

INSTALLATION INSTRUCTIONS

TOP 60 Series Switching Power Supply

MODEL	Max. Power	Output #1			Output #2		Output #3	
		V	I*	or I**	V	I	V	I
TOP 60105	55W	+5V	11A	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
TOP 60112	60W	+12V	5A	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
TOP 60115	64W	+15V	4.3A	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
TOP 60124	64W	+24V	2.7A	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
TOP 60148	64W	+48V	1.35A	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
TOP 60252	55W	+5V	6A	8A	+12V	3.0A	(N/A)	(N/A)
TOP 60254	55W	+5V	6A	8A	+24V	1.5A	(N/A)	(N/A)
TOP 60522	55W	+5V	6A	8A	+12V	3.0A	-12V	0.5A
TOP 60316	37.5W	+3.3V	6A	8A	+5.2V	3.0A	+12V	0.5A
TOP 60317	47.5W***	+5V	6A	8A	+3.3V	1.5A	+12V	0.5A
TOP 60533	55W	+5V	6A	8A	+15V	2.4A	-15V	0.5A
TOP 60318	55W	+5V	6A	8A	+24V	1.5A	-12V	0.5A

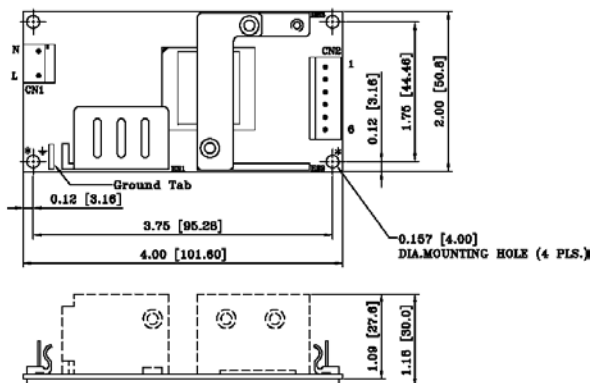
* Max. Current at convection

** Max. Current at forced air (can be 8A at 5 CFM forced air provided by user)

*** Max. 37.5 W when unit without forced air.

Input Voltage Range:	90 – 264Vac / 47 – 63Hz	Terminal for wiring:	PCB mounting with solder pin's or Screw type terminal: Wires 1.5mm ² max Recommended tightening torque 0.5 to 0.7Nm (4.5 to 6.2lb.in.)
Input current:	1,3A rms at Vin = 100Vac 0.7A rms at Vin = 240Vac		
Earth Leakage Current:	150µA at Vin = 264Vac and 63Hz		
Output voltage accuracy	±2.0% Single	Case material:	Plastic Resin + Fibreglas UL 94V-0 flammability rating
	±3% / ±5% Dual Output		
	±3% / ±5% / ±4% Triple Output		
Operating temperature range:	-25°C - +70°C max.		

Operating temperature range:	-10°C – +70°C max at nominal load, above +50°C see derating below
Natural Air Convection Cooling	14°F – +158°F max at nominal load, above +122°F see derating below
Output Power Derating:	above +50°C → 2.5%/°C up to +70°C above 122°F → 1.4%/°F up to +158°F
Storage temperature range:	-40°C – +85°C max -40°F – +185°F max
Connectors:	Input connector: mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminals Output connector: mates with Molex housing 09-50-3061 and Molex 2878 series crimp terminals Use: Strand / solid copper wire Wire temperature specification: 70°C minimum (>70°C) Wire material: Copper



Model	PIN					
	1	2	3	4	5	6
TOP 60105; TOP 60112; TOP 60115	+V1	+V1	RTN	RTN	N.C.	N.C.
TOP 60124; TOP 60148	+V1	+V1	RTN	RTN	N.C.	+V2
TOP 60252; TOP 60254	+V1	+V1	RTN	RTN	-V3	+V2
TOP 60522, TOP 60533, TOP 60318	+V1	+V1	RTN	RTN	+V3	+V2
TOP 60316, TOP 60317	+V1	+V1	RTN	RTN	+V3	+V2

- Dimensions shown in inches [mm]
- Tolerances 0,02 [0.5] maximum
- Ground tap is 0.25 [6.35] x 0.032 [0.8]
- To ensure compliance with conducted noise class B, connect the two with "*" marked mounting holes with metallic standoffs to chassis.
- Weight: app. 205gr (app. 0,45lbs)

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 is a building-in component and 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) of EN 60950-1/IEC 60950-1, UL 60950-1, 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).
 - ❖ The creepage distance, clearance and thickness of insulation into a certain primary and ground as well as primary and secondary circuits shall comply with the current requirement of EN 60950-1/IEC 60950-1, UL 6950-1.
 - ❖ By use of stranded wires, all strands must be fastened in the terminal blocks.
 - ❖ Power supply and mains cables must be sufficiently fused.
 - ❖ Touch current shall not be higher as 3.5 mA
 - ❖ All output wires must be rated for the power supply output current and must be connected with the correct polarity.
 - ❖ This unit power supply must be connected to the safety grounding before using.
 - ❖ Sufficient cooling must be ensured.
 - ❖ The power supply is intended to be used in altitudes up to 3000M
 - ❖ 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.