# Switching Power Supply Enclosed Type SPPC 35W Series Single Output





#### **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 35W ranges from 5V to 24V. All the range carries full certification offering a wide range of universal input and screw terminal connections.

- 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, 60%@70°C
- PCB soldering side with conformal coating

# Ordering Key



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
Single Output Models					
SPPC 535 1	90VAC~264VAC	5V	-5%~+10%	6 A	±3.0%
SPPC 1235 1	90VAC~264VAC	12V	-5%~+10%	3 A	±3.0%
SPPC 2435 1	90VAC~264VAC	24V	-5%~+10%	1.5 A	±3.0%

#### **Output Data**

Current range		Line regulation	± 0.5%
SPPC 535 1	0~6A	Load regulation	± 1.0%
SPPC 1235 1	0~3A	Turn on time (full resistive load)	<1.0S (230VAC input,
SPPC 2435 1	0~1.5A		Full load)
Ripple and noise *Note		Temperature coefficient	±0.03%/°C
SPPC 535 1	<50mV 0°~70°C; <80mV -25°C~0°C	Hold up time	>20mS (230Vac input, Full load); >10mS (120Vac input, Full load)
SPPC 1235 1	<80mV 0°~70°C; <180mV -25°C~0°C	Overshoot and undershoot	<5.0%
SPPC 2435 1	<120mV 0°~70°C; <200mV -25°C~0°C		

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

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

Voltage range	90 ~ 264VAC 127 ~ 370VDC	Inrush current (cold start) Leakage current	<50A@230VAC, Cold start
Frequency range	47-63Hz	Input-Output	<0.25mA
Efficiency		Input-PG	<0.75mA
SPPC 535 1	115VAC, 79%; 230VAC 80%	AC current (max.)	<1A (max)
SPPC 1235 1	115VAC, 83%; 230VAC 84%		
SPPC 2435 1	115VAC, 86%; 230VAC 87%		

## **Controls and Protection**

Overload	105%~150% of rated output current, constant power, auto recovery.	Output short circuit	Long-term mode, auto recovery.
Over voltage	105%~150% of rated output voltage, constant voltage.		

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

Ambient temperature	-25°C to +70°C	Switching Frequency	65kHz
Relative humidity	20%~90%RH	MTBF (MIL-HDBK-217F)	More than 200.000 hrs
Storage	-40°C to +85°C;	Case material	Metal
	10% ~ 95% RH	Dimensions LxWxD	101.6 x 63.5 x 33 mm
	no condensing.	Packing	60 PCS/CTN.
Cooling	Free air convection		G.W: 15.18kgs
Insulation resistance I/O	≥100M ohms		0.06CBM

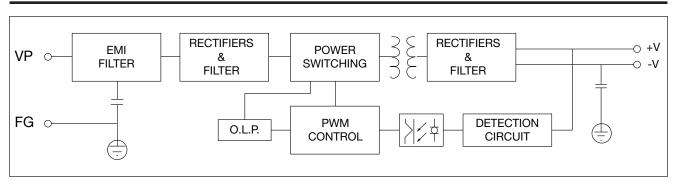
### Norms and Standard

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

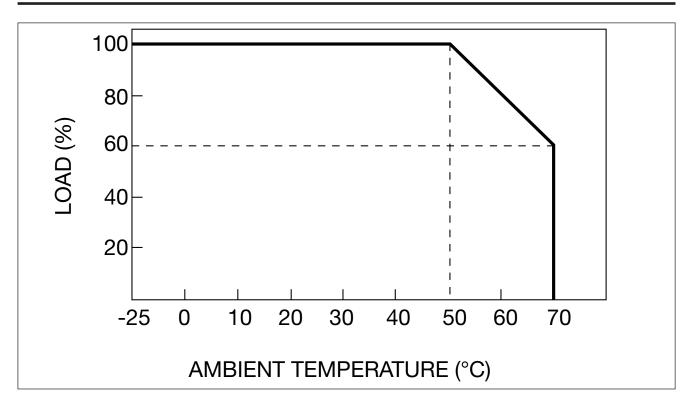
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#### **Block Diagram**



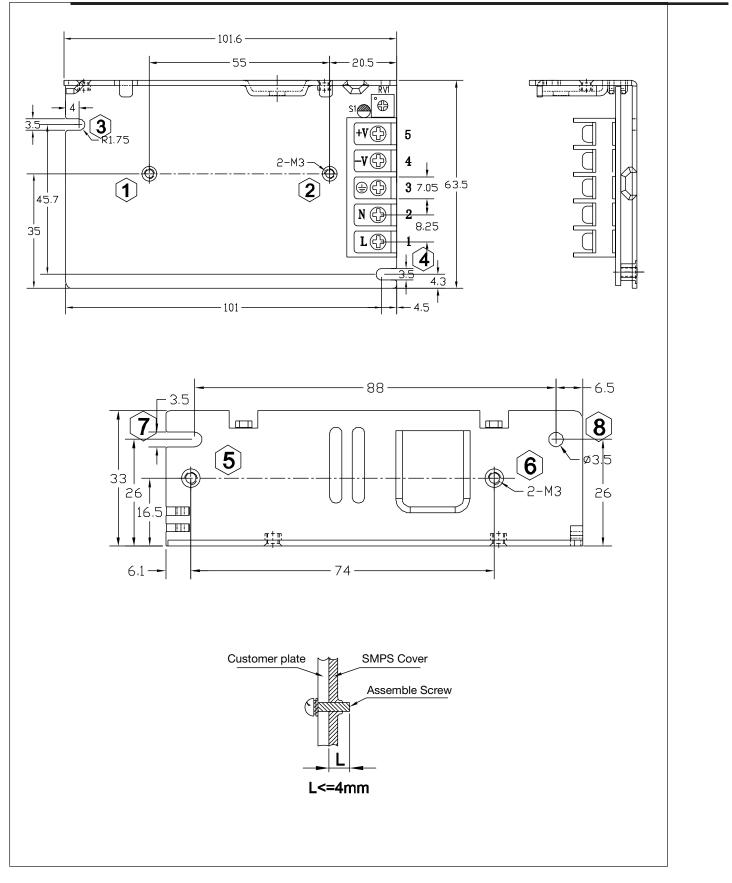
# **Derating Curve**



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## **Mechanical Drawing**



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# **Mouser Electronics**

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