INSTALLATION INSTRUCTIONS

TSPC-DCM600 Series Redundancy/Isolation Module.

This module contains two diodes that provide isolation for two power supplies in case one power supply output becomes short circuit.

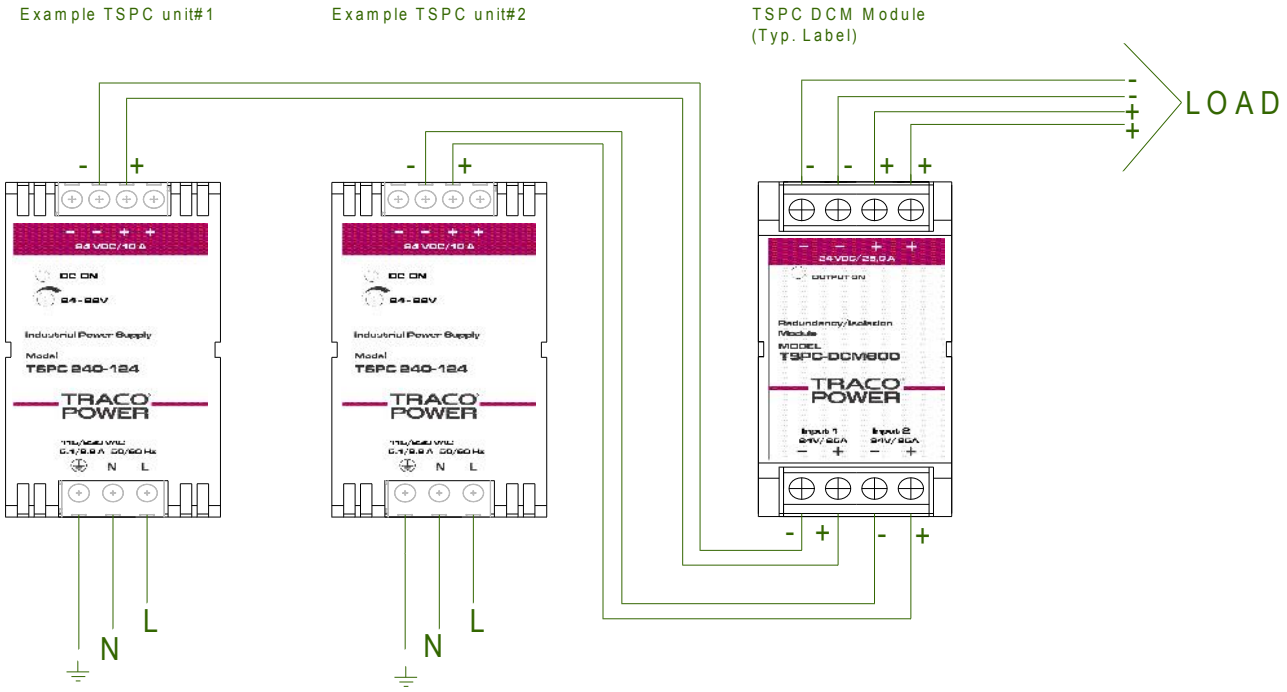
Order Code	* Input Voltage range	** Output	Max. Reverse Voltage [Vdc]	Voltage drop across the diodes/internal losses	
TSPC-DCM600	24Vdc nom.	24Vdc nom / 25A max.	35Vdc	0.75 [Vdc typ.]	1.2 [Vdc max.]

* Note 1 (5 – 28Vdc)

** Note 2 (Output voltage = Input voltage – Load dependent dropout voltage)

Input current:	@ V_{in} = 24Vdc	@ V_{in} = 24Vdc	**Power Consumption**	@ V_{in} = 24Vdc	@ V_{in} = 24Vdc
➢ TSPC-DCM600	20mA min.	25A max.	➢ TSPC-DCM600	0.5Watt min.	28.8 Watt max.

Operational Output Voltage range		5Vdc min. – 28Vdc max.
Operating temperature range: Natural Air Convection Cooling		–25°C up to +70°C max –13°F up to +158°F max
Output Power Derating:		see TSPC Datasheet for power supply de-rating.
Boost Power		see TSPC Datasheet for Boost power operation.
Boost Power Operating temperature range: Natural Air Convection Cooling		–25°C up to +60°C max –13°F up to +140°F max
Storage temperature range:		–25°C up to +85°C max –13°F up to +185°F max
IP Class		IP20
Connections:	Input	2 x 2 Screw type terminal Combi – Typ. Recommended tightening torque 0.5 to 0.6Nm
	Output	4 Screw type terminal Combi – Typ. Recommended tightening torque 0.5 to 0.6Nm
Wire Size: Input & Output		0.5mm^2 – 4.0mm^2 [AWG 20 – AWG 10]
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 office or from the product datasheet, which can be downloaded from our website: http://www.tracopower.com/products/tspc.pdf.
- This isolation module is constructed in accordance with the safety requirements of IEC/EN/UL 60950-1, EN 60204, EN 50178, UL508, IEC/EN/UL 60079-15 (protection type "n" Class I, Zone 2, AEx nA IIC T4 Gc and Class I, Division 2, Group A,B,C,D), EN 61558-2-7 and IEC62103. They are approved to UL and cUL approved in accordance to UL508 (Listed) & UL 60079-15 via CSA. They fulfil the requirements of the Low Voltage Directive (LVD) as well as the ATEX Directive.
- 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 power supply in compliance with national regulations (e.g. VDE0100 and EN50178).
  - By use of stranded wires, all strands must be fastened in the terminal blocks. (Potential danger of contact with the case)
  - All output wires must be rated for the TSPC-DCM600 output current and must be connected with the correct polarity.
  - Sufficient cooling must be ensured.
- ***Never work on the TSPC-DCM600 if power is supplied!*** Risk of electric arcs and electrical shock, severe personal injury or substantial property damage.
- **Warning:** Hazardous voltages and components storing a very substantial amount of energy will be connected to this device during normal operating conditions. However, these are inaccessible. Improper handling may result in an electric shock or serious burns! ***Do not open the TSPC-DCM600 until at least 5 minutes after it has been disconnected from the power supply units on all poles.***
  - Only trained personnel may open the TSPC-DCM600.
  - Do not introduce any objects into the TSPC-DCM600.
  - Keep away from fire and water

Installation Instructions:

- This TSPC-DCM600 is designed for professional indoor systems. In operation the TSPC-DCM600 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 below the power supplies and isolation module.
- To comply with the ATEX directive following installation instructions have to be observed.

1. The Series TSPC power supply units and the TSPC-DCM600 module must be installed in Switch cabinets or protective housing that meet the requirements of EN 60079-15 or if applicable EN 60079-0 (housing protection type min. IP54)
2. The permissible ambient temperature range is -20°C to +70°C [-4°F to 158°F]. Observe load derating above an operating temperature of +40°C [104°F] and at a use at Vin = 85Vac – 100Vac.
3. For installation in switch cabinets or in protective housings, it must be ensured that the stipulated maximum temperatures (Ta) are not exceeded on the TSPC-DCM600.
4. When assembling and maintenance of the power supply pluggable terminals its always must be completely pushed in. In particular the snap-in locking devices at the pluggable terminals are to be examined for correct locking. Terminals with defective snap-in locking devices may not be used.
5. The power supply units are Unit Group II Category 3G components (ex components) as defined by RL 94/9/EG (ATEX 95) Appendix I. A separate conformity on the end-equipment which contains these components evaluation process must be performed.
6. For use / Installation also the requirements defined in EN60079-14 must be observed.

- ***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 TSPC-DCM600 will be recycled environment friendly at the end of its service life.