models	2.10 A typ.	1.10 A typ.
	TXL 220 models	3.00 A typ.	1.60 A typ.
	TXL 300 models	4.3 A typ.	tba
	TXL 600 models	8.0 A typ.	tba
Input current (at no load)		Vin = 115 VAC	Vin = 230 VAC
	TXL 025 models	10 mA typ.	17 mA typ.
	TXL 035 models	50 mA typ.	55 mA typ.
	TXL 220 models	115 mA typ.	140 mA typ.
	other models	100 mA typ.	80 mA typ.
Recommended circuit breaker (characteristic C) or slow blow fuse	TXL 025/ 035/ 060/070 models	5 A	
	TXL 100/150/ 220 models	10 A	

Output Specifications

Output voltage adjustment range (only single output models)		±10%
Regulation	– Input variation	1 % max.
	– Load variation (10 – 100%)	2 % max. for main output 5 % max. for output 2/3 (minimum load of 0.3A on output 1 is required)
Ripple and noise (20Mhz Bandwidth)	3.3VDC output	< 50mV
	Output 3 (of triple output models)	< 1.5% of Vout
	all other output voltages	< 1.0% of Vout nom.
Output current limitation		105 % – 150% of Iout max.
Overload protection mode		Fold back, automatic recovery
Over voltage protection (only output 1)		115 % – 140 % of Vout nom. (depending on model)
Capacitive load, max.	3.3 –12 VDC output models	10'000 µF
	TXL 070: 24 VDC & 48VDC output models	10'000 µF
	TXL 100/150: 24 VDC & 48VDC output models	4'700 µF
	TXL 035: 24 VDC & 48VDC output models	1'000 µF
	TXL 025/ TXL 220 models	t.b.a.

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

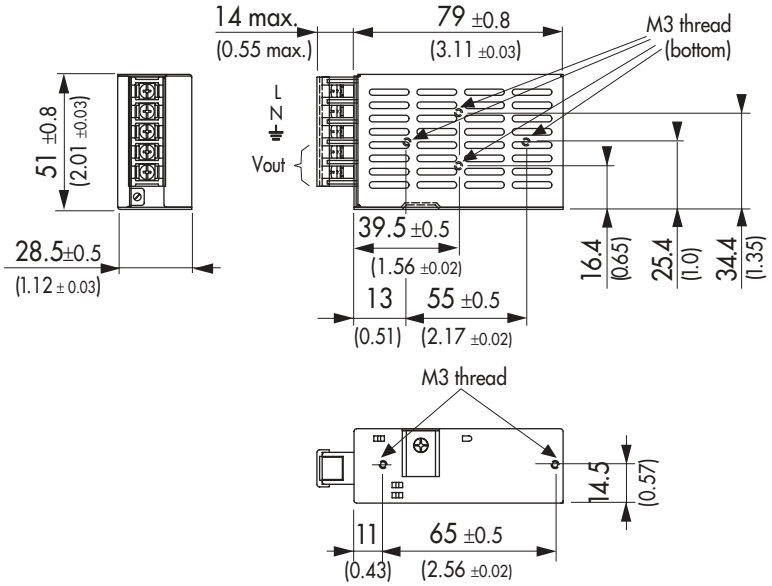
General Specifications

Temperature ranges	– Operating	– 10 °C...+70 °C	
	– Load derating above 45°C	2% /°K (2.5%/°K for TXL 220)	
	– Storage (non operating)	– 10 °C...+75 °C	
Temperature coefficient		0.02 % / °C	
Efficiency		70 – 80 % (depending on model)	
Humidity (non condensing)		85 % rel max. (non condensing)	
Switching frequency		50 kHz typ. (pulse width modulation)	
Hold-up time		Vin = 115 VAC	Vin = 230 VAC
		16 ms min.	60 ms min.
	TXL 220 models	20 ms min.	40 ms min.
Isolation voltage	– Input / output	3'000 VAC	
	– Input / case	1'500 VAC	
	– Output / case	500 VAC	
Reliability /calculated MTBF (MIL-HDBK-217F)		> 250'000 h @ 25°C typ.	
Electromagnetic compatibility (EMC), Emissions			
	– Conducted input RI suppression	EN 55022, class B, FCC part 15, level B	
	– Harmonic current emissions	IEC / EN 61000-3-2, class D (TXL 150/220)	
		IEC / EN 61000-3-2, class A (others)	
	– Flicker	IEC / EN 61000-3-3	
Electromagnets compatibility (EMC), Immunity			
	– Electrostatic discharge ESD	IEC / EN 61000-4-2	4 kV / 8 kV
	– RF field immunity	IEC / EN 61000-4-3	3 V/m
	– Electrical fast transients/burst immunity	IEC / EN 61000-4-4	1 kV
	– Surge	IEC / EN 61000-4-5	1 kV / 2 kV
	– Conducted RF	IEC / EN 61000-4-6	3 V/m
	– Magnetic field	IEC / EN 61000-4-8	3 A/m
	– Voltage dip	IEC / EN 61000-4-11	
Safety standards		UL 1950, IEC 60950, EN 60950	
Safety approval		cUL /UL File E188913	
Case material	TXL 025/035/220	Nickel plated steel (chassis & cover)	
	TXL 060/070/100/150	Aluminium (chassis), Nickel plated steel (cover)	

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

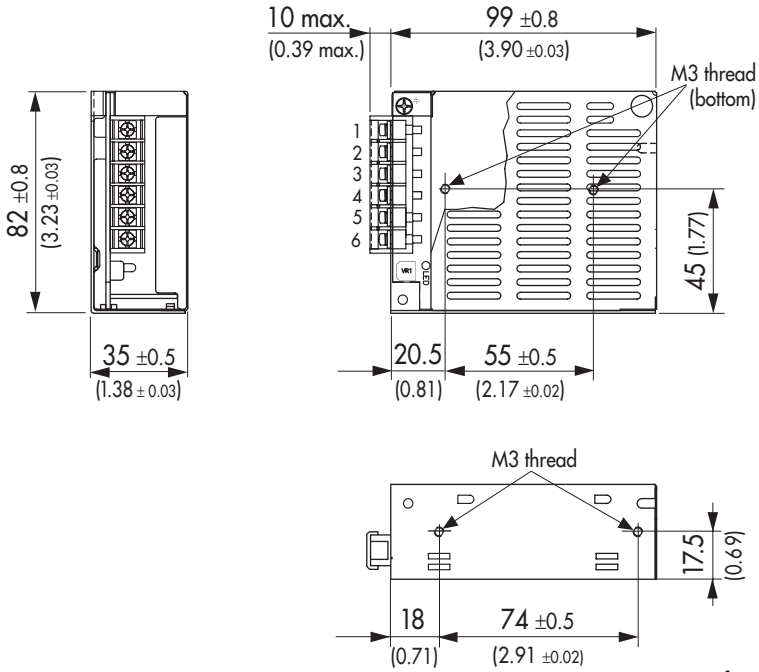
Outline Dimensions mm (inches)

Case C



Weight: 0.19 kg (6.7 oz)

Case D

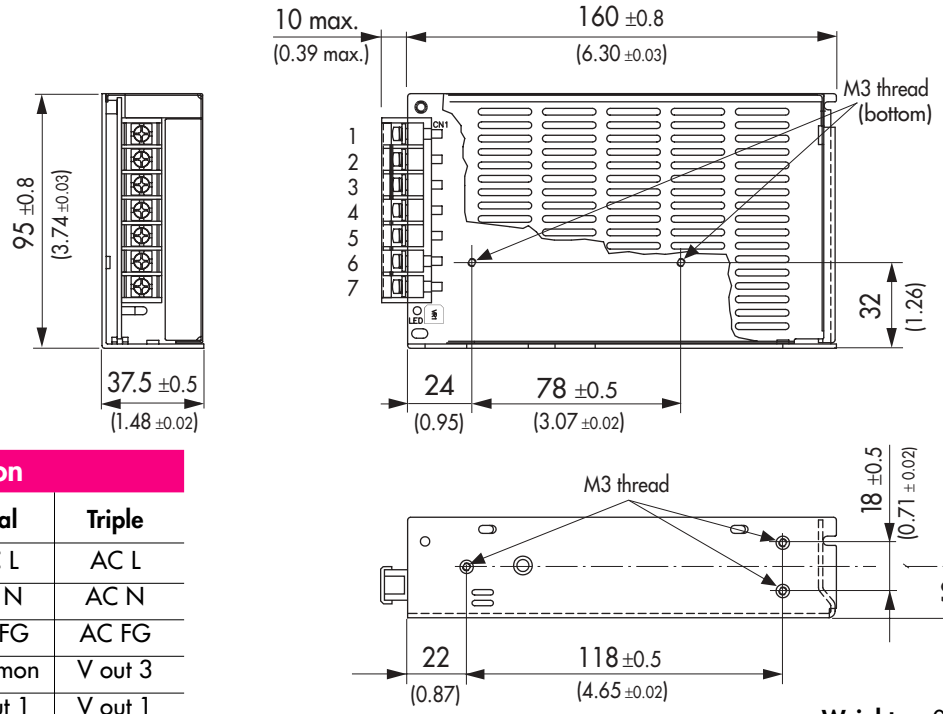


Weight: 0.3 kg (10 oz)

Connection		
	single	**dual**
1	AC L	AC L
2	AC N	AC N
3	AC FG	AC FG
4	–V out	Common
5	+V out	V out 1
6	No con.	V out 2

Specifications can be changed without notice

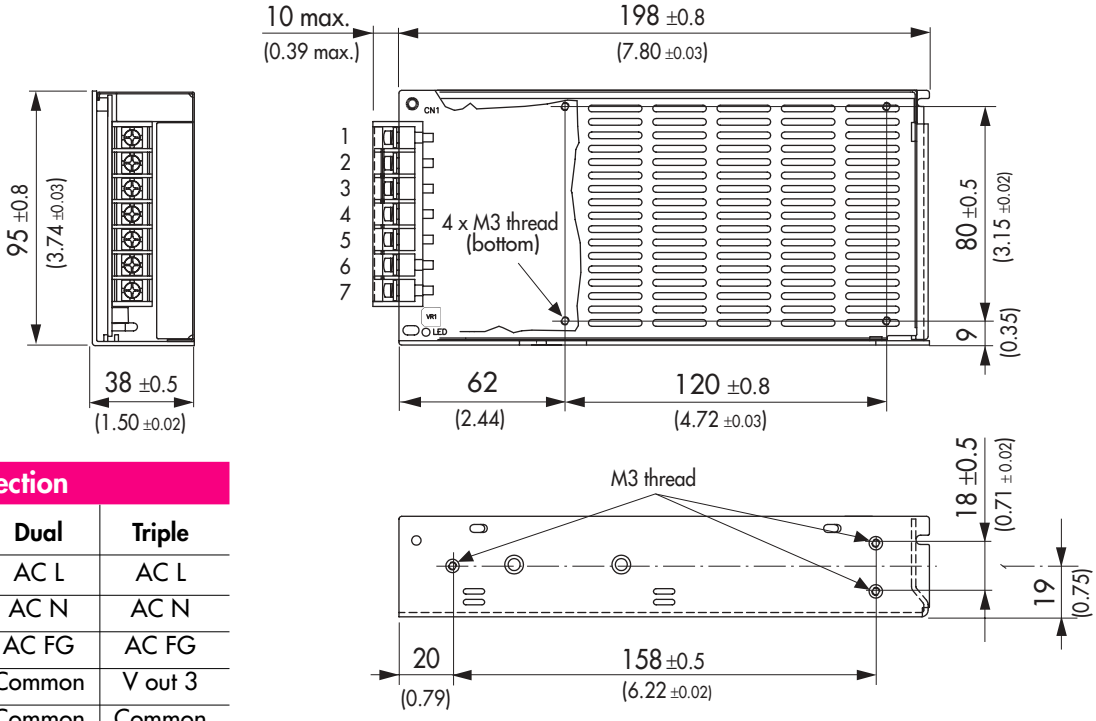
Case E



Connection			
	Single	**Dual**	**Triple**
1	AC L	AC L	AC L
2	AC N	AC N	AC N
3	AC FG	AC FG	AC FG
4	–V out	Common	V out 3
5	–V out	V out 1	V out 1
6	+V out	Common	Common
7	+V out	V out 2	V out 2

Weight: 0.7 kg (25 oz)

Case J

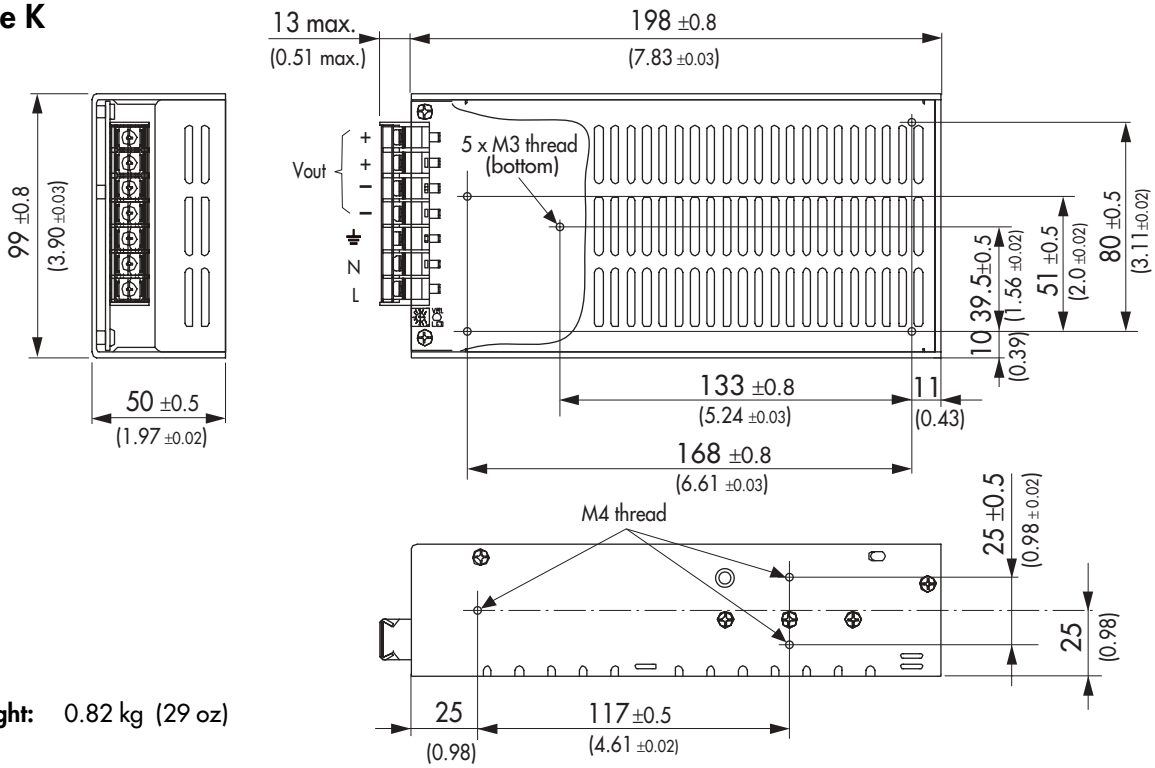


Connection			
	Single	**Dual**	**Triple**
1	AC L	AC L	AC L
2	AC N	AC N	AC N
3	AC FG	AC FG	AC FG
4	–V out	Common	V out 3
5	–V out	Common	Common
6	+V out	V out 1	V out 1
7	+V out	V out 2	V out 2

Weight: 0.8 kg (28 oz)

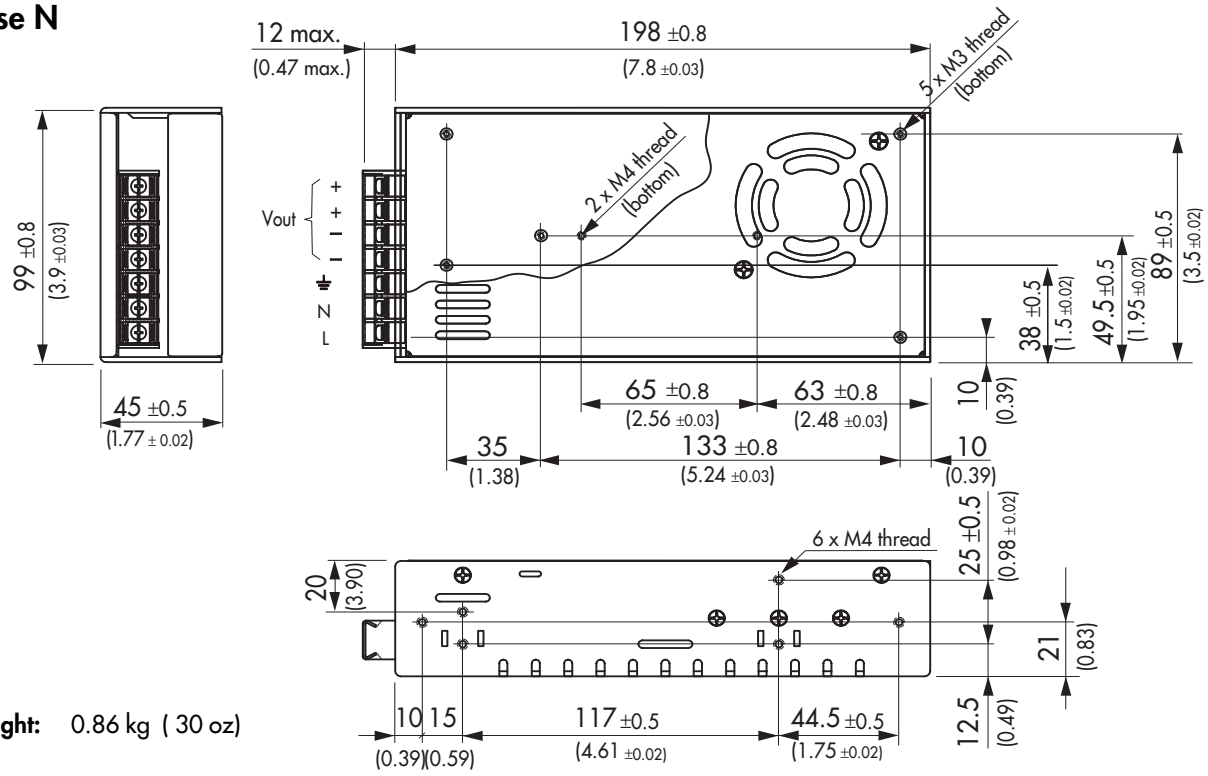
Specifications can be changed without notice

Case K



Weight: 0.82 kg (29 oz)

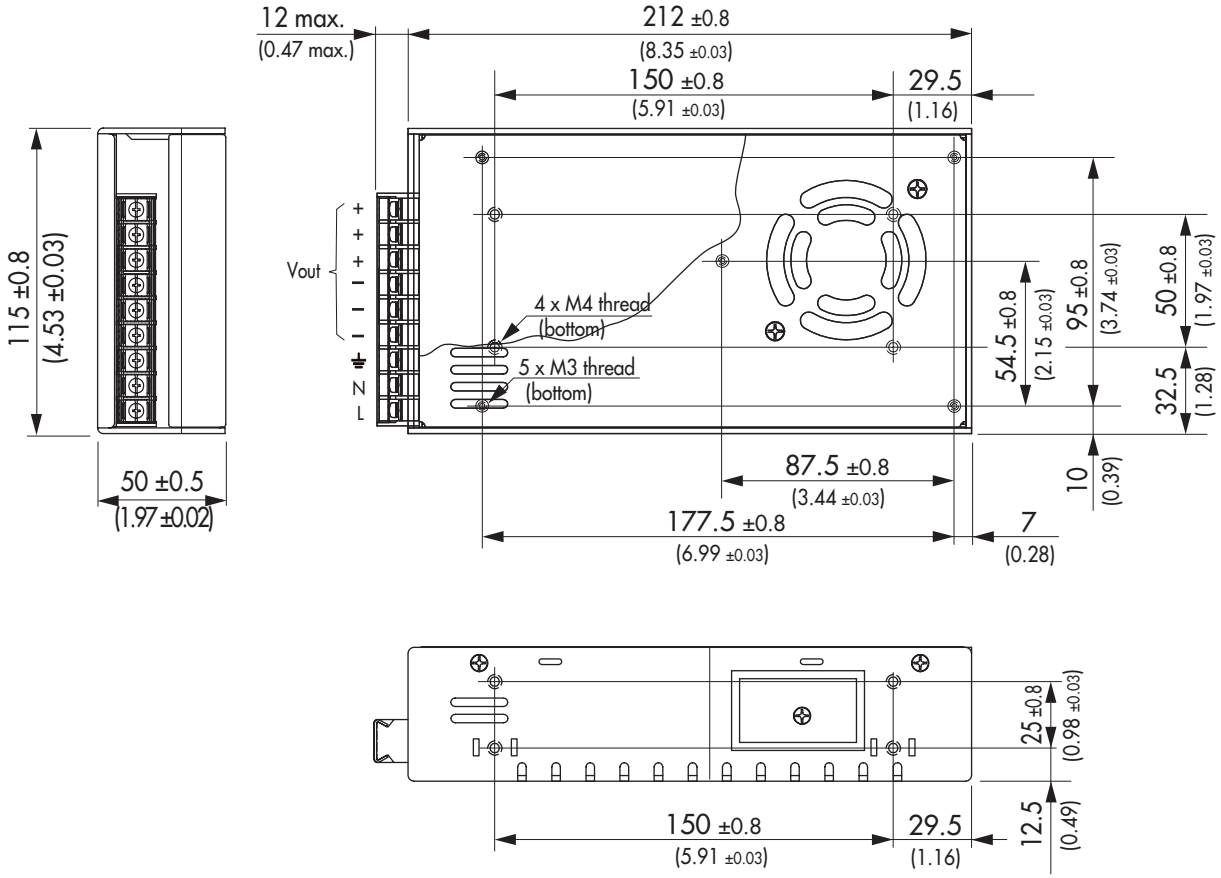
Case N



Weight: 0.86 kg (30 oz)

Specifications can be changed without notice

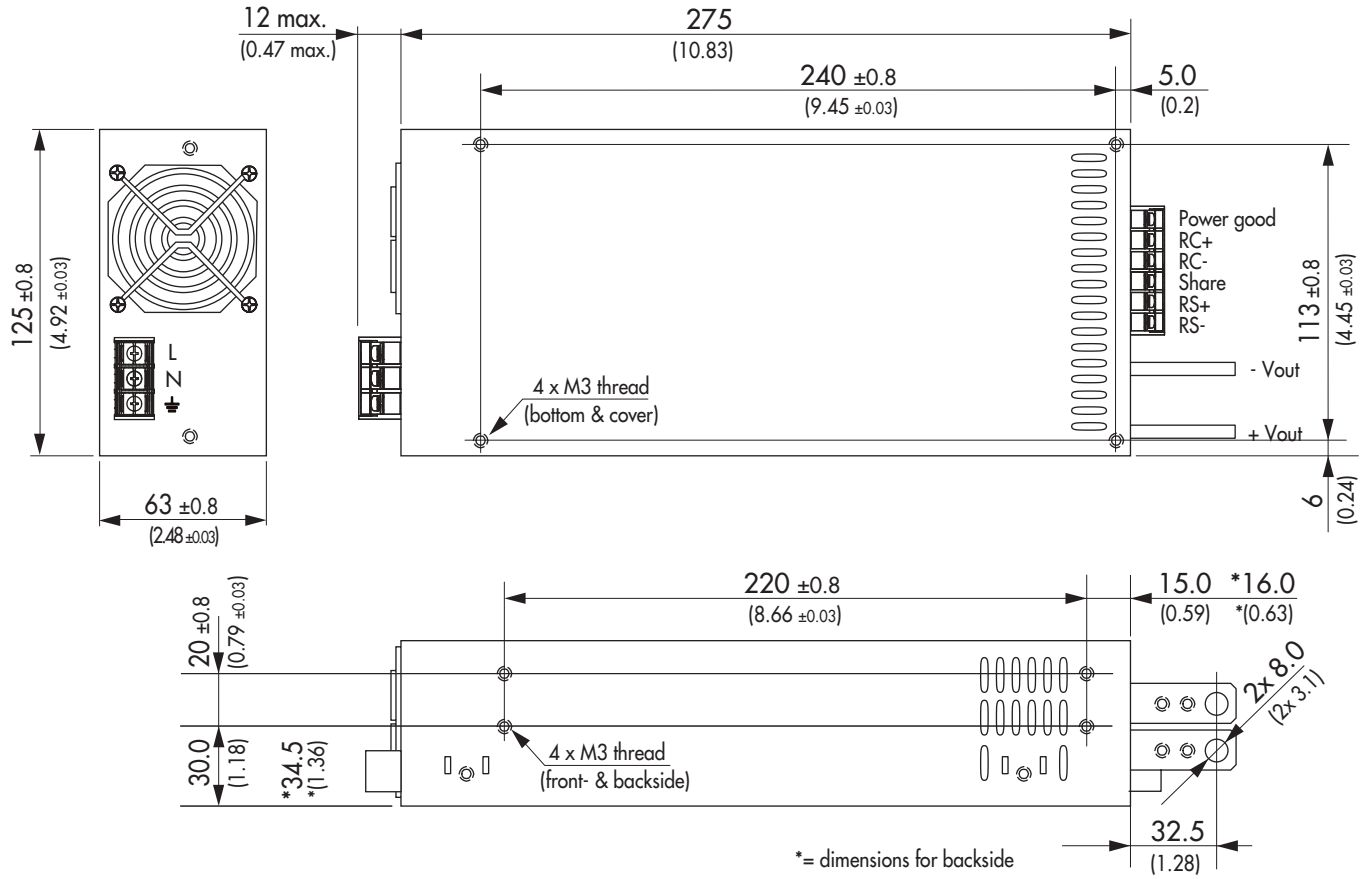
Case O



Weight: 1.05 kg (37 oz)

Specifications can be changed without notice

Case P



Weight: 2.3 kg (81 oz)

Specifications can be changed without notice

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