

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 035-3.3S TXL 035-05S TXL 035-12S TXL 035-15S TXL 035-24S TXL 035-48S	35 Watt	3.3 VDC 5 VDC 12 VDC 15 VDC 24 VDC 48 VDC	9.0 A 7.0 A 3.0 A 2.4 A 1.5 A 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 5 VDC 12 VDC 15 VDC 24 VDC 48 VDC	15.0 A 12.0 A 6.0 A 4.8 A 3.0 A 1.5 A
TXL 100-3.3S TXL 100-05S TXL 100-12S TXL 100-15S TXL 100-24S TXL 100-48S	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

Models with Multiple Output				
Order Code	Output Power max.	* Output1	* Output 2	* Output 3
TXL 060-0512D TXL 060-0524D TXL 060-0521T TXL 060-0522T TXL 060-0533T TXL 060-0534T	60 Watt	+5 VDC / 8.0 A +5 VDC / 6.0 A +5 VDC / 8.0 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 +12 VDC / 3.5 A +15 VDC / 3.0 A +12 VDC / 1.5 A	-5 VDC / 1.0 A -12 VDC / 1.0 A -15 VDC / 1.0 A +24 VDC / 1.2 A
TXL 100-0512D TXL 100-0524D TXL 100-0521T TXL 100-0522T TXL 100-0533T TXL 100-0534T	100 Watt	+5 VDC / 12 A +5 VDC / 10 A +5 VDC / 12 A +5 VDC / 12 A +5 VDC / 12 A +5 VDC / 12 A	+12 VDC / 5.0 A +24 VDC / 3.0 A +12 VDC / 5.0 A +12 VDC / 5.0 A +15 VDC / 3.0 A +12 VDC / 3.0 A	-5 VDC / 1.5 A -12 VDC / 1.5 A -15 VDC / 1.5 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)	TXL 035 models TXL 060/ 070 models TXL 100 models	Vin = 115 VAC 0.7 A typ. 1.0 A typ. 1.65 A typ.	Vin = 230 VAC 420 mA typ. 600 mA typ. 950 mA typ.
Input current (at no load)	TXL 035 models other models	Vin = 115 VAC 50 mA typ. 100 mA typ.	Vin = 230 VAC 55 mA typ. 80 mA typ.
Start-up time		200 ms max @ 230 VAC 700 ms max @ 115 VAC	

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

Output Specifications

Output voltage adjustment range (only single output models)		±10%
Regulation	– Input variation	± 1 % max.
	– Load variation (10 – 100%)	± 2 % max. (main output)
		± 5 % max. (output 2/3)
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: 24 VDC & 48VDC output models:	4'700 µF
	TXL 035: 24 VDC & 48VDC output models:	1'000 µF

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

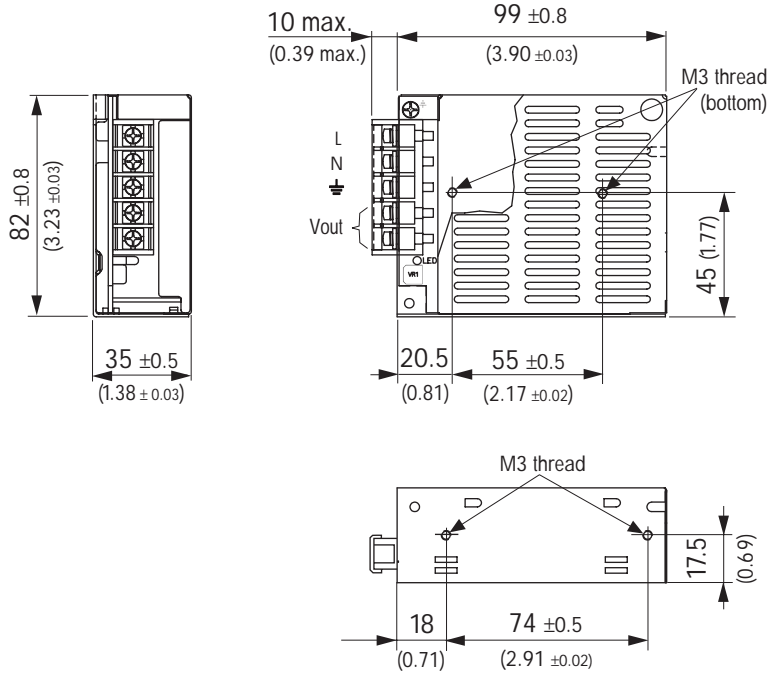
General Specifications

Temperature ranges	<ul style="list-style-type: none"> – Operating – Load derating above 45°C – Storage (non operating) 	<p>0 °C...+70 °C</p> <p>2% / °C</p> <p>– 10 °C...+75 °C</p>														
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		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">Vin = 115 VAC</td> <td style="width: 50%; text-align: center;">Vin = 230 VAC</td> </tr> <tr> <td style="text-align: center;">16 ms min.</td> <td style="text-align: center;">60 ms min.</td> </tr> </table>	Vin = 115 VAC	Vin = 230 VAC	16 ms min.	60 ms min.										
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Isolation voltage	<ul style="list-style-type: none"> – Input / output – Input / case – Output / case 	<p>3'000 VAC</p> <p>1'500 VAC</p> <p>500 VAC</p>														
Reliability /calculated MTBF (MIL-HDBK-217F)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: right;">TXL 035</td> <td style="width: 50%;">> 335'000 h @ 25°C</td> </tr> <tr> <td style="text-align: right;">TXL 060/070 single output models</td> <td>> 355'000 h @ 25°C</td> </tr> <tr> <td style="text-align: right;">TXL 100 single output models</td> <td>> 270'000 h @ 25°C</td> </tr> <tr> <td style="text-align: right;">Multi output Models</td> <td>> 290'000 h @ 25°C</td> </tr> </table>	TXL 035	> 335'000 h @ 25°C	TXL 060/070 single output models	> 355'000 h @ 25°C	TXL 100 single output models	> 270'000 h @ 25°C	Multi output Models	> 290'000 h @ 25°C							
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Electromagnetic compatibility (EMC), Emissions	<ul style="list-style-type: none"> – Conducted input RI suppression – Harmonic current emissions – Flicker 	<p>EN 55022, class B, FCC part 15, level B</p> <p>IEC / EN 61000-3-2, class A</p> <p>IEC / EN 61000-3-3</p>														
Electromagnetic compatibility (EMC), Immunity (all multioutput models)	<ul style="list-style-type: none"> – Electrostatic discharge ESD – RF field immunity – Electrical fast transients/burst immunity – Surge – Conducted RF – Magnetic field – Voltage dip 	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">IEC / EN 61000-4-2</td> <td style="width: 50%;">4 kV / 8 kV</td> </tr> <tr> <td>IEC / EN 61000-4-3</td> <td>3 V/m</td> </tr> <tr> <td>IEC / EN 61000-4-4</td> <td>1 kV</td> </tr> <tr> <td>IEC / EN 61000-4-5</td> <td>1 kV / 2 kV</td> </tr> <tr> <td>IEC / EN 61000-4-6</td> <td>3 V/m</td> </tr> <tr> <td>IEC / EN 61000-4-8</td> <td>3 A/m</td> </tr> <tr> <td>IEC / EN 61000-4-11</td> <td></td> </tr> </table>	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	
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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	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: right;">TXL 035</td> <td style="width: 50%;">Stainless steel (chassis & cover)</td> </tr> <tr> <td style="text-align: right;">TXL 060/070/100</td> <td>Aluminium (chassis), stainless steel (cover)</td> </tr> </table>	TXL 035	Stainless steel (chassis & cover)	TXL 060/070/100	Aluminium (chassis), stainless steel (cover)											
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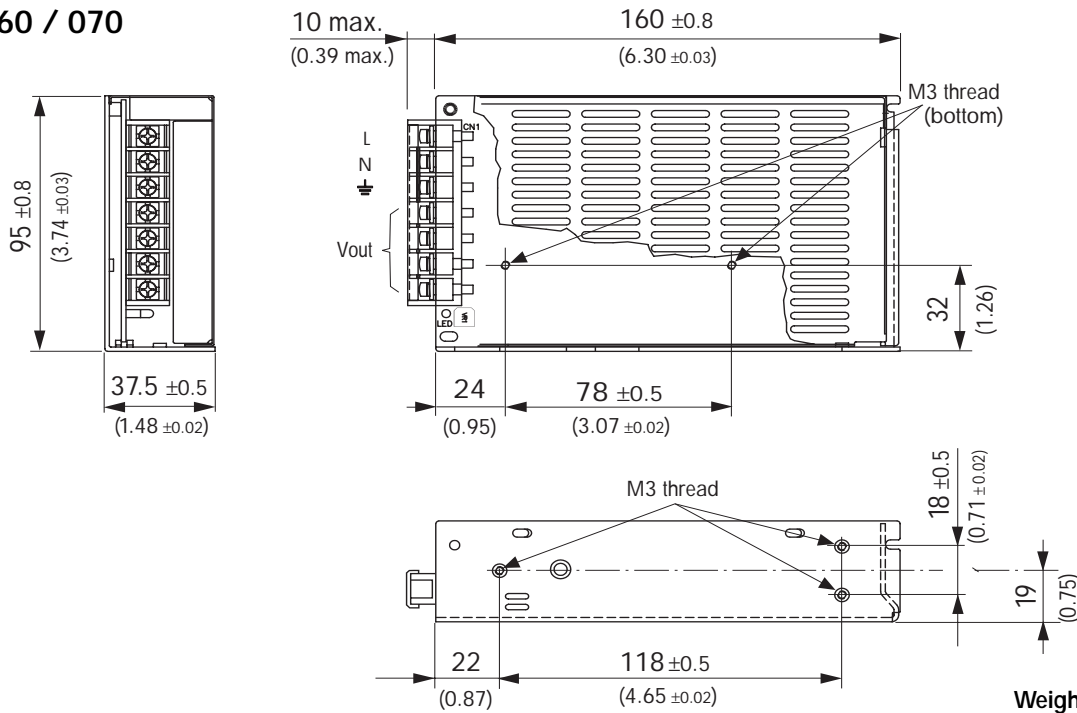
Outline Dimensions mm (inches)

TXL 035



Weight: 0.3 kg (10 oz)

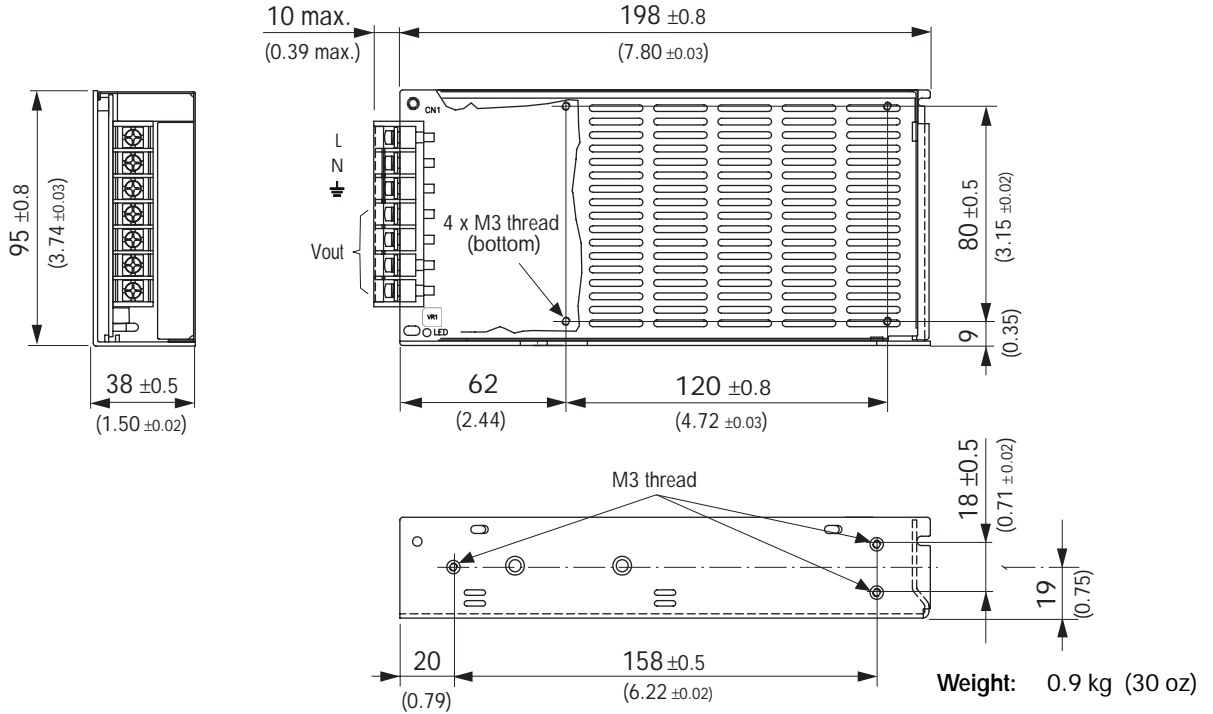
TXL 060 / 070



Weight: 0.7 kg (25 oz)

Outline Dimensions mm (inches)

TXL 100



Specifications can be changed without notice