

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
- 2 Year Product Warranty



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	Output Power	Output Voltage nom.	Output Current max.
TXL 025-3.3S TXL 025-05S TXL 025-12S TXL 025-15S TXL 025-24S TXL 025-48S	25 Watt	3.3 VDC	6.0 A
		5 VDC	5.0 A
		12 VDC	2.1 A
		15 VDC	1.7 A
		24 VDC	1.1 A
		48 VDC	0.57 A
TXL 035-3.3S TXL 035-05S TXL 035-12S TXL 035-15S TXL 035-24S TXL 035-48S	35 Watt	3.3 VDC	9.0 A
		5 VDC	7.0 A
		12 VDC	3.0 A
		15 VDC	2.4 A
		24 VDC	1.5 A
		48 VDC	0.75 A
TXL 060-3.3S TXL 060-05S TXL 070-12S TXL 070-15S TXL 070-24S TXL 070-48S	60 / 70 Watt	3.3 VDC	15.0 A
		5 VDC	12.0 A
		12 VDC	6.0 A
		15 VDC	4.8 A
		24 VDC	3.0 A
		48 VDC	1.5 A

Models with Single Output			
Order Code	Output Power	Output Voltage nom.	Output Current max.
TXL 100-3.3S	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	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	220 Watt	12 VDC	18.4 A
TXL 220-24S		24 VDC	9.2 A
TXL 220-48S		48 VDC	4.6 A

Models with Multiple Output				
Order Code	Output Power max.	* Output1	* Output 2	* Output 3
TXL 060-0512D	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	100 Watt	+5 VDC / 12 A	+12 VDC / 5.0 A	
TXL 100-0524D		+5 VDC / 10 A	+24 VDC / 3.0 A	
TXL 100-0521T		+5 VDC / 12 A	+12 VDC / 5.0 A	-5 VDC / 1.5 A
TXL 100-0522T		+5 VDC / 12 A	+12 VDC / 5.0 A	-12 VDC / 1.5 A
TXL 100-0533T		+5 VDC / 12 A	+15 VDC / 3.0 A	-15 VDC / 1.5 A
TXL 100-0534T		+5 VDC / 12 A	+12 VDC / 3.0 A	+24 VDC / 2.0 A

* Total power must not exceed specified output power

Input Specifications

Input voltage range		85 – 264 VAC	
		88 – 264 VAC (TXL 100 models)	
Input frequency		47 – 63 Hz	
Input current (at full load)		V _{in} = 115 VAC	V _{in} = 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.
Input current (at no load)		V _{in} = 115 VAC	V _{in} = 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 V _{out}
	all other output voltages	< 1.0% of V _{out} nom.
Output current limitation		105 % – 150% of I _{out} max.
Overload protection mode		Fold back, automatic recovery
Over voltage protection (only output 1)		115 % – 140 % of V _{out} 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.

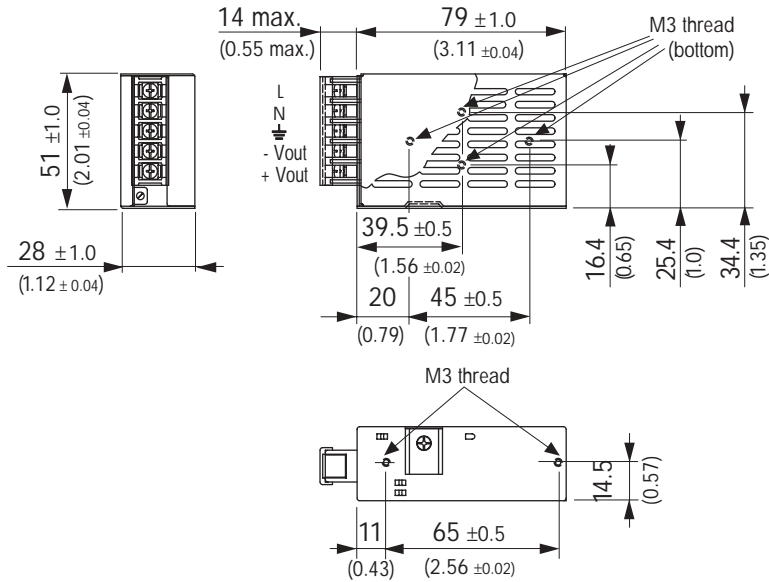
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

General Specifications

Temperature ranges	– Operating – Load derating above 45°C – Storage (non operating)	– 10 °C...+70 °C 2% /°K (2.5%/°K for TXL 220) – 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 – Input / case – Output / case	3'000 VAC 1'500 VAC 500 VAC
Reliability /calculated MTBF (MIL-HDBK-217F)	TXL 025 models TXL 035 models TXL 060/070 single output models TXL 100 single output models TXL 150 models TXL 220 models Multi output Models	> 454'000 h @ 25°C > 335'000 h @ 25°C > 355'000 h @ 25°C > 270'000 h @ 25°C > 225'000 h @ 25°C > 250'000 h @ 25°C > 290'000 h @ 25°C
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 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 025/035/220 TXL 060/070/100/150	Nickel plated steel (chassis & cover) Aluminium (chassis), Nickel plated steel (cover)

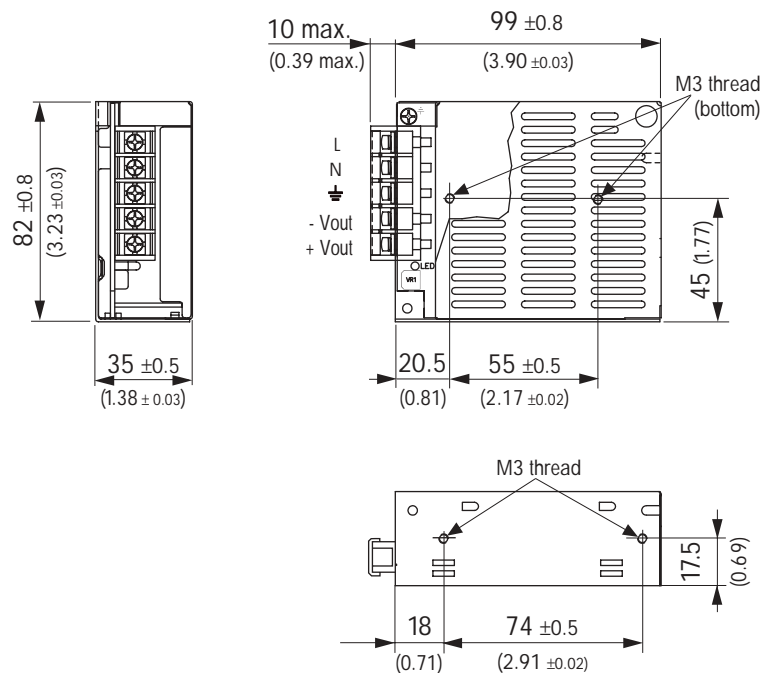
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

TXL 025



Weight: 0.19 kg (6.7 oz)

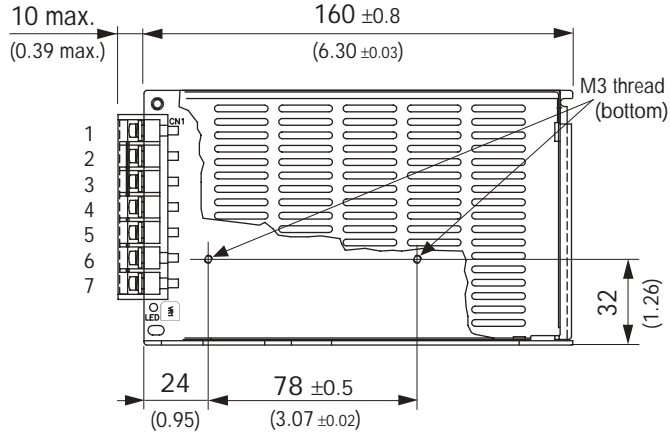
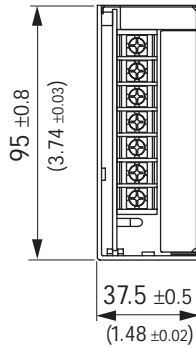
TXL 035



Weight: 0.3 kg (10 oz)

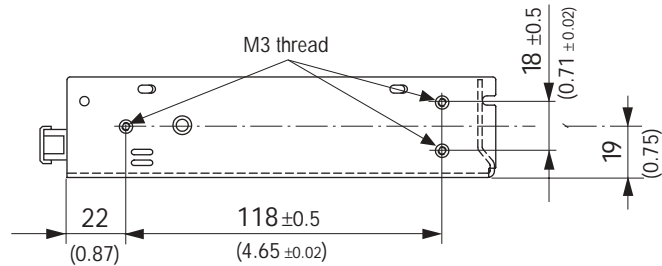
Outline Dimensions mm (inches)

TXL 060 / 070



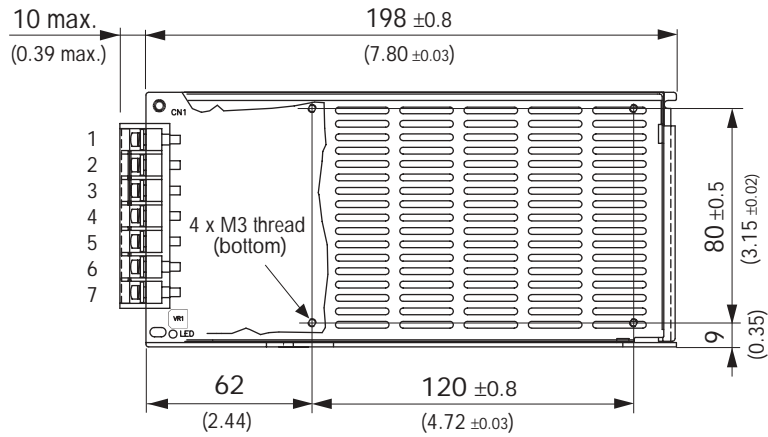
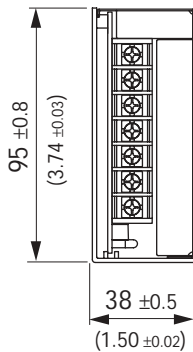
Connection

	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



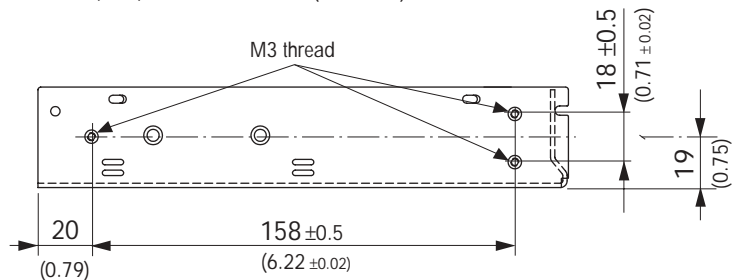
Weight: 0.7 kg (25 oz)

TXL 100



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

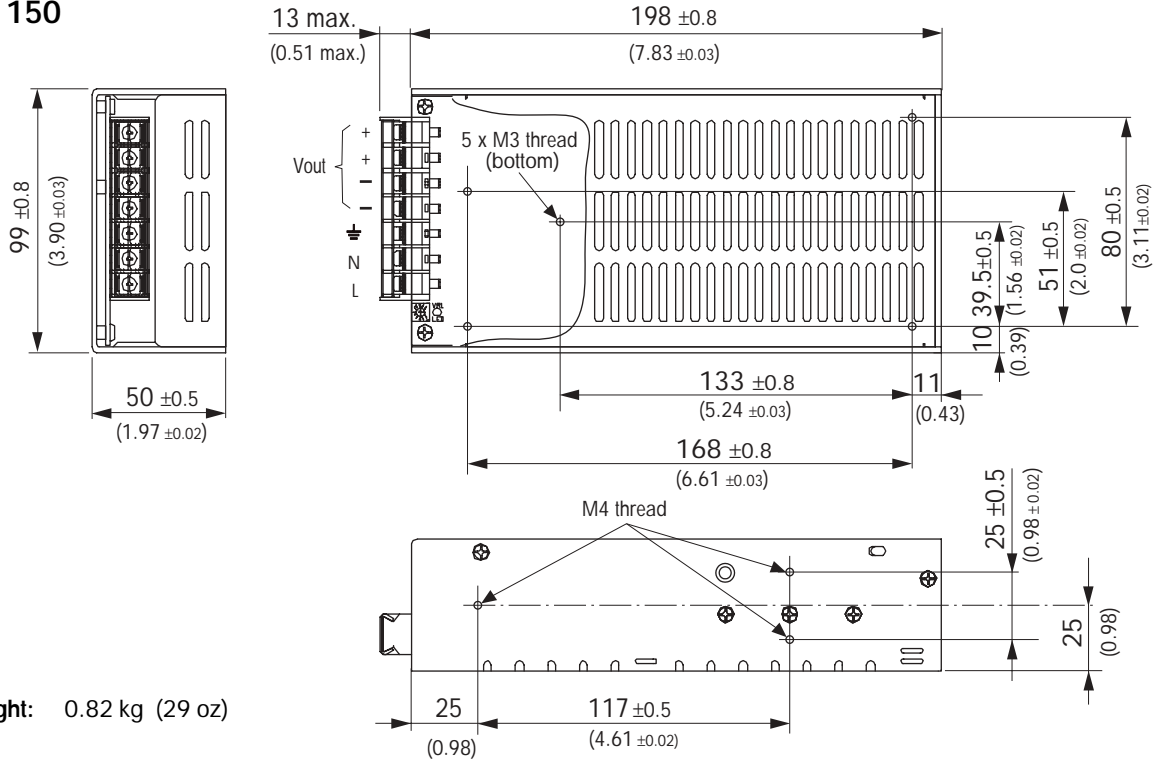


Weight: 0.8 kg (28 oz)

Specifications can be changed without notice

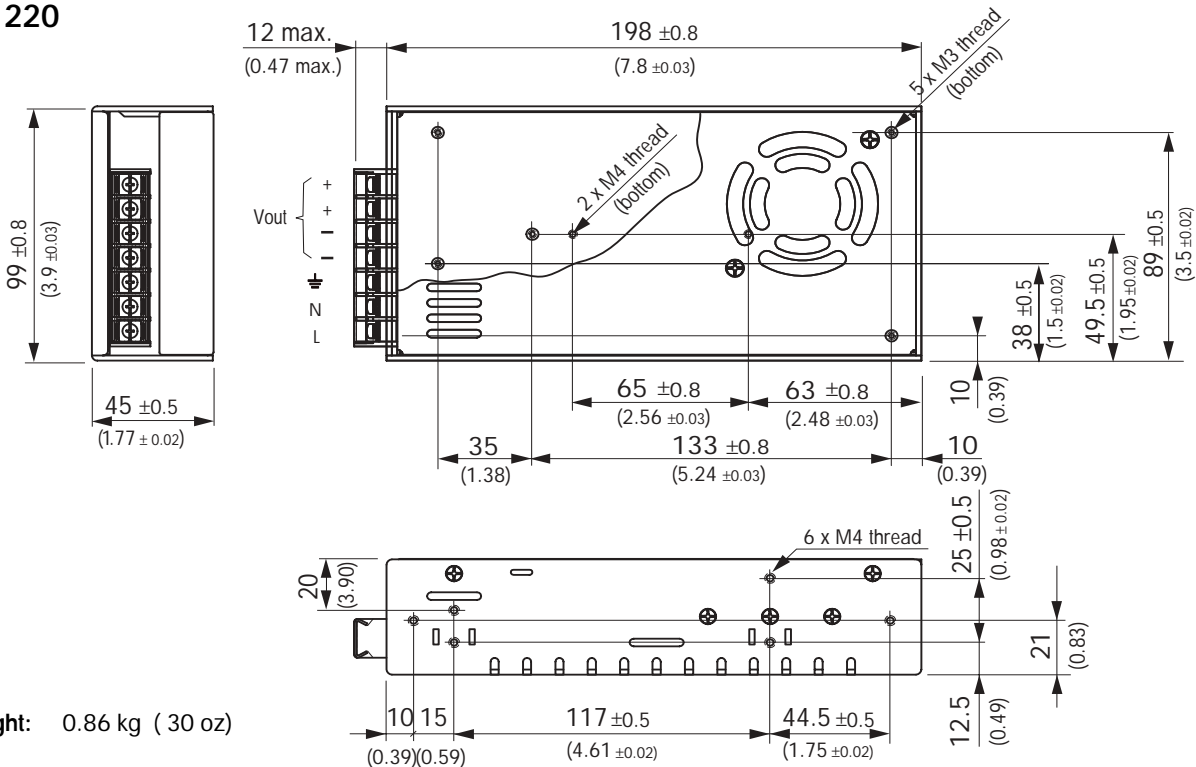
Outline Dimensions mm (inches)

TXL 150



Weight: 0.82 kg (29 oz)

TXL 220



Weight: 0.86 kg (30 oz)

Specifications can be changed without notice