

Features

- ◆ Compact Metal Case with Screw Terminal Block
- NEW** ◆ Dual and Triple Output Models with isolated Outputs
- ◆ Universal Input 85-264 VAC, 50/60 Hz
- ◆ EMI / EMC Compliance with EN 61000-6-3 and EN 61000-6-1
- ◆ Compliance to EN 61000-3-2 (PFC)
- ◆ Short Circuit and Overvoltage Protection
- ◆ High Efficiency
- ◆ International Safety Approvals
- ◆ Industrial Grade Components
- ◆ 3 Year Product Warranty



The TRACOPOWER TXL series is a family of encased power supplies designed for a wide range of cost critical industrial applications. With a low profile metal case and screw terminal block connection they are easy to install in any equipment. There are 57 models in this range with single-, dual-, and triple output voltages from 3.3VDC to 48VDC in 10 power ranges from 25W to 600W.

These power supplies have Universal Input 85-240VAC and comply also with European EMC standards and the Low Voltage Directive (LVD). The high quality of this product is supported by a 3 year warranty.

Models with Single Output

Order Code	Case Size	Output Power max.	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 max.	Output Voltage nom.	Output Current max.
TXL 100-3.3S TXL 100-05S TXL 100-12S TXL 100-15S TXL 100-24S TXL 100-48S	J	100 Watt	3.3 VDC 5 VDC 12 VDC 15 VDC 24 VDC 48 VDC	25.0 A 20.0 A 8.5 A 6.8 A 4.5 A 2.1 A
TXL 120-12S TXL 120-15S TXL 120-24S TXL 120-48S	K	120 Watt	12 VDC 15 VDC 24 VDC 48 VDC	10.0 A 8.0 A 5.0 A 2.5 A
TXL 150-05S TXL 150-12S TXL 150-24S TXL 150-48S	L	150 Watt	5 VDC 12 VDC 24 VDC 48 VDC	30.0 A 12.5 A 6.3 A 3.2 A
TXL 220-12S TXL 220-24S TXL 220-48S	N	220 Watt	12 VDC 24 VDC 48 VDC	18.4 A 9.2 A 4.6 A
TXL 300-24S TXL 300-48S	O	300 Watt	24 VDC 48 VDC	12.5 A 6.5 A
TXL 600-24S TXL 600-48S	P	600 Watt	24 VDC 48 VDC	25.0 A 12.5 A

Models with Multiple Output

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

* Total power must not exceed specified max. 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 120 models	1.30 A typ.	0.65 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	3.30 A typ.	1.70 A typ.
	TXL 600 models	6.30 A typ.	3.10 A typ.
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 120 models	135 mA typ.	125 mA typ.
	TXL 220/ 300 models	115 mA typ.	140 mA typ.
	TXL 600 models	210 mA typ.	220 mA typ.
		other models	100 mA typ.
Recommended circuit breaker (characteristic C) or slow blow fuse	TXL 025/ 035/ 060/070 models	5 A	
	TXL 100/120/150/ 220 models	10 A	
	TXL 300 models	15 A	
	TXL 600 models	20 A	

Output Specifications

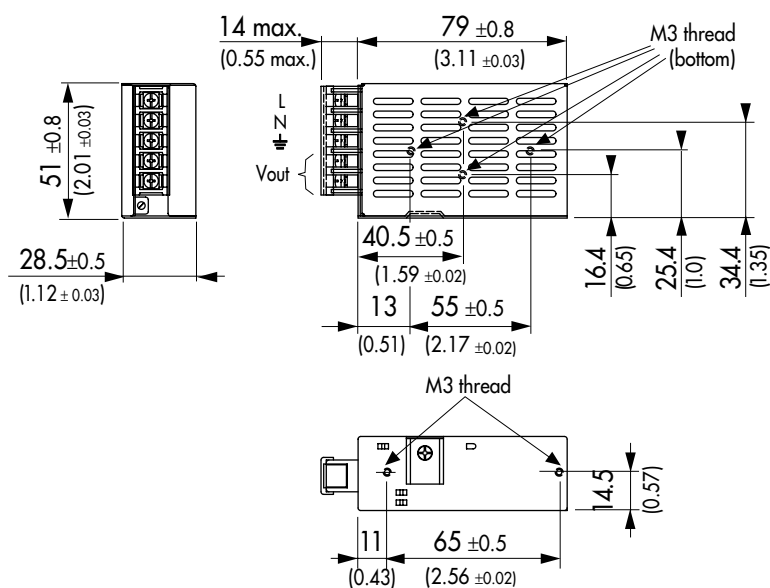
Output voltage adjustment range		±10% - 35 Watt dual output models: range Vout 1-2 - other multi output models: Vout 1	
Regulation	– Input variation	1 % max.	
	– Load variation (10–100%)	single output models	2 % max.
		multiple output models	4 % max. for main output 6 % max. for output 2/3 (20–100% load)
	– Minimum load on main output of multiple output models (for to assure the regulation on the auxillary outputs)	0.3A for TXL 035 1.0A for TXL 060 1.5A for TXL 100	
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/ 120: 24 VDC & 48VDC output models	1'000 µF	
	TXL 025/ TXL 220: models	5'000 µF	
	TXL 300 models	17'000 µF	
	TXL 600 models	44'000 µF	

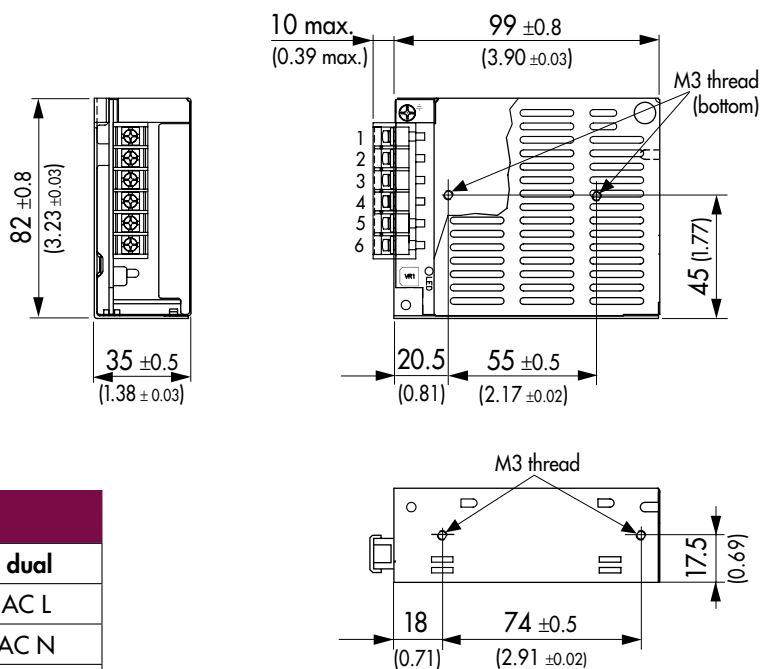
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

General Specifications

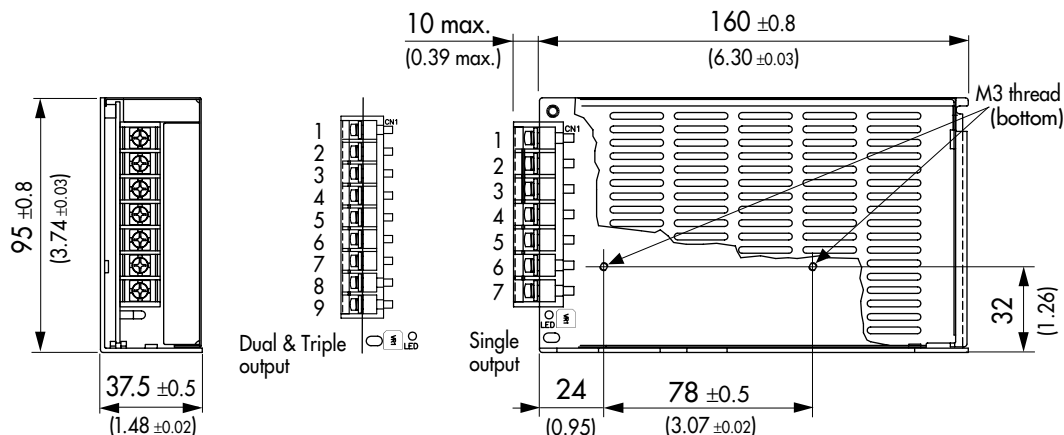
Temperature ranges	– Operating – Load derating above 45°C – Storage (non operating)	– 10 °C...+70 °C 2% /°K (2.5%/°K for TXL 120/220) – 10 °C...+75 °C
Temperature coefficient		0.02 % / °C
Efficiency		70 – 84 % (depending on model)
Humidity (non condensing)		85 % rel max. (non condensing)
Switching frequency		50 kHz typ. (pulse width modulation)
Hold-up time		20 ms min.
Isolation voltage	– Input / output – Input / case – Output / case – Output / Output	3'000 VAC 1'500 VAC 500 VAC 60-100 Watt multiple output models: 500 VAC (for all outputs of triple output models!) 35 Watt dual output models: outputs not isolated
Reliability /calculated MTBF (MIL-HDBK-217F)		> 250'000 h @ 25°C typ.
Electromagnetic compatibility (EMC), Emissions	– Conducted input RI suppression – Harmonic current emissions – Flicker	EN 55022, class B, FCC part 15, level B IEC / EN 61000-3-2, class D (TXL 120/150/220) IEC / EN 61000-3-2, class A (others) IEC / EN 61000-3-3
Electromagnets compatibility (EMC), Immunity	– Electrostatic discharge ESD – RF field immunity – Electrical fast transients/burst immunity – Surge – Conducted RF – Magnetic field – Voltage dip	IEC / EN 61000-4-2 4 kV / 8 kV IEC / EN 61000-4-3 3 V/m IEC / EN 61000-4-4 1 kV IEC / EN 61000-4-5 1 kV / 2 kV IEC / EN 61000-4-6 3 V/m IEC / EN 61000-4-8 3 A/m IEC / EN 61000-4-11
Safety standards		UL 1950, IEC 60950, EN 60950
Safety approval		cUL /UL File E188913
Case material	TXL 025/035 TXL 50/60/70/100 others	nickel plated steel (chassis & cover) aluminium (chassis), Nickel plated steel (cover) aluminium (chassis & cover)

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

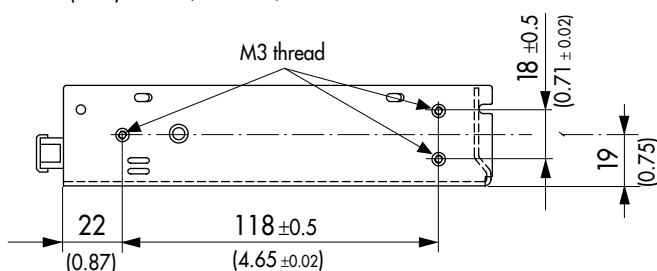
Outline Dimensions mm (inches)
Case C

Weight: 0.19 kg (6.7 oz)

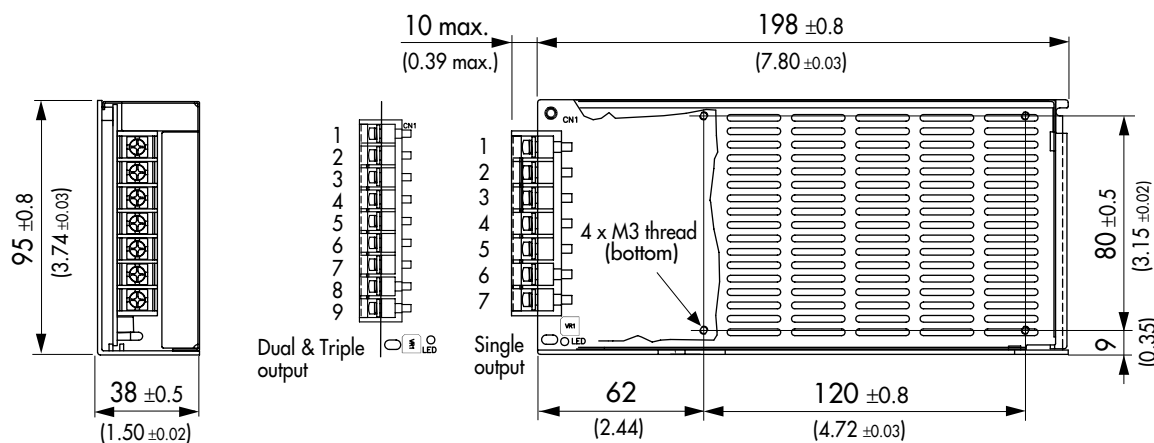
Case D

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

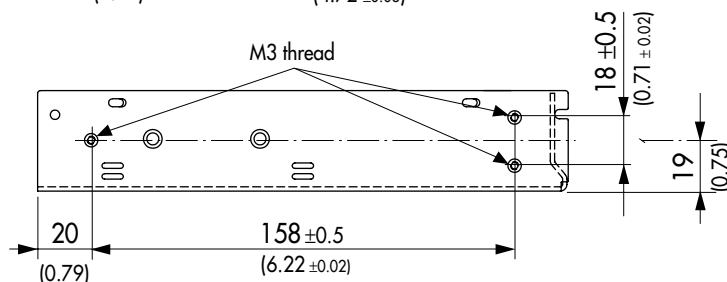
Outline Dimensions mm (inches)
Case E

Pin-Out

	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	-Vout	No con.	+Vout 3
5	-Vout	No con.	-Vout 3
6	+Vout	-Vout 1	-Vout 1
7	+Vout	+Vout 1	+Vout 1
8	-	-Vout 2	-Vout 2
9	-	+Vout 2	+Vout 2

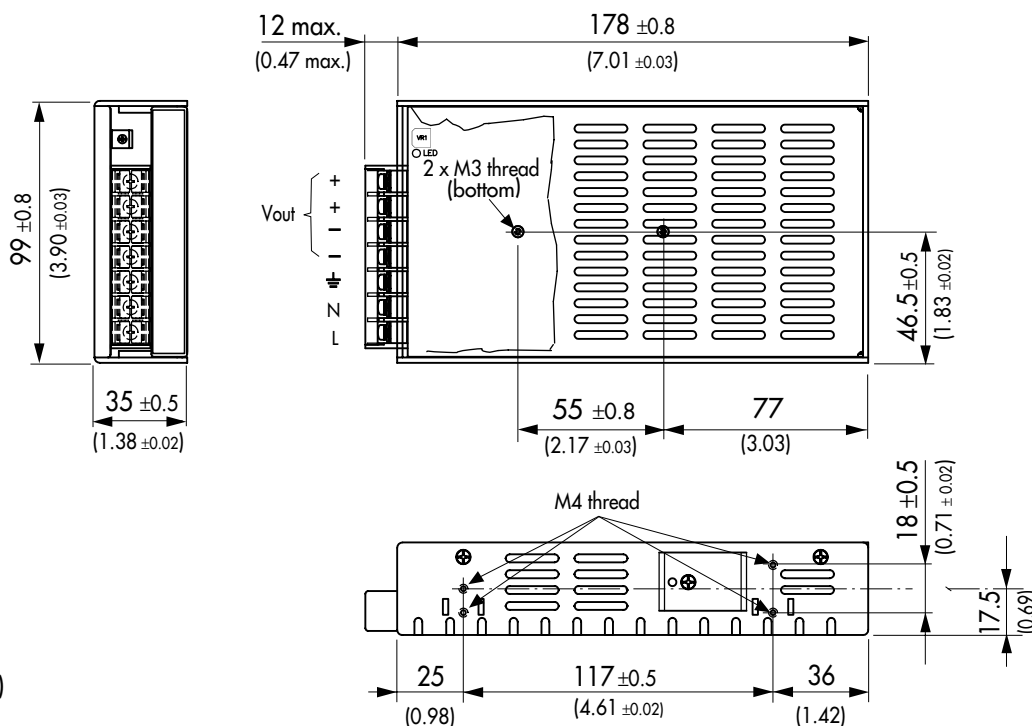

Weight: 0.7 kg (25 oz)

Case J

Pin-Out

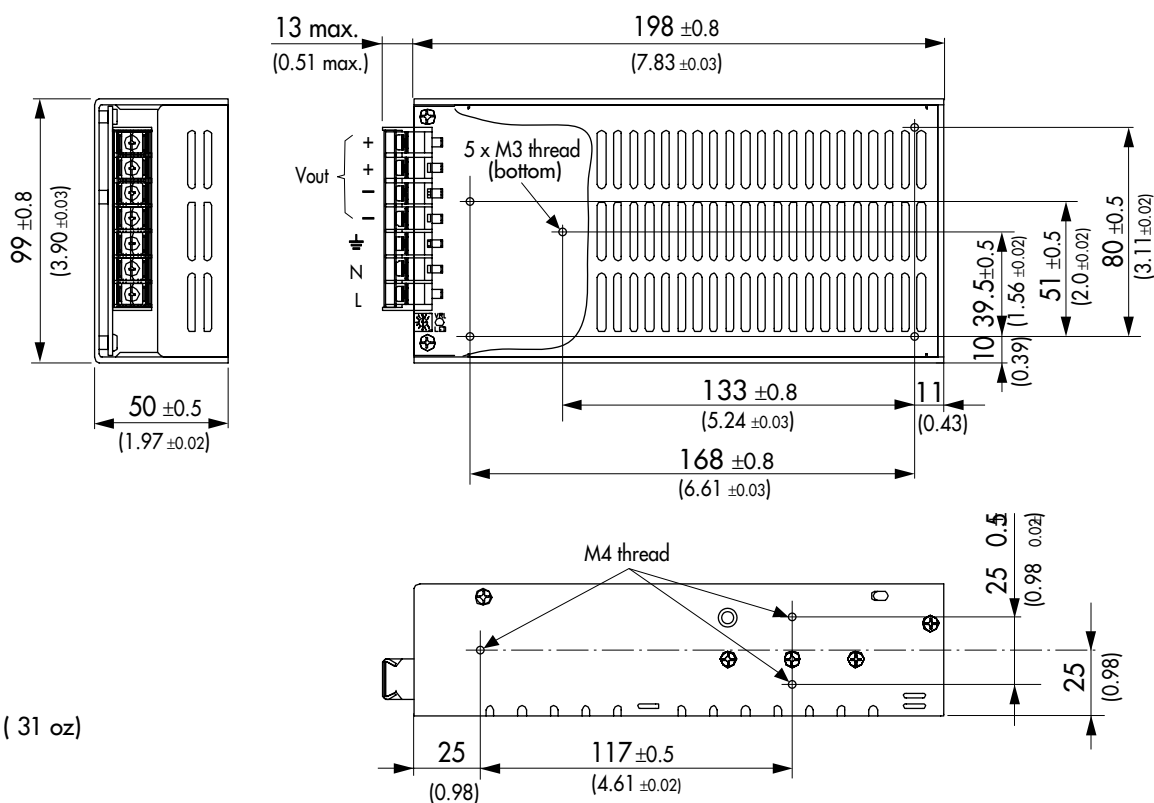
	Single	Dual	Triple
1	AC L	AC L	AC L
2	AC N	AC N	AC N
3	AC FG	AC FG	AC FG
4	-Vout	No con.	+Vout 3
5	-Vout	No con.	-Vout 3
6	+Vout	-Vout 1	-Vout 1
7	+Vout	+Vout 1	+Vout 1
8	-	-Vout 2	-Vout 2
9	-	+Vout 2	+Vout 2


Weight: 0.8 kg (28 oz)

Specifications can be changed without notice

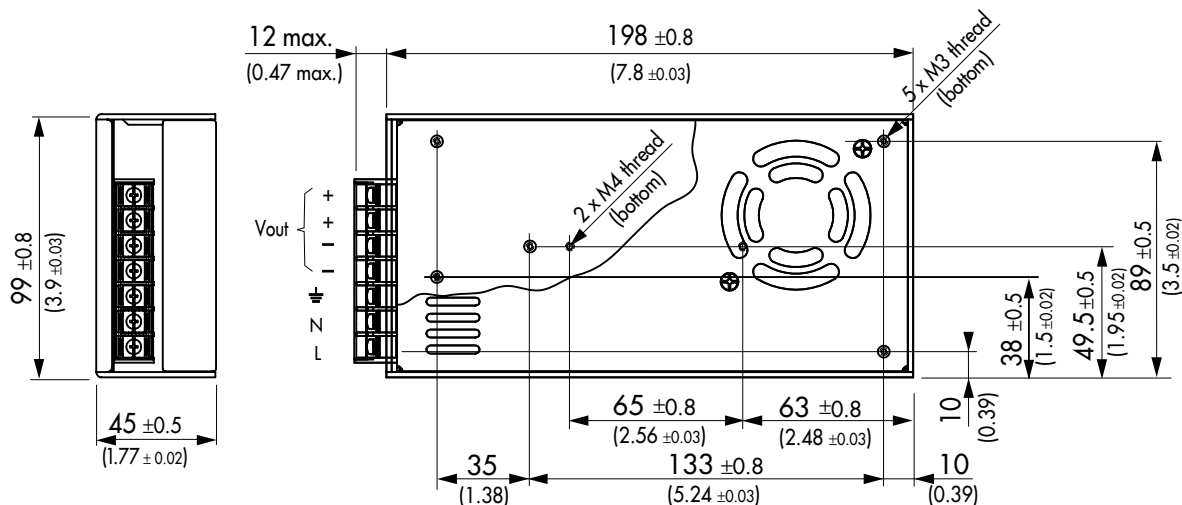
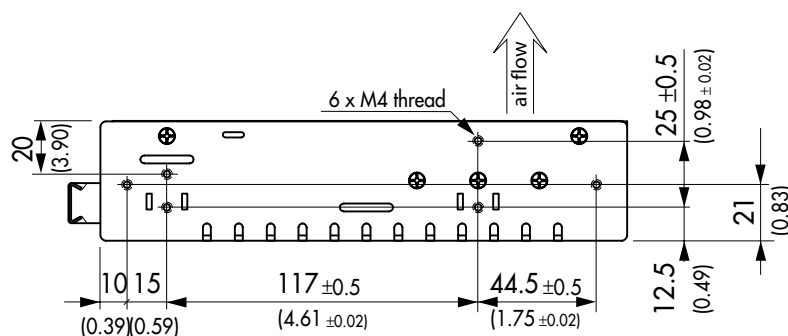
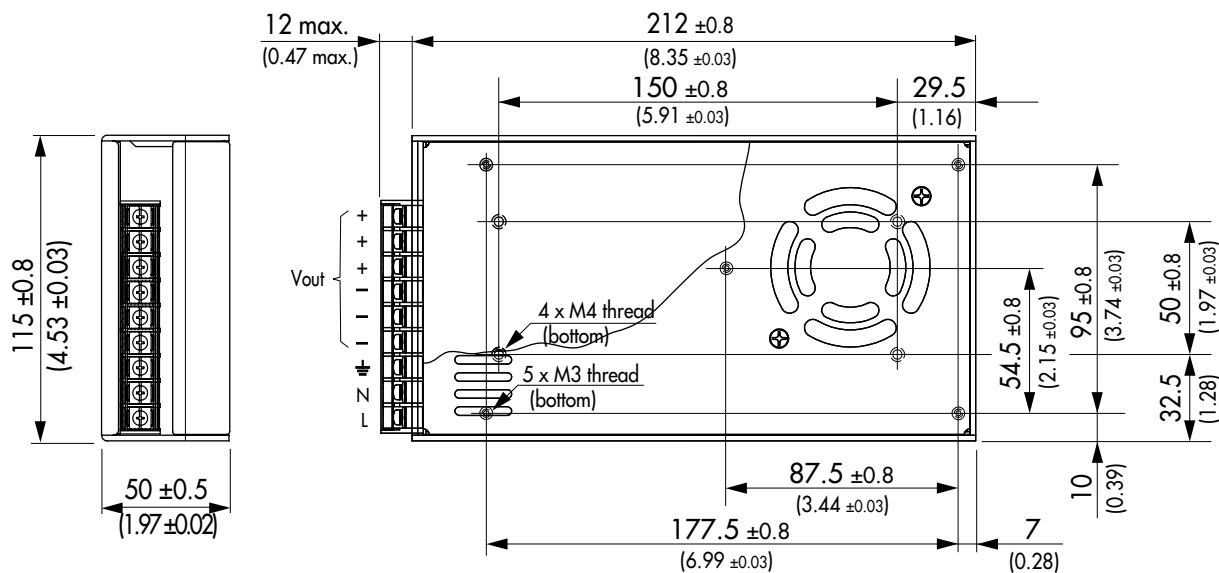
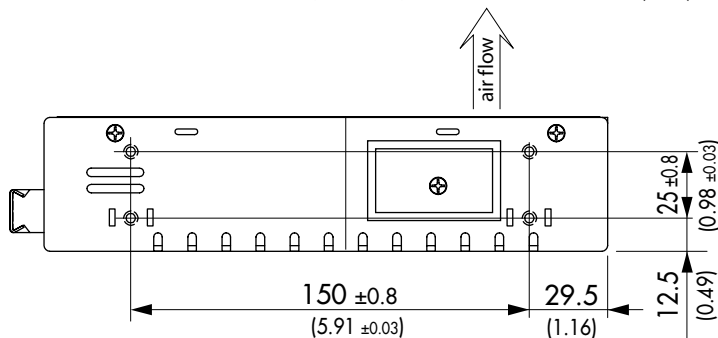
Outline Dimensions mm (inches)
Case K


Weight: 0.82 kg (29 oz)

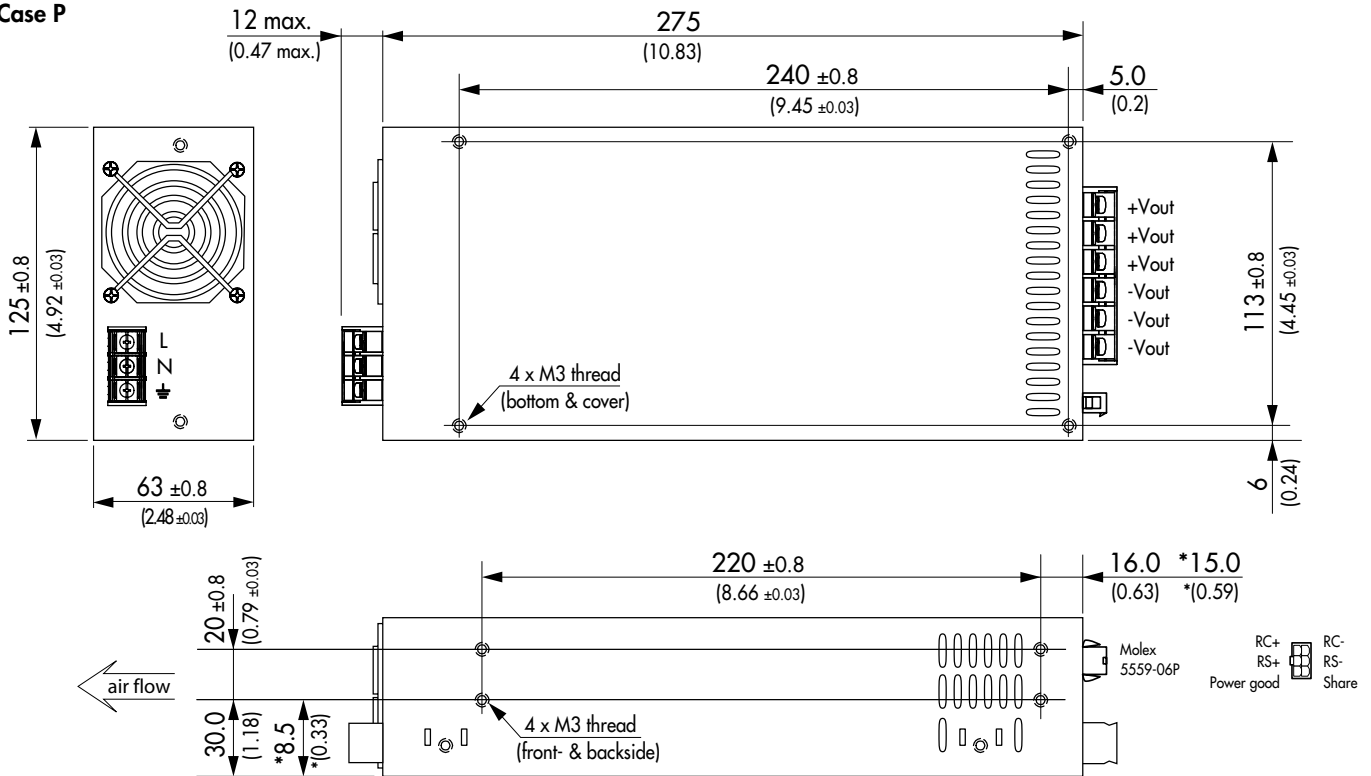
Case L


Weight: 0.89 kg (31 oz)

Specifications can be changed without notice

Outline Dimensions mm (inches)
Case N

Weight: 0.86 kg (30 oz)

Case O

Weight: 1.05 kg (37 oz)


Specifications can be changed without notice

Outline Dimensions mm (inches)
Case P


Weight: 2.3 kg (81 oz)

Specifications can be changed without notice

**TRACO
ELECTRONIC AG**

Jenatschstrasse 1 · CH-8002 Zurich · Switzerland

Tel. +41 43 311 45 11 · Fax +41 43 311 45 45 · info@traco.ch · www.tracopower.com

Rev. 09/05.1