

# Switching Power Supply Enclosed Type SPPC 50W Series Single Output

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- Universal AC input range
- Miniature size, long life, and high power density, efficiency and reliability
- Operating altitude up to 5,000m
- Easy assembly from top side
- Withstand 300VA surge input for 5 sec.
- Output protections: OLP/OVP/SCP
- Wide operating ambient temperature (-25°C~70°C), 100%@50°C, 70%@70°C
- PCB soldering side with conformal coating

## Product Description

Enclosed Switching Power Supply for AC DC and DC DC power requirements. The new SPPC family provides flexible OEM power solutions for industrial control and automation applications,

which in the case of the SPPC 50W ranges from 5V to 48V. All the range carries full certification offering a wide range of universal input and screw terminal connections.

## Ordering Key

**SP PC XX 50 1**

Power supply model \_\_\_\_\_  
 Panel mounted \_\_\_\_\_  
 Output voltage \_\_\_\_\_  
 Output power \_\_\_\_\_  
 Input type (single phase) \_\_\_\_\_

## Approvals



## Output Performances

MODEL NO.	INPUT VOLTAGE	OUTPUT VOLTAGE	VOLTAGE ADJ	RATED CURRENT	VOLTAGE ACCURACY
<b>Single Output Models</b>					
<b>SPPC 550 1</b>	90VAC~264VAC	5V	-5%~+10%	8 A	±3.0%
<b>SPPC 1250 1</b>	90VAC~264VAC	12V	-5%~+10%	4.2 A	±3.0%
<b>SPPC 1550 1</b>	90VAC~264VAC	15V	-5%~+10%	3.4 A	±3.0%
<b>SPPC 2450 1</b>	90VAC~264VAC	24V	-5%~+10%	2.2 A	±3.0%
<b>SPPC 4850 1</b>	90VAC~264VAC	48V	-5%~+10%	1.12 A	±3.0%

## Output Data

<b>Current range</b>		<b>Line regulation</b>	± 0.5%
SPPC 550 1	0~8A	<b>Load regulation</b>	± 1.0%
SPPC 1250 1	0~4.2A	<b>Turn on time (full resistive load)</b>	<2.0S (115VAC input, Full load) <1.5S (230VAC input, Full load)
SPPC 1550 1	0~3.4A	<b>Temperature coefficient</b>	±0.03%/°C
SPPC 2450 1	0~2.2A	<b>Hold up time</b>	>20mS (115VAC input, Full load); >50mS (230VAC input, Full load)
SPPC 4850 1	0~1.12A	<b>Overshoot and undershoot</b>	<5.0%
<b>Ripple and noise (-25°~70°C)</b>			
*Note			
SPPC 550 1	<80mV		
SPPC 1250 1	<120mV		
SPPC 1550 1	<120mV		
SPPC 2450 1	<200mV		
SPPC 4850 1	<200mV		

\* Note: Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 10uF parallel capacitor.

## Input Data All specifications are at nominal values, full load, 25°C unless otherwise noticed

<b>Voltage range</b>	90VAC~264VAC 27~370VDC	<b>AC current</b>	<1.5A
<b>Frequency range</b>	47Hz~63Hz	<b>Inrush current (Typical)</b>	<20A@115VAC <40A@230VAC Cold start
<b>Efficiency</b>		<b>Leakage current</b>	
SPPC 550 1	115VAC, 79%; 230VAC 80%	<b>Input - Output</b>	<0.25mA
SPPC 1250 1	115VAC, 84%; 230VAC 85%	<b>Input - PG</b>	<0.75mA
SPPC 1550 1	115VAC, 85%; 230VAC 86%		
SPPC 2450 1	115VAC, 86%; 230VAC 87%		
SPPC 4850 1	115VAC, 88%; 230VAC 89%		

## Controls and Protection

<b>Overload (OLP)</b>	105%~150% of rated output current, constant power, auto recovery.	<b>Over voltage (OVP)</b>	105%~150% of rated output voltage, Constant Voltage.
<b>Output short circuit (SCP)</b>	Long-term mode, auto recovery.		

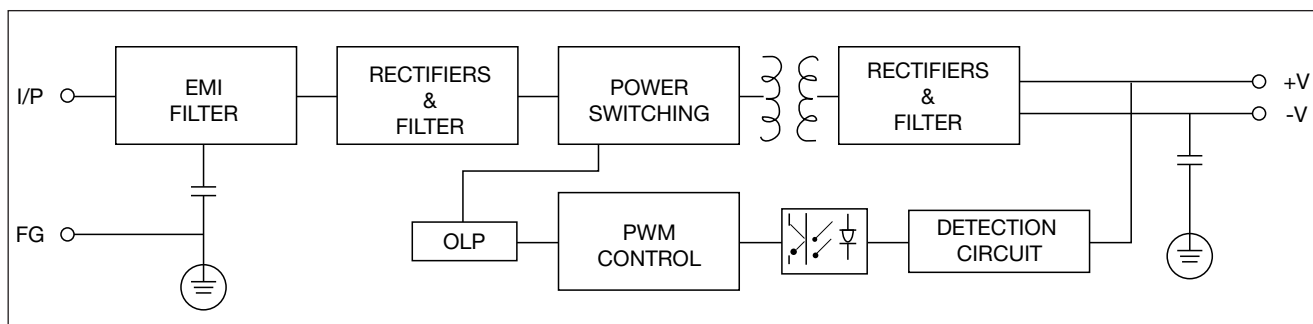
## General Data All specifications are at nominal values, full load, 25°C unless otherwise noticed

<b>Ambient temperature</b>	-25°C to +70°C	<b>MTBF (MIL-HDBK-217F)</b>	More than 200.000 hrs
<b>Relative humidity</b>	20 - 90% RH	<b>Case material</b>	Metal
<b>Storage</b>	-40°C to +85°C; 10% ~ 95% RH no condensing.	<b>Dimensions LxWxD</b>	99 x 82 x 35 mm
<b>Cooling</b>	Free air convection	<b>Packing</b>	40 PCS/CTN. G.W: 12.8kgs 0.043CBM
<b>Insulation resistance I/O</b>	≥100M ohms		

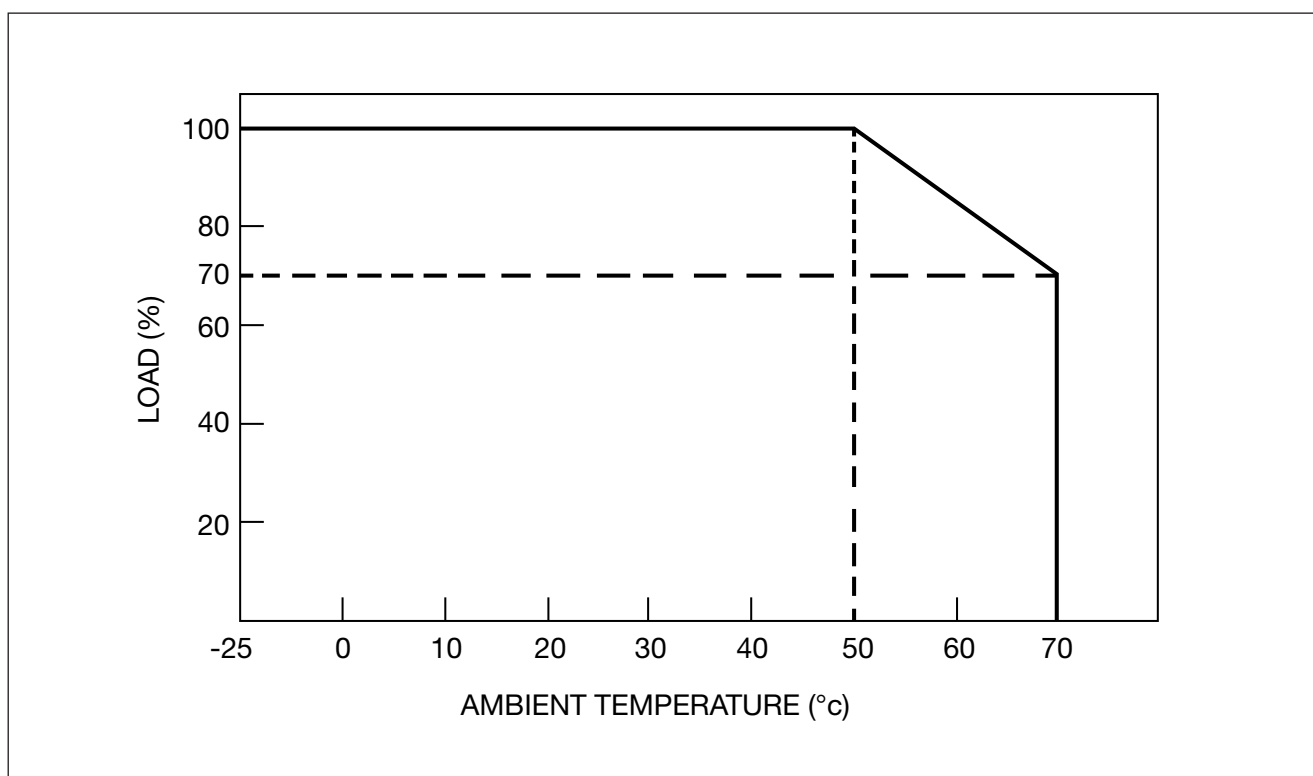
## Norms and Standard

<b>Safety standard</b>	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	<b>Harmonic current</b>	Compliance to EN61000-3-2, 3
<b>Withstand voltage</b>	Primary-Secondary: 3.0kVAC; ≤10mA. Primary-PG: 1.5kVDC; ≤10mA. Secondary PG: 0.5kVDC	<b>EMC emission</b>	Compliance to EN55022, EN55024 ClassB
		<b>EMC immunity</b>	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV55024, EN61000-6-2 heavy industry level.

## Block Diagram



## Derating Curve



## Mechanical Drawing

