

INSTALLATION INSTRUCTIONS

TEX 120 Series Industrial Power Supply

Table 1

Order Code	Rated Input Voltage	Output Power max.	Output	** Output Voltage Adjustment Range	recommended Circuit breaker (Characteristic C)
TEX 120-112	100 – 240Vac 50 / 60Hz Universal Input	96 Watt	12.0VDC / 8.0A	12.0 – 15.0VDC	5A
TEX 120-124		120 Watt	24.0VDC / 5.0A	24.0 – 28.0VDC	5A

** Adjustable by potentiometer with a screwdriver.

The equipment can be connected to TN-S, TT and IT power systems

Table 2

Input current:	@ Vin=115VAC	@ Vin=230VAC	Power Consumption	@ Vin=115VAC	@ Vin=230VAC
➤ TEX 120-112	2.2A typ.	1.0A typ.	➤ TEX 120-112	114 Watt typ.	112 Watt typ.
➤ TEX 120-124	2.4A typ.	1.2A typ.	➤ TEX 120-124	140 Watt typ.	136 Watt typ.

Table 3

Operational Input Voltage	AC: 85Vac – 264Vac, 50 / 60Hz. DC: 85Vdc* – 375Vdc (*Observe derating)
Operating temperature range: Natural Air Convection Cooling	-40°C – +85°C max (Atex: -40°C - +70°C) (*Observe derating) -40°F – +185°F max (Atex: -40°F - +158°F) (*Observe derating)
Output Power Derating:	above +60°C → 2%/K above 140°F → 2%/K
Storage temperature range:	-40°C – +85°C max -40°F – +185°F max
Parallel Operation:	Only possible with external decoupling diode.
Connectors on the user side: (see Fig. 2 & Fig. 3)	Input Cable Assembly: See Fig.2 (Tracopower P/N: TEX-IP-ASSY, 3 x 1.3mm ²) Input Connector: Binder Circular Connector Series 693: 99-4222-14-04 Output Cable Assembly: See Fig.3 (Tracopower P/N: TEX-OP-ASSY, 7 x 0.8mm ²) Output Connector: Binder Circular Connector Series 693: 99-4217-160-07
Wiring: Material → Copper Temp: -40°C – +125°C (-40°F – + 257°F)	Input: 3 x 0.8mm ² – 2mm ² max (AWG 18 – AWG 14) (1 x Live; 1 x Neutral; 1 x Protective Earth) Output: 7 x 0.8mm ² – 1.3mm ² max (AWG18– AWG 16) (3 x +V _{out} ; 3 x -V _{out} ; 1 x Protective Earth). Input: TEX-IP-ASSY Cord Diameter = 10 – 12mm / Output: TEX-OP-ASSY Cord Diameter = 12 – 14mm
Case protection:	IP67 (according to IEC 60529), NEMA 6P, UL50 4X
Case material:	Die-Cast Aluminium (chassis and cover)

Output Voltage adjustment:

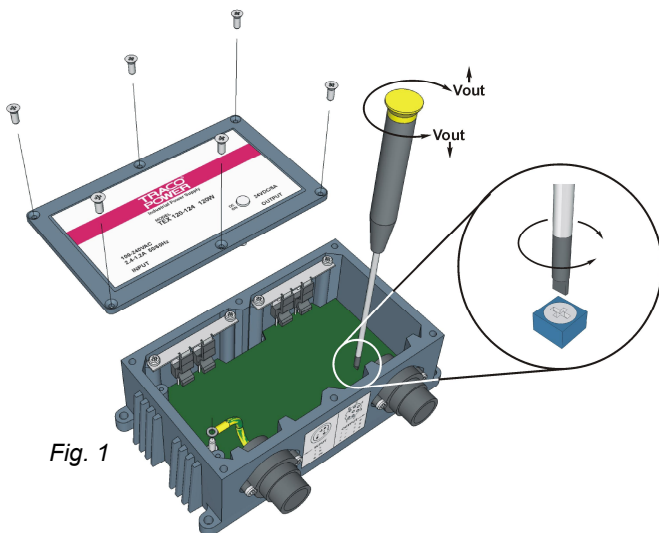


Fig. 1

Note: The integrity of the seal cannot be guaranteed once the cover has been removed in the field!

To adjust the output voltage, the case cover must be removed. Carefully loosen and remove all six screws, then remove the cover. The output voltage of the unit can be adjusted by turning the potentiometer screw, using an insulated screwdriver. By turning the screw clockwise (cw) the output voltage will increase; by turning the screw counter-clockwise (ccw), the output voltage will decrease. The output voltage level should only be adjusted with the output connected to a load, (similar to the load used in the application). After adjusting the output voltage to the required value, the case must be carefully reassembled. Place the cover over the case and ensure that the rubber-sealing gasket is undamaged, and is correctly positioned. Secure the lid with the six screws. Tighten the screws gradually, moving diagonally from one to another. The recommended tightening torque is 0.6Nm (5.310lb-in).

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 datasheet, which can be downloaded, from our website: <http://tracopower.com/products/tex120.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. Normally, live components cannot be touched, but while adjusting the output voltage live components can be touched. 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 wires must be sufficiently fused.
 - ❖ Degree of protection I to IEC536. The non-fused protective earth connection must be connected to the FG terminal (Protection Class I).
 - ❖ 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 until at least 5 minutes after it has been disconnected from the mains on all poles.**
 - ❖ Class I Equipment (Chassis earthed)
 - ❖ Do not operate voltage adjustment when an explosive atmosphere may be present
 - ❖ Do not disconnect while circuit is alive, unless area is known to be non-hazardous.
 - ❖ 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.

- These power supplies are constructed in accordance with the safety requirements of EN60079-0:2009 & EN60079-15:2010, Ex nA IIC T4 Gc.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- The power input and output cables must NOT touch the enclosure during operation of the equipment.

Only trained personnel may open the power supply. Once the cover is opened, the warranty is void!

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

WARNING: – POTENTIAL ELECTROSTATIC CHARGING HAZARD –

Prevent unintentional contact with a dry cloth.

Do **NOT** clean surfaces with a dry cloth!

Clean **ONLY** with a damp cloth.

Installation Instructions:

- User-side connector/Cable assemblies shown in *Fig. 2 and Fig. 3* on page 3.
- Copper conductors rated min. 60/75C only are to be used.
- Wire size 18-14 AWG only are to be used. (See *Table 3*)
- These devices are intended for installation on industrial machines in accordance with the "Electrical Standard for Industrial Machinery" (NFPA79). Due to the nature of these devices they may not be suitable for installation accordance with the "National Electrical Code" (NFPA70).
- The suitability of the use of flexible cord per CEC, PART I, Rule 4-010, is to be determined by the local inspection authority having jurisdiction. For Hazard Location, this device must be installed within a suitable enclosure.
- This power supply is designed for professional outdoor systems as well as indoor systems. 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 the user may not replace it. 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.
- When no connector is connected to the unit, the connectors shall be sealed with the cover caps to maintain the degree of protection.

Cover cap for Input connector 08-2301-000-000

Cover cap for Output connector 08-2302-000-000

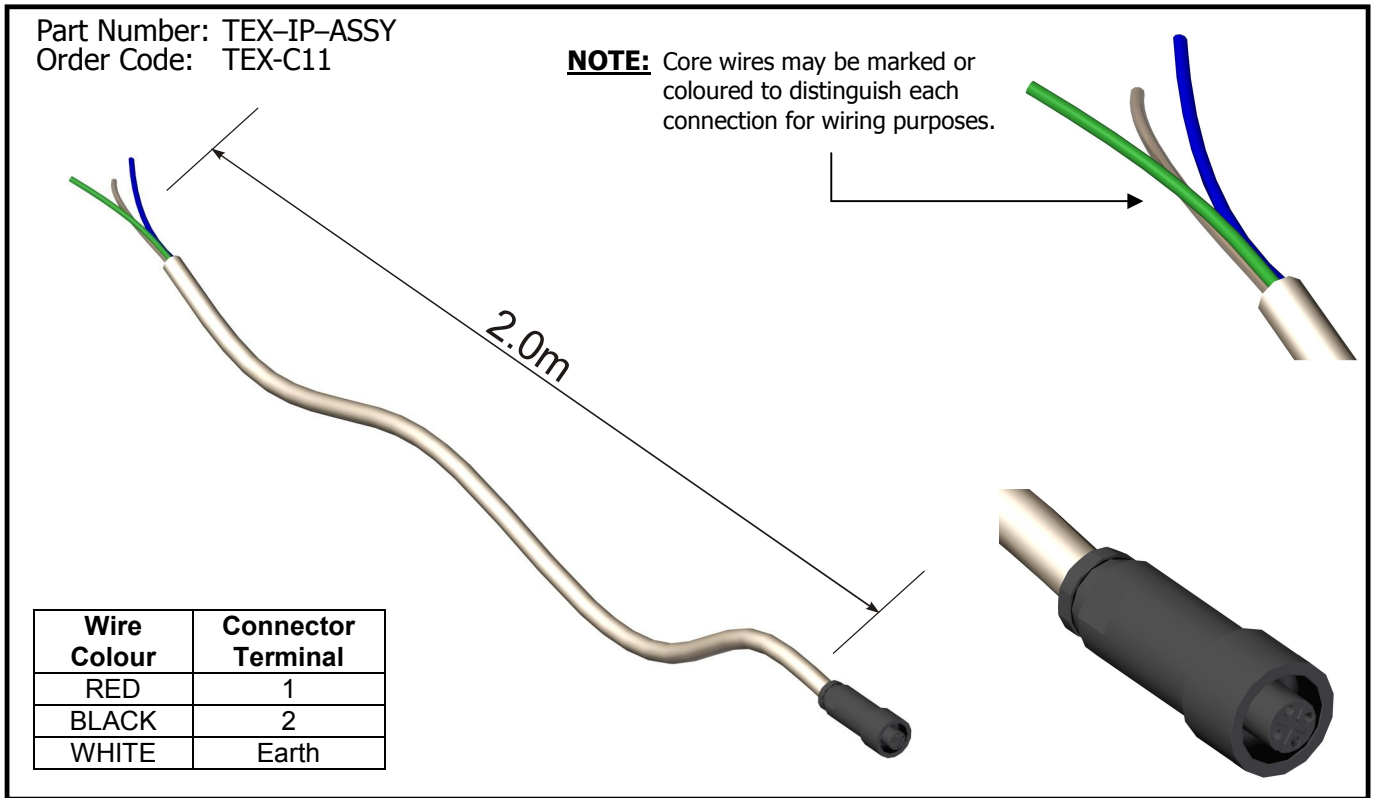


Fig. 2

