

Switching Power Supply Enclosed Type SPPC 600W Series Single Output

CARLO GAVAZZI



- Universal AC input/ Full range
- Built-in active PFC function, PF>0.96
- Using ZVS technology to reduce power dissipation
- Built in Fan speed control and over temperature protection
- Built in AC inrush current limiting circuit (<20A)
- Built in constant current limiting circuit
- Built in Remote Sense Function
- Built in DC OK signal
- Wide operating ambient temperature (-30°C~70°C)
- 1 U low profile, 41mm

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 600W ranges from 12V to 48V. All the range carries full certification offering a wide range of universal input and screw terminal connections.

Ordering Key

SP PC XX 600 1 F C

Power supply model _____
 Panel mounted _____
 Output voltage _____
 Output power _____
 Input type (single phase) _____
 Power Factor Correction (PFC) _____
 Compact _____

Approvals



Output Performances

MODEL NO.	INPUT VOLTAGE	OUTPUT VOLTAGE	VOLTAGE ADJ	VOLTAGE ACCURACY
Single Output Models				
SPPC 12600 1FC	90VAC~264VAC 127VDC~370VDC	12V	-5%~+10%	±2.0%
SPPC 24600 1FC	90VAC~264VAC 127VDC~370VDC	24V	-5%~+10%	±2.0%
SPPC 36600 1FC	90VAC~264VAC 127VDC~370VDC	36V	-5%~+10%	±2.0%
SPPC 48600 1FC	90VAC~264VAC 127VDC~370VDC	48V	-5%~+10%	±2.0%

Output Data

Rated current (100~127VAC)		SPPC 36600 1FC	150mV (0-70°C); 150mV (-30°C)
SPPC 12600 1FC	34A	SPPC 48600 1FC	200mV (0-70°C); 200mV (-30°C)
SPPC 24600 1FC	22A	Line regulation	± 0.5%
SPPC 36600 1FC	14A	Load regulation	± 1.0%
SPPC 48600 1FC	11A	Turn on time	<1.5S (230VAC input, Full load); <3S (115VAC input, Full load)
Rated current (128~264VAC)		Output voltage accuracy	±2.0%
SPPC 12600 1FC	42A	Temperature coefficient	±0.05%/°C
SPPC 24600 1FC	26.5A	Hold up time	≥16mS (230VAC input, Full load)
SPPC 36600 1FC	17.5A	Overshoot and Undershoot	< 5.0%
SPPC 48600 1FC	13.6A		
Ripple and noise *Note			
SPPC 12600 1FC	120mV (0-70°C); 180mV (-30°C)		
SPPC 24600 1FC	150mV (0-70°C); 150mV (-30°C)		

* 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	Leakage current	
Inrush current	<20A@230VAC Cold start	Input-Output	<0.1mA
Efficiency		Input-PG	<0.75mA
SPPC 12600 1FC	88%	AC current (max.)	<7A
SPPC 24600 1FC	89%	Frequency range	47-63Hz
SPPC 36600 1FC	90%	PFC (Power Factor Correction)	PF>0.98/115VAC; PF>0.96/230VAC
SPPC 48600 1FC	90%		

Controls and Protection

Overload (OLP)	110%~135% of rated output current, constant current.	Over voltage (OVP)	110%~150% of rated voltage; constant voltage.
Output short circuit (SCP)	Long-term mode, constant current, auto recovery.		

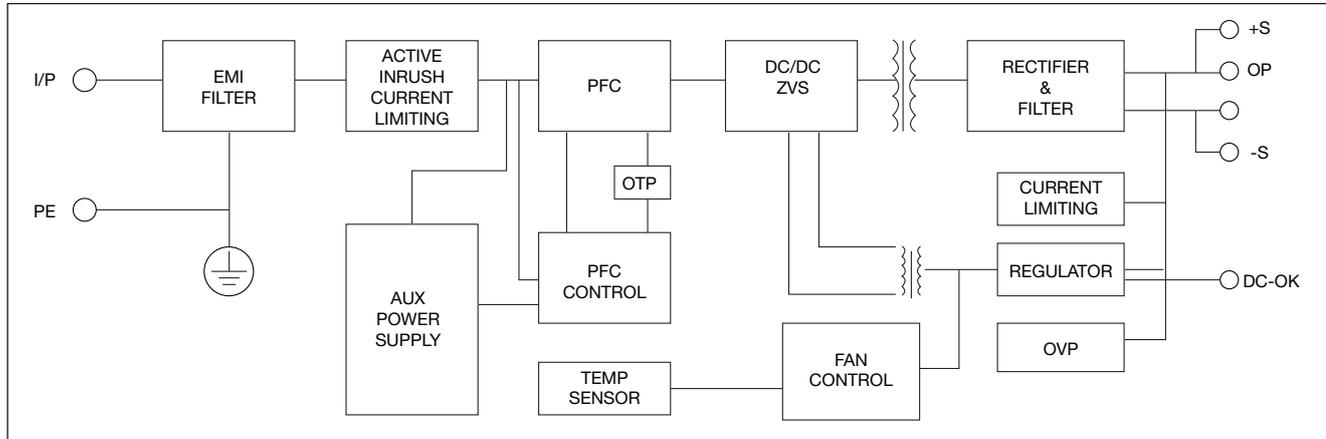
General Data All specifications are at nominal values, full load, 25°C unless otherwise noticed

Ambient temperature	-30°C to +70°C	Insolation resistance I/O	≥100M ohms
Relative humidity	20%~90%RH	MTBF (MIL-HDBK-217F)	More than 200.000 hrs
Storage	-40°C to +85°C	Case material	Metal
Cooling	Forced air (built-in fan controlled by load and internal temperature)	Dimensions LxWxD	218 x 116.5 x 41 mm
		Packing	6 PCS/CTN. G.W: 8.7kgs 0.04CBM

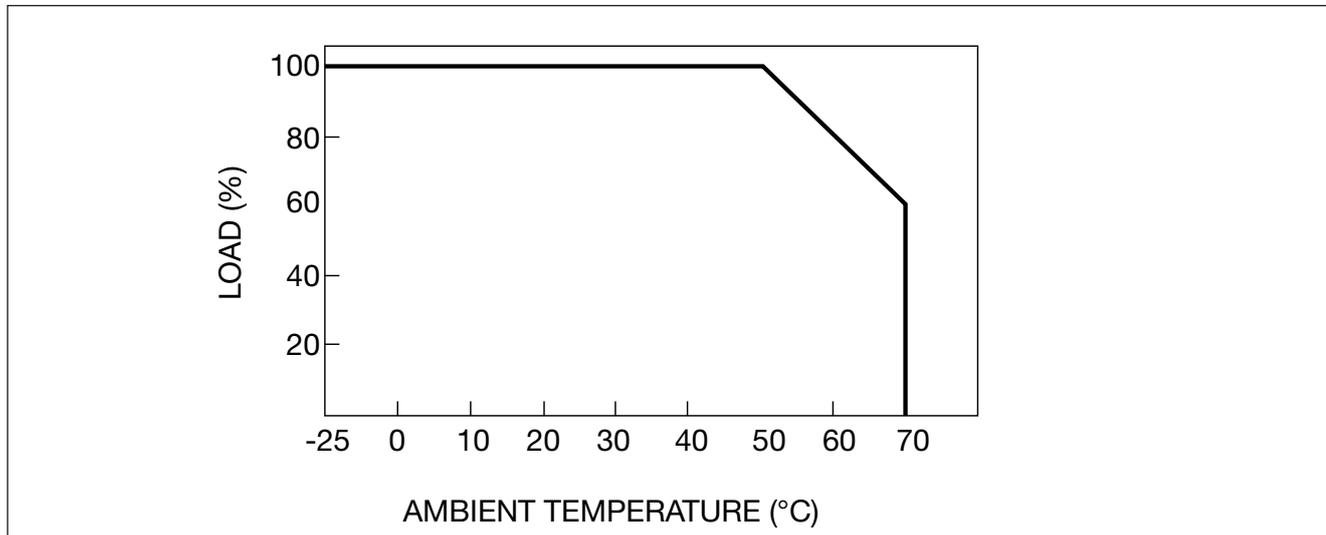
Norms and Standard

Safety standard	UL60950-1 2 nd Ed; IEC 60950-1:2005 (2 nd Ed); EN60950-1:2006	EMS immunity	Compliance to EN61000 -4- 2, 3, 4, 5, 6, 8, 11; heavy industry level.
Withstand voltage	Primary-Secondary: 3.0kVAC; ≤10mA. Primary-PG: 1.5kVAC; ≤10mA. Secondary PG: 0.5kVDC; ≤10mA	EMI conduction and radiation	Compliance to EN55022, Class B
		Harmonic current	Compliance to EN61000-3- 2, Class D

Block Diagram



Derating Curve



Mechanical Drawing

