

# INSTALLATION INFORMATION

## TMM 60 Series

## AC/DC POWER MODULE

Order Code	Order Code	Output Power max.	Output
TMM 60105	TMM 60105C	51 Watts	5.1Vdc / 1000mA
TMM 60112	TMM 60112C	60 Watts	12Vdc / 5000mA
TMM 60115	TMM 60115C	60 Watts	15Vdc / 4000mA
TMM 60124	TMM 60124C	60 Watts	24Vdc / 2500mA
TMM 60148	TMM 60148C	60 Watts	48Vdc / 1250mA

Input Voltage Rated:	100-240Vac 60-50Hz	Terminal for Wiring:	PCB mounting with solder pin's, Screw type terminal: Wires 1.5mm <sup>2</sup> max. Recommended tightening torque(Used Copper Conductors only, 60/75°C): 0.5 to 0.6Nm (4.4 to 5.3lb.in.)
Input Current:	1.5A-0.8A		
Humidity / Storage /Transportation Temperature:	95% rel. H /40°C – +95°C max.		
Operation Temperature Range:	-40°C – +80°C max. (with derating)		
Internal Fuse:	T6.3A 250VAC min.	Case Material:	Plastic Resin, UL 94V-0 flammability rating

### 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 is obtainable from your local distributor office or from the product datasheet which can be downloaded from the Internet at <http://www.tracopower.com/>
- The power supplies are constructed in accordance with the safety requirements of IEC/EN/UL/UL62368-1(60950-1), UL 508 and CSA C22.2 No 107.1-01. They fulfil the requirements of the Low Voltage Directive (LVD) and carries the CE-mark. They are UL and cUL approved in accordance to ANSI/AAMI ES60601-1, UL62368-1(60950-1), UL 508 and CSA C22.2 No107 1-01 (recognised). The equipment has not been evaluated according to IEC60601-1-2. The EMC assessment shall be conducted for the end system configuration.
- Before an 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 of 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
  - The equipment for installation in a Pollution Degree 2 environment.
- The classification of the equipment is: (For ANSI/AAMI ES60601-1)
  - Class II
  - No applied parts
  - Not AP or APG type
  - Protection class IPX0
  - Not intended for use in the presence of flammability anaesthetic mixture with air or with oxygen or nitrous oxide
  - Intended for continuous operation
- **Never work on the power supply if power is supplied!** Risk of electric arcs and electrical shock which can cause death, severe personal injury of substantial property damage.
- **Warning:**
  1. 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!
  2. The switching power supply is intended used for medical electrical equipment. There are no parts in this equipment, not suitable for direct patient contact!

(ANSI/AAMI ES60601-1)

3. Any inspection and maintenance tasks must be carried out only by authorized by the manufacturer service personnel. (ANSI/AAMI ES60601-1)
4. Do not modify this equipment without authorization of the manufacturer. (ANSI/AAMI ES60601-1)
5. Do not open this equipment without authorization of the manufacturer. (ANSI/AAMI ES60601-1)
6. CAUTION:DOUBLE POLE/NEUTRAL FUSING
7. CAUTION:FOR USE IN A CONTROLLED ENVIRONMENT. REFER TO MANUAL FOR ENVIRONMENTAL CONDITIONS. (ANSI/AAMI ES60601-1)

#### ◆Avertissement:

1. Ce bloc d'alimentation contient une grande tension et des composants puissants pendant l'utilisation normale. Une mauvaise manipulation peut causer un choc électrique ou des brûlures graves !
2. Ce bloc d'alimentation est à utiliser dans l'équipement électrique médical. Il faut éviter son contact direct avec le patient ! (ANSI/AAMI ES60601-1)
3. Toute inspection et maintenance doit être assurée par agent autorisé du fournisseur.
4. Ne modifiez pas cet équipement sans autorisation du fournisseur.
5. N'ouvrez pas cet équipement sans autorisation du fournisseur.
6. ATTENTION: FUSIBLE BIPOLAIRE/NEUTRE
7. ATTENTION: A UTILISER DANS UN ENVIRONNEMENT SOUS CONTROLE. VOIR MANUEL POUR LES CONDITIONS ENVIRONNEMENTALES. *N'ouvrez pas le bloc d'alimentation.*

#### 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.
- 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.
- The correct mounting position for optimal cooling performance must be observed. Observe power derating (see datasheet).
- Maximum Operation of Temperature:

	85V	105V	115V	264V
100%	60	60	60	60
50%	75	75	75	75
25%	80	80	80	80

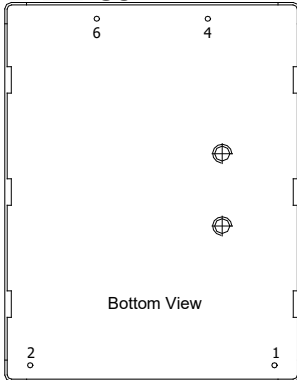
**Do not open the power supply.**

## Wiring terminals diagram:

- PCB Mounting Version



UL508 recognition mark



Pin Connections

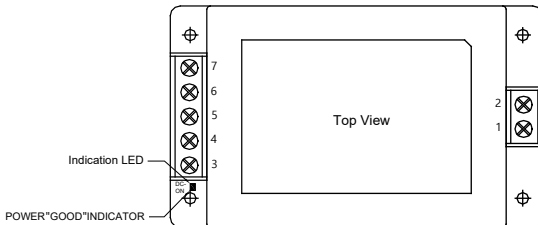
Pin	Function
1	AC (N)
2	AC (L)
4	+Vout
6	-Vout

- Chassis Mounting Version



UL 508 Listing

Pin Connections



Pin	Single
1	AC (N)
2	AC (L)
3	NC
4	+Vout
5	NC
6	-Vout
7	NC

- DIN-Rail Mounting Kit

