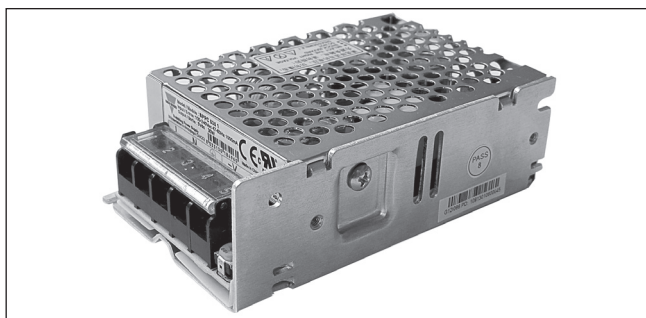


Switching Power Supply Enclosed Type SPPC 35W Series Single Output

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
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

SPPC 535 1

0~6A

SPPC 1235 1

0~3A

SPPC 2435 1

0~1.5A

Ripple and noise *Note

SPPC 535 1

<50mV 0°~70°C;
<80mV -25°C~0°C

SPPC 1235 1

<80mV 0°~70°C;
<180mV -25°C~0°C

SPPC 2435 1

<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

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

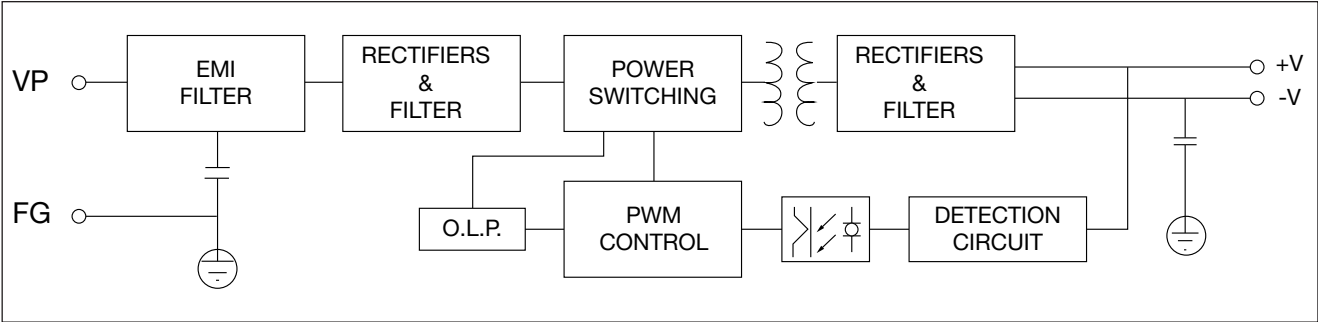
General Data All specifications are at nominal values, full load, 25°C unless otherwise noticed

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; 10% ~ 95% RH no condensing.	Case material	Metal
Cooling	Free air convection	Dimensions LxWxD	101.6 x 63.5 x 33 mm
Insulation resistance I/O	≥100M ohms	Packing	60 PCS/CTN. G.W: 15.18kgs 0.06CBM

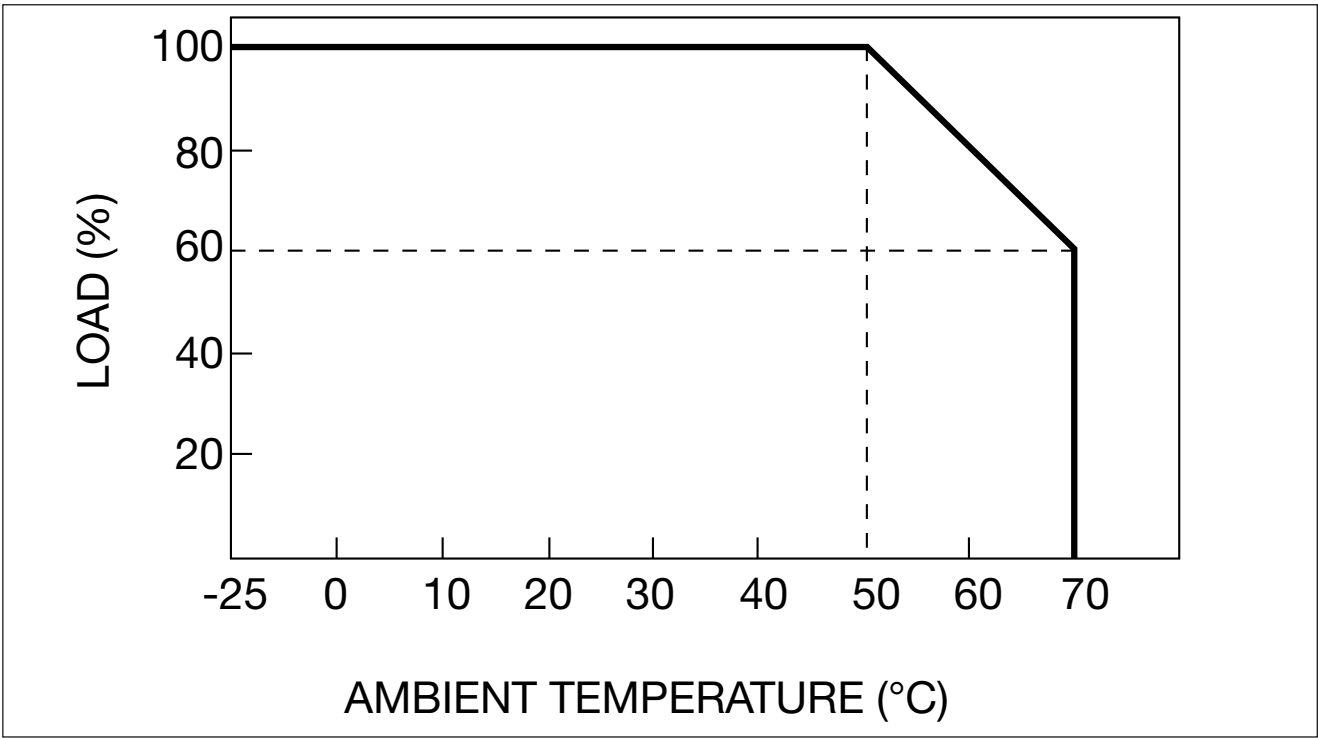
Norms and Standard

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

Block Diagram



Derating Curve



Technical drawing of a terminal block assembly, showing front and side views with dimensions and callouts.

Front View Dimensions:

- Overall width: 101.6
- Distance from left edge to center of terminal 1: 55
- Distance from center of terminal 1 to center of terminal 2: 20.5
- Distance from center of terminal 2 to right edge: 20.5
- Overall height: 63.5
- Distance from bottom edge to center of terminal 1: 45.7
- Distance from bottom edge to center of terminal 2: 35
- Distance from bottom edge to center of terminal 3: 4.3
- Distance from bottom edge to center of terminal 4: 3.5
- Distance from bottom edge to center of terminal 5: 4.5

Callouts and Features:

- 1: Terminal 1 (Positive)
- 2: Terminal 2 (Negative)
- 3: Terminal 3 (Neutral)
- 4: Terminal 4 (Ground)
- 5: Terminal 5 (Ground)
- 6: Terminal 6 (Ground)
- 7: Terminal 7 (Ground)
- 8: Terminal 8 (Ground)
- 9: Terminal 9 (Ground)
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- 99: Terminal 99 (Ground)
- 100: Terminal 100 (Ground)

