

INSTALLATION INSTRUCTIONS

TPP 150 Series

Switching Power Supply

Order Code	Nominal AC-Input Voltage Range	Input Voltage Range	*Output Power max.	**DC-Output	Circuit breaker
TPP 150-112	100 – 240Vac 50/60Hz	85 – 264Vac 47 – 63Hz	150 W	12.0Vdc / 12.5A	Internal T3.15A/250Vac fuse in line and neutral (soldered)
TPP 150-115				15.0Vdc / 10.0A	
TPP 150-124				24.0Vdc / 6.25A	
TPP 150-136	Universal Input	120 – 370Vdc		36.0Vdc / 4.17A	
TPP 150-148				48.0Vdc / 3.13A	

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

**Output adjustable by potentiometer with an insulated screwdriver.

Max. Input current	@ V _{in} = 115Vac	@ V _{in} = 230Vac	Typ. Power Consumption	@ V _{in} = 115Vac	@ V _{in} = 230Vac
TPP 150	1.7A max.	0.8A max.	TPP 150	171W typ.	171W typ.

Output Voltage Adjustment Range	typical ±10%
Output Power Derating	above +50°C ambient temperature → 2.33%/K below 100Vac input voltage → 1.33%/V
Operating Temperature Range (with natural air convection cooling)	-25°C to +80°C
Storage Temperature Range	-40°C to +85°C
Input and Output Connectors	Screw type terminal for AWG 26..16 Recommended tightening torque 0.2Nm (1.8lb.in.) Wire end sleeve recommended Terminal rated for 10A max (higher current connection has to be splitted)
Protective Earth	PE connection is not required (protection class II prepared)
Case Material	Aluminium base
Mounting Position	Vertical (for best cooling conditions)
Mounting Inserts	8 x M3 on the bottom side (max mounting screw penetration: 2.0mm) Recommended tightening torque 0.5Nm (4.4lb.in.)
Options	DIN-Rail clip (TPP-MK1) Customized case and connectors on request

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/tpp150.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. The 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).
- PE connection is not required (protection class II prepared)
- 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.