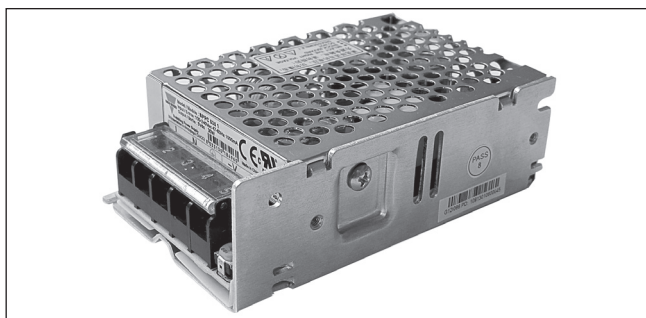


# Switching Power Supply Enclosed Type SPPC 35W Series Single Output

CARLO GAVAZZI



- 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

## 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.

## Ordering Key

**SP PC XX 35 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 535 1</b>	90VAC~264VAC	5V	-5%~+10%	6 A	±3.0%
<b>SPPC 1235 1</b>	90VAC~264VAC	12V	-5%~+10%	3 A	±3.0%
<b>SPPC 2435 1</b>	90VAC~264VAC	24V	-5%~+10%	1.5 A	±3.0%

## Output Data

### Current range

<b>SPPC 535 1</b>	0~6A
<b>SPPC 1235 1</b>	0~3A
<b>SPPC 2435 1</b>	0~1.5A

### Ripple and noise \*Note

<b>SPPC 535 1</b>	<50mV 0°~70°C; <80mV -25°C~0°C
<b>SPPC 1235 1</b>	<80mV 0°~70°C; <180mV -25°C~0°C
<b>SPPC 2435 1</b>	<120mV 0°~70°C; <200mV -25°C~0°C

### Line regulation

± 0.5%

### Load regulation

± 1.0%

### Turn on time (full resistive load)

<1.0S (230VAC input, Full load)

### Temperature coefficient

±0.03%/°C

### Hold up time

>20mS (230Vac input, Full load);  
>10mS (120Vac input, Full load)

### Overshoot and undershoot

<5.0%

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

## Controls and Protection

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

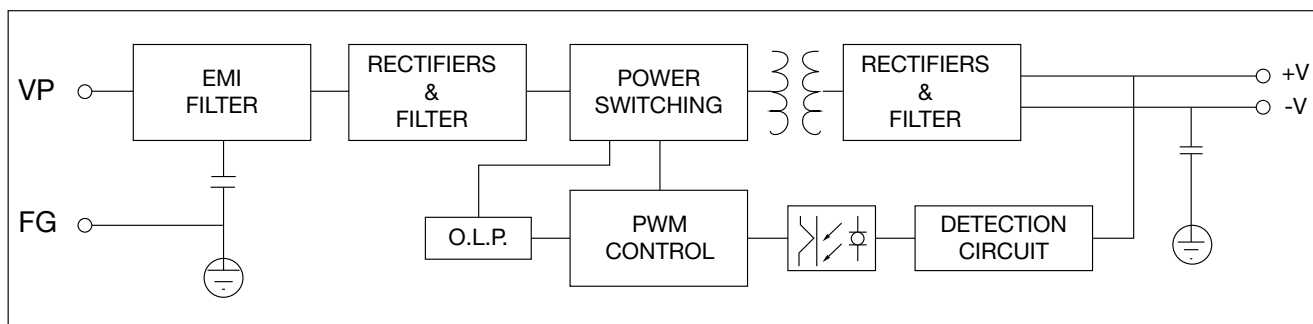
## General Data All specifications are at nominal values, full load, 25°C unless otherwise noticed

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

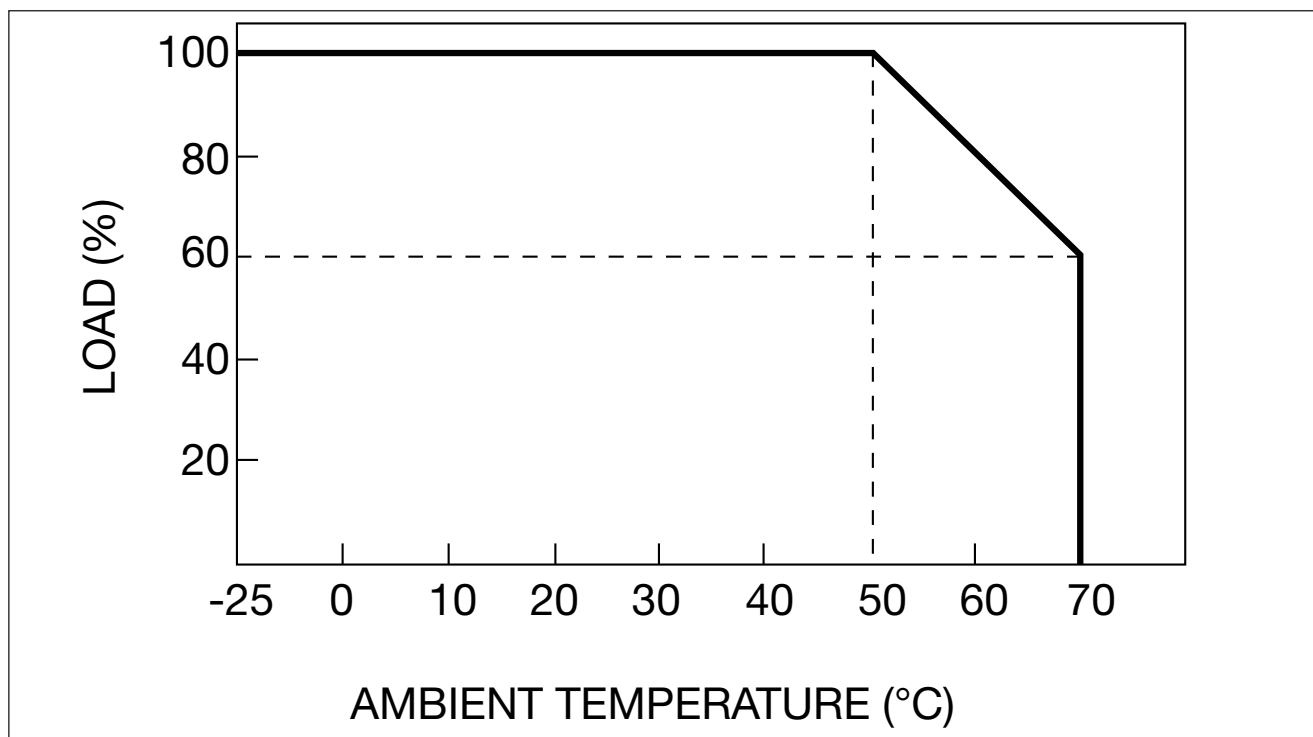
## Norms and Standard

<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; EN55024, EN61000-6-2 heavy industry level.

## Block Diagram



## Derating Curve



## Mechanical Drawing

