

INSTALLATION INSTRUCTIONS

TIS Series Industrial Power Supply

| Order Code | AC-Input Voltage Range | Output Power max. | Output | ** Output Voltage Adjustment Range | recommended Circuit breaker (Characteristic C) |
|-------------------|---|-------------------|-----------------|------------------------------------|--|
| TIS 50-112 | 93 – 264VAC Universal Input | 50 Watt | 12.0VDC / 3.5A | 12.0 – 14.0VDC | 5A |
| TIS 50-124 | | | 24.0VDC / 2.0A | 24.0 – 28.0VDC | |
| TIS 75-112 | 115VAC/230VAC selectable | 75 Watt | 12.0VDC / 6.0A | 12.0 – 14.0VDC | 5A |
| TIS 75-124 | | | 24.0VDC / 3.0A | 24.0 – 28.0VDC | |
| TIS 75-148 | | | 48.0VDC / 1.5A | 48.0 – 52.0VDC | |
| * TIS 150-124 (P) | 93 – 132VAC 187 – 264VAC | 150 Watt | 24.0VDC / 6.0A | 24.0 – 28.0VDC | 10A |
| * TIS 150-148 (P) | | | 48.0VDC / 3.0A | 48.0 – 52.0VDC | |
| * TIS 300-124 (P) | 50 / 60Hz | 300 Watt | 24.0VDC / 12.0A | 24.0 – 28.0VDC | 16A |
| * TIS 300-148 (P) | | | 48.0VDC / 6.0A | 48.0 – 52.0VDC | |
| * TIS 300-172 (P) | | | 72.0VDC / 4.2A | 60.0 – 72.0VDC | |
| TIS 500-124-115 | 115VAC 93 – 132VAC | 500 Watt | 24.0VDC / 20.0A | 24.0 – 28.0VDC | 20A |
| TIS 500-124-230 | 230VAC 187 – 264VAC | | 24.0VDC / 20.0A | 24.0 – 28.0VDC | |
| TIS 600-124 | 115VAC/230VAC selectable 93 – 132VAC 187 – 264VAC 50 / 60Hz | 600 Watt | 24.0VDC / 24.0A | 24.0 – 28.0VDC | 20A |
| TIS 600-128 | | | 28.0VDC / 22.0A | 28.0 – 32.0VDC | |
| TIS 600-148 | | | 48.0VDC / 12.0A | 48.0 – 52.0VDC | |
| TIS 600-172 | | | 72.0VDC / 8.5A | 60.0 – 72.0VDC | |

* If compliance to EN 61000-3-2 (PFHC → Power Factor Harmonic Current) is required, option P is available for these models

** Adjustable by potentiometer with a screwdriver.

| Input current: | @ Vin=115VAC | @ Vin=230VAC | Power Consumption | @ Vin=115VAC | @ Vin=230VAC |
|----------------|--------------|--------------|-------------------|---------------|---------------|
| ➤ TIS 50 | 0.85A typ. | 0.50A typ. | ➤ TIS 50 | 62 Watt typ. | 60 Watt typ. |
| ➤ TIS 75 | 1.30A typ. | 0.75A typ. | ➤ TIS 75 | 87 Watt typ. | 86 Watt typ. |
| ➤ TIS 150 | 2.70A typ. | 1.55A typ. | ➤ TIS 150 | 168 Watt typ. | 165 Watt typ. |
| ➤ TIS 300 | 4.85A typ. | 2.90A typ. | ➤ TIS 300 | 338 Watt typ. | 330 Watt typ. |
| ➤ TIS 500 | 6.0A typ. | 4.3A typ. | ➤ TIS 500 | 545 Watt typ. | 541 Watt typ. |
| ➤ TIS 600 | 7.0A typ. | 5.0A typ. | ➤ TIS 600 | 660 Watt typ. | 652 Watt typ. |

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| Operating temperature range: Natural Air Convection Cooling | -25°C – +70°C max -13°F – +158°F max |
| Output Power Derating: | above +50°C → 2%/K above 122°F → 2%/K |
| Storage temperature range: | -25°C – +85°C max -13°F – +185°F max |
| <i>Parallel Operation:</i> | |
| <ul style="list-style-type: none"> TIS 75-1xx TIS 500-124-xxx TIS 150, TIS 300 & TIS 600 | <ul style="list-style-type: none"> Up to 5 power supplies possible. User selectable standard mode or parallel mode by jumper on PCB. Only 2 power supplies possible Option RED required |
| Connections: | Plugable screw type terminal COMBICON. TIS 600: Screw type terminal COMBICON. Recommended tightening torque 0.5 to 0.7Nm (4.5 to 6.2lb.in.) |
| Case material: | Aluminium (chassis) and Zinc-plated steel (cover) |

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 <http://tracopower.com>. You will find additional information in our Instruction Manual, which can also be downloaded, from the Internet at: http://www.tracopower.com/products/tis_manual.pdf.
- The mains supply voltage connection, must be in accordance to IEC 62103, EN 50178 and IEC 60364, VDE 100.
- 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 (in the USA, Europe and other countries) 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.
 - ❖ Degree of protection I to IEC536. The non-fused protective earth connection must be connected to the FG terminal.
 - ❖ 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 and water

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.
- 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.
- 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 below the power supply. Observe power derating.
- The internal fuse is not accessible, as it may not be replaced by the user. If this internal fuse has blown, the power supply has an internal defect and, for safety reasons, must be shipped to the local distributor. In case this internal fuse has to be replaced in the field, replace only with same type and rating of fuse for continued protection against risk of fire.
- **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 at the end of its service life.
 - ❖ This equipment is suitable for use in Class I, Division 2, Groups A,B,C,D or Non-Hazardous Locations only.
 - ❖ **WARNING** – Explosion Hazard – Substitution of Components may impair suitability for Class I, Division 2.
 - ❖ **WARNING** – Explosion Hazard – Do not disconnect Equipment unless power has been switched off or the area is known to be Non-Hazardous.
 - ❖ Do not connect more than one main power supply to any one fuse or circuit breaker.