

### Features

- ◆ Compact U-bracket and enclosed power supplies
- ◆ Screw terminal block
- ◆ Very high efficiency up to 93%
- ◆ No internal fan for 120 W & 240 W models.
- ◆ Universal input 90 – 264 VAC
- ◆ Fixed output voltage
- ◆ 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
- ◆ 3-year product warranty



The TRACOPOWER TXH series is a family of power supplies in metal enclosure, designed for a wide range of cost critical applications. The very high efficiency of up to 93% admits of a compact design with free air convection cooling for the 120 and 240 Watt models. The units are equipped with screw terminal blocks and are easy to install in any equipment.

These power supplies have universal input and comply with European EMC stan-

Models with Single Output			
Order Code	Output Power max.	Output Voltage nom.	Output Current max.
TXH 120-112	120 Watt	12 VDC	10 A
TXH 120-124		24 VDC	5.0 A
TXH 120-148		48 VDC	2.5 A
TXH 240-112	240 Watt	12 VDC	20 A
TXH 240-124		24 VDC	10 A
TXH 240-148		48 VDC	5.0 A
TXH 360-112	360 Watt	12 VDC	30.0 A
TXH 360-124		24 VDC	15 A
TXH 360-148		48 VDC	7.5 A

### Input Specifications

Input voltage	– nominal – AC range (universal input) – output current derating at operation below 100 VAC – DC range	100 – 240 VAC 90 – 264 VAC see graph B, page 5 120 – 370 VDC												
Input frequency		47–63 Hz												
Earth leakage current	120 & 240 W models: 360 W models:	500 µA max. 300 µA max.												
Input current (at full load)		<table border="0"> <tr> <td></td> <td><math>V_{in} = 115 \text{ VAC}</math></td> <td><math>V_{in} = 230 \text{ VAC}</math></td> </tr> <tr> <td>120 W models:</td> <td>2.0 A typ.</td> <td>1.0 A typ.</td> </tr> <tr> <td>240 W models:</td> <td>3.0 A typ.</td> <td>1.5 A typ.</td> </tr> <tr> <td>360 W models:</td> <td>4.0 A typ.</td> <td>2.0 A typ.</td> </tr> </table>		$V_{in} = 115 \text{ VAC}$	$V_{in} = 230 \text{ VAC}$	120 W models:	2.0 A typ.	1.0 A typ.	240 W models:	3.0 A typ.	1.5 A typ.	360 W models:	4.0 A typ.	2.0 A typ.
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120 W models:	2.0 A typ.	1.0 A typ.												
240 W models:	3.0 A typ.	1.5 A typ.												
360 W models:	4.0 A typ.	2.0 A typ.												
Recommended circuit breaker (characteristic C) or slow blow fuse	120 & 240 W models: 360 W models:	5 A 10 A												

### Output Specifications

Output voltage adjustment range		±5 % with internal potentiometer
Regulation	– Input variation – Load variation (0 –100%)	1 % max. 1 % max.
Minimum load		0 %
Ripple and noise (20 MHz bandwidth)	12 VDC models: other models:	<150 mV <200 mV
Current limitation		at 130–150 %, auto recovery
Short circuit protection	120 & 240 W models: 360 W models:	indefinite, no auto recovery (power disconnect required) auto recovery
Overvoltage protection by Zehner diode	120 & 240 W models:	120 % of $V_{out}$ typ. no auto recovery (power disconnect required) auto recovery
Overtemperature protection		for 360 W models only, auto recovery
Capacitive load, max.	12 VDC models: 24 VDC models: 48 VDC models:	23'000 µF 4'700 µF 4'70 µF

### General Specifications

Temperature ranges	– Operating – Storage (non operating)	–10°C to +75°C –25°C to +85°C
Derating		2.5 %/K above +50°C
Temperature coefficient		0.03 %/K
Humidity (non condensing)		95 % rel max.
Efficiency		91 % typ.
Switching frequency (pulse width modulation PWM)	120 & 240 W models: 360 W models:	100 kHz typ. 75 kHz typ.
Hold-up time		13 ms min.
Isolation voltage (60 sec)	– Input/Output – Input/Case – Output/Case	3'000 VAC 1'500 VAC 500 VAC
Reliability /calculated MTBF (MIL-HDBK-217F at 25°C, ground benign)		>50'000 h

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

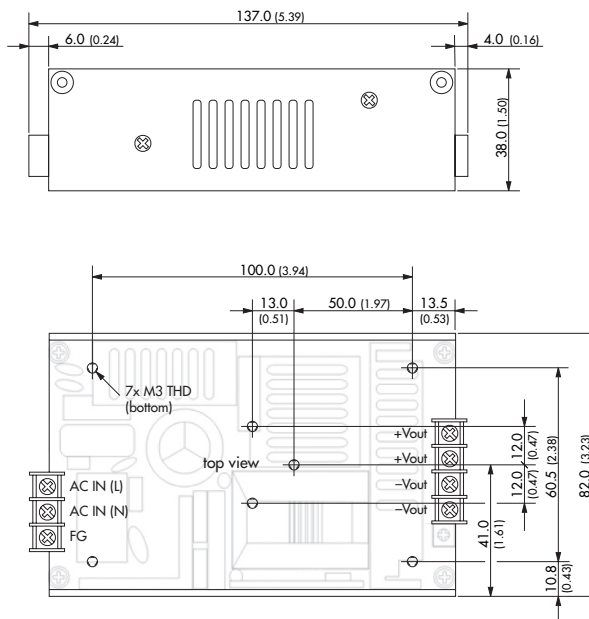
**General Specifications**

Electromagnetic compatibility (EMC), Emissions	– Conducted input RI suppression – Harmonic current emissions	EN 55022, class B, FCC part 15, level B IEC/EN 61000-3-2 class B
Electromagnetic compatibility (EMC), Immunity		tba
Degree of protection		class I
Safety standards		UL 60950-1, IEC/EN 60950-1
Safety approval		cUL /UL File E188913 (pending) <a href="http://www.ul.com">www.ul.com</a> -> certifications
Environment	– Vibration – Shock	3 axis, sine sweep, 10-500Hz, 2g, 0.1 oct/min tba.

**Outline Dimensions**

TXH 120 models

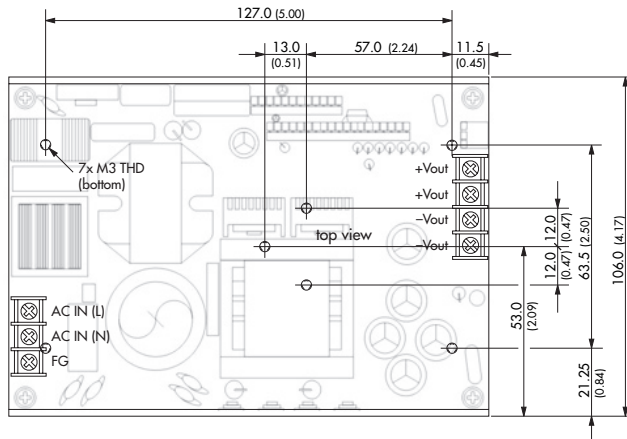
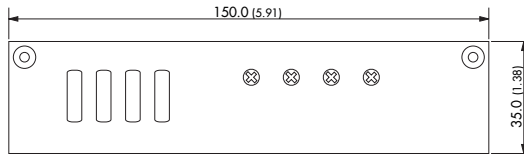
Weight: 390 g (13.8 oz)



**Outline Dimensions**

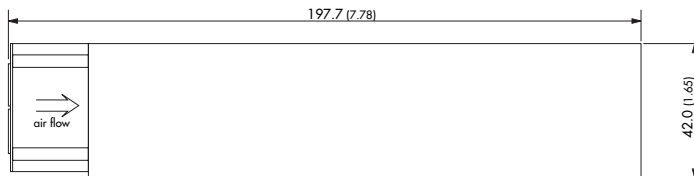
**TXH 240 models**

**Weight:** 580 g (20.5 oz)



**TXH 360 models**

**Weight:** 880 g (31.0 oz)



Detailed drawing under construction



Dimensions in [mm], ( ) = Inch  
Tolerances  $\pm 0.8$  (0.03)  
Mounting hole pitch tolerances  $\pm 0.5$  (0.02)

**Caution!** Max mounting screw penetration: 3.0 mm (0.12)

Specifications can be changed any time without notice.