

## INSTALLATION INSTRUCTIONS

### TML 20 Series Switching Power Supply

Order Code	Output Power max.	Output 1	Output 2	Output 3
TML 20103	14.85 Watt	3.3Vdc / 4500mA		
TML 20105	20 Watt	5.0Vdc / 4000mA		
TML 20107	20 Watt	7.35Vdc / 2730mA		
TML 20109	20 Watt	9.0Vdc / 2230mA		
TML 20112	20 Watt	12.0Vdc / 1670mA		
TML 20115	20 Watt	15.0Vdc / 1340mA		
TML 20124	20 Watt	24.0Vdc / 840mA		
TML 20205	20 Watt	+5.0Vdc / 2000mA	-5.0Vdc / 2000mA	
TML 20212	20 Watt	+12.0Vdc / 830mA	-12.0Vdc / 830mA	
TML 20215	20 Watt	+15.0Vdc / 670mA	-15.0Vdc / 670mA	
TML 20512	20 Watt	+5.0Vdc / 2800mA	+12.0Vdc / 250mA	-12.0Vdc / 250mA
TML 20515	20 Watt	+5.0Vdc / 2800mA	+15.0Vdc / 200mA	-15.0Vdc / 200mA

Add C behind the order code for chassis mounting version with screw type terminals.

Input Voltage Range:	90 – 264Vac / 47 – 440Hz 100 – 375Vdc	Load Derating:	all models: above +50°C of 3.75%/°C
Input current:	0.400A typ at Vin = 115VAC 0.270A typ at Vin = 230VAC	Terminal for wiring:	PCB mounting with solder pin's or Screw type terminal: Wires 1.5mm <sup>2</sup> max Recommended tightening torque 0.5 to 0.7Nm (4.5 to 6.2lb.in.)
Output voltage accuracy	±2.0%	Case material:	Plastic Resin + Fibreglas UL 94V-0 flammability rating
Operating temperature range:	-25°C - +71°C max		
Case Temp.	+95°C max.		

#### Safety Instructions:

- Before installation read these instructions carefully and completely. This installation instruction cannot claim for every possible example of installation, operation or maintenance. Further information's are obtainable from your local distributor office or from the product data sheet which can be downloaded from the Internet at <http://tracopower.com>.
- The power supplies are constructed in accordance with the safety requirements of IEC/EN/UL60950-1. They fulfil the requirements of the Low Voltage Directive (LVD) and carries the CE-mark. They are UL and cUL approved in accordance with UL60950-1 (recognised).
- Before any installation, maintenance or modification work ensure that the main switch is switched off and prevented from being switched on again. In case of non-observance touching at any alive components or improper dealing with this power supply can result in death, severe personal injury or substantial property damage. The successful and safe operation is dependent on proper storage, handling, installation and operation.
- Compliance with the relevant national regulations (in the USA, Europe and the 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.
  - ❖ 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.
- ❖ Keep away from fire and water

- **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!

#### 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. Observe power derating. (see data sheet)
- **Recycling:** The unit contains elements which are suitable for recycling, and components which need special disposal. You are therefore requested to make sure that the power supply will be recycled by the end of its service life.