

# TDK-Lambda

## SC120PW Model Series INSTALLATION MANUAL

This manual contains important information regarding the proper installation and operation of the power supply inside the host equipment.

### GENERAL SAFETY INSTRUCTIONS

This power supply is designed for use within other equipment or enclosures. For safe installation and operation of this product, carefully follow the instructions below:

1. Do not install, test or operate this product near water, and do not spill any liquid on it.
2. Do not operate this product unless it is in a secure position.
3. This product must be installed in a restricted access location accessible to authorized competent personnel only.
4. This product must be reliably earthed and professionally installed in accordance with the prevailing electrical wiring regulations and safety standards.
5. After disconnecting the AC source, allow 5 minutes before touching the unit to allow capacitors within the unit to discharge.
6. Heat sinks within this power supply are live and must not be touched when the unit is in operation.
7. All four 3.5 mm diameter mounting holes at the corners of the unit must be used to secure the power supply. To conform to EMI specifications, solder pads located around the mounting holes on the underside of the pcb must make electrical connection with the chassis. Washers and other mounting hardware must not exceed 6mm in diameter.
8. A minimum of 4.2mm creepage and 3.8mm clearance must be maintained between the power supply and the equipment chassis. If the mounting spacer height is less than 8mm, basic insulation must be provided between the power supply and the equipment chassis.
9. The output power taken from the power supply must not exceed the rating stated on the power supply label. For convection cooling, ensure that adequate ventilation is provided to allow air to circulate naturally.
10. All servicing, repair and testing of this product must be carried out by competent personnel who are fully conversant with the hazards of AC line operated equipment and with the particular dangers associated with switch mode power supplies.
11. Dangerous voltages are present within the power supply. Power must be disconnected before servicing.

### FUSING

An internal T3.15A, 250V, time lag, HBC fuse is provided. For continued protection against risk of fire, replace only with same type and rating as that fitted.

**Caution:** Changing the fuse is to be performed by qualified service personnel only.

### SAFETY AGENCY APPROVALS

The CE Marking, when applied to the product, indicates conformance to the requirements outlined in the European Union's Low Voltage Directive (72/23/EEC) as amended by the CE Marking directive (93/68/EEC) in that the product complies with EN60950-1.

Rev. B  
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SC120PW Series

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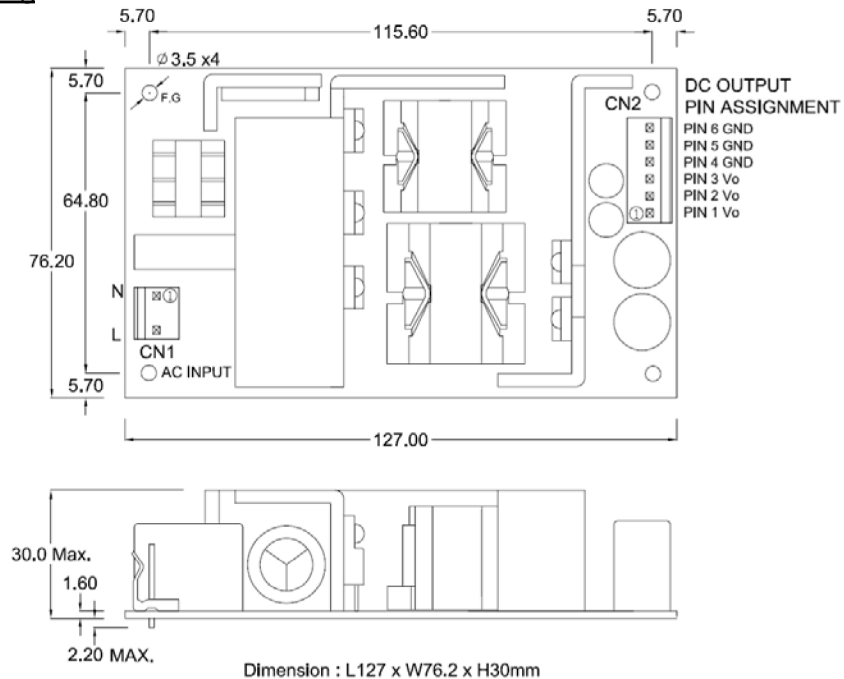
SPECIFICATIONS	
Marked Input	100–240VAC, 4.0A, 50/60Hz
Operating Range	90–264VAC (Wide range), 47–63Hz
Inrush Current	<50A peak @ 230VAC, cold start @ 25°C
Power Factor Correction	Meets EN61000-3-2 (active – 0.9 at 230VAC full load)
Output Power	120W convection cooled
Load and Line Regulation	+/-3%
Ripple & Noise	1% peak to peak measured across 10 $\mu$ F & 0.1 $\mu$ F capacitor on load cables 6" from power supply
Over Voltage Protection	110-130%, cycle AC to reset
Over Current Protection	105 – 120% (typical)
Operating Temperature Range	0 to +40°C, derate to 50% load from 40 to 60°C
Storage Temperature Range	-20°C to +85°C
Over Current Protection	Short circuit protection, 200%
Efficiency	Typically 70% at full load at nominal AC line
AC input mating connector (CN1)	Molex 09-50-8031, Pins 08-52-0113
DC output mating connector (CN2)	Molex 09-50-8061, Pins 08-52-0113
Warranty	1 year

## Connections

AC Input Connection	
CN1	Function
1	N Neutral
3	L Line

DC Output Connection	
CN2	Function
1 – 3	+V out
4 – 6	Common

## Outline Drawing



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