

## INSTALLATION INSTRUCTIONS

### TXH 120, TXH 240, TXH 360 & TXH 480 Series

### Switching Power Supply

Order Code	Nominal AC-Input Voltage Range	Input Voltage Range	*Output Power max.	**DC-Output	Recommended Circuit breaker		
TXH 120-112	100 – 240Vac 50/60Hz  Universal Input	90 – 264Vac 47 – 63Hz  120 – 370Vdc	120W	12.0Vdc / 10.0A	3.15A (Characteristic C)		
TXH 120-124			120W	24.0Vdc / 5.0A			
TXH 120-148			120W	48.0Vdc / 2.5A			
TXH 240-112					240W	12.0Vdc / 20.0A	5A (Characteristic C)
TXH 240-124					240W	24.0Vdc / 10.0A	
TXH 240-148					240W	48.0Vdc / 5.0A	
TXH 360-112					360W	12.0Vdc / 30.0A	6.3A (Characteristic C)
TXH 360-124					360W	24.0Vdc / 15.0A	
TXH 360-148					360W	48.0Vdc / 7.5A	
TXH 480-112					480W	12.0Vdc / 40.0A	10A (Characteristic C)
TXH 480-124					480W	24.0Vdc / 20.0A	
TXH 480-148					480W	48.0Vdc / 10.0A	

\*Total output power must not exceed specified max output power.

\*\*Output adjustable by potentiometer with an insulated screwdriver.

Max. Input current	@ V <sub>in</sub> = 115Vac	@ V <sub>in</sub> = 230Vac	Typ. Power Consumption	@ V <sub>in</sub> = 115Vac	@ V <sub>in</sub> = 230Vac
TXH 120	2.0A max.	1.0A max.	TXH 120	138W typ.	137W typ.
TXH 240	3.0A max.	1.5A max.	TXH 240	265W typ.	253W typ.
TXH 360	4.0A max.	2.0A max.	TXH 360	414W typ.	409W typ.
TXH 480	5.5A max.	3.0A max.	TXH 480	587W typ.	575W typ.

Output Voltage Adjustment Range	typical ±5% (TXH 360: ±10%)
Output Power Derating	above +50°C ambient temperature → 2.5%/K below +41°C ambient temperature → 2.0 %/K ( TXH 480-112 only) below 100Vac input voltage → 1%/V
Operating Temperature Range (with natural air convection cooling)	-10°C – +70°C → (TXH 240 & TXH 360) -20°C – +70°C → (TXH 480) -25°C – +70°C → (TXH 120)
Storage Temperature Range	-25°C – +85°C
Input and Output Connectors	Screw type terminal for AWG 22..12 (TXH 480) AWG 22..14 (other types) Recommended tightening torque 1.4Nm (TXH 480), 0.5Nm (other types) Wire end sleeve or fork cable lug recommended (min. inside diameter = 3.0mm / max. outside diameter = 4.9mm)
Control Connector	Connection cable with flying leads enclosed
Protective Earth	The non-fused protective earth connection must be connected to the FG terminal (protection class I)
Case Material	Aluminium base
Mounting Inserts	7x M3 (TXH 120 & TXH 240 on the bottom side) 9x M4 (TXH 360; 5x on the bottom side and 4x on the side) 11x M3 (TXH 480; 7x on the bottom side and 4x on the side) (max mounting screw penetration: 2.5mm)
Options	Cover for TXH 120 (TXH 120-COV) and TXH 240 (TXH 240-COV)

## **Safety Instructions:**

- Before installation read these instructions carefully and completely. This installation instruction cannot account for every possible condition of installation, operation or maintenance. Further information can be obtained from your local distributor's office or from the product data sheet, which can be downloaded, from the Internet at [www.tracopower.com/products/txh.pdf](http://www.tracopower.com/products/txh.pdf).
- Before any installation, maintenance or modification work ensure that the main switch is switched off and prevented from being switched on again. Non-observance, touching of any live components or improper handling of this power supply can result in death, severe personal injury or substantial property damage. Proper and safe operation is dependent on proper storage, handling, installation and operation.
- Compliance with the relevant national regulations must be ensured. Before operation is started the following conditions must be ensured:
  - ❖ Connection to mains supply in compliance with national regulations (VDE0100 and EN50178).
  - ❖ By use of stranded wires, all strands must be fastened in the terminal blocks. (Potential danger of contact with the case)
  - ❖ Power supply and mains cables must be sufficiently fused.
  - ❖ All output wires must be rated for the power supply output current and must be connected with the correct polarity.
  - ❖ Sufficient cooling must be ensured.
- **Never work on the power supply if power is supplied!** Risk of electric arcs and electrical shock, which can cause death, severe personal injury or substantial property damage.
- **Warning:** Hazardous voltages and components storing a very substantial amount of energy are present in this power supply during normal operating conditions. However, these are inaccessible. Improper handling may result in an electric shock or serious burns!  
**Do not open the power supply.**
  - ❖ Do not introduce any objects into the power supply. An output voltage adjustment potentiometer may only be actuated using an insulated screwdriver.
  - ❖ Keep away from fire, water and chemicals.

## **Installation Instructions:**

- This power supply is designed for professional indoor systems. In operation the power supply must not be accessible. It may be installed and put into service by qualified personnel only.
- The correct mounting position for optimal cooling performance must be observed. **Do not cover any ventilation holes.** Leave a free space of minimum 50mm (2in.) above and on the sides of the power supply. Observe power derating. (see our data sheet)
- Do not operate without PE connection! To comply with EMC and safety standards (CE mark, approvals) the power supply must be operated only if PE terminal is connected to the non-fused earth conductor.
- While putting on connectors or wires, no mechanical stress should be applied to the printed circuit board and its components.
- The internal fuse(s) may not be replaced by the user. If an internal fuse has blown, the power supply has an internal defect and, for safety reasons, must be shipped to your local distributor.
- **Note:** This unit contains an automatic input voltage selection switch. Do not change the input voltage without disconnecting the input connector.
- **Recycling:** The unit contains elements that are suitable for recycling, and components that need special disposal. You are therefore requested to make sure that the power supply will be recycled environment friendly at the end of its service life.