## Switching Power Supply Enclosed Type SPPC 600W 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 600W ranges from 12V to 48V. All the range carries full certification offering a wide range of universal input and screw terminal connections.

#### 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)
- Build in constant current limiting circuit
- Built in Remote Sense Function
- Build in DC OK signal
- Wide operating ambient temperature (-30°C~70°C)
- 1 U low profile,41mm

Ordering Key	SP PC	XX 6	00 1	FC
Power supply model				
Panel mounted Output voltage				
Output power				
Input type (single phase)				
<b>Power Factor Correction (F</b>	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);
Rated current (128~264VAC)			<3S (115VAC input, Full load)
SPPC 12600 1FC	42A	Output voltage accuracy	±2.0%
SPPC 24600 1FC	26.5A	Temperature coefficient	±0.05%/°C
SPPC 36600 1FC	17.5A	Hold up time	≥16mS (230VAC input, Full load)
SPPC 48600 1FC	13.6A	Overshoot and Undershoot	< 5.0%
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
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Voltage range	90~ 264VAC	Leakage current	
	127 ~ 370VDC	Input-Output	<0.1mA
Inrush current	<20A@230VAC Cold start	Input-PG	<0.75mA
Efficiency		AC current (max.)	<7A
SPPC 12600 1FC	88%	Frequency range	47-63Hz
SPPC 24600 1FC	89%	PFC (Power Factor Correction)	PF>0.98/115VAC;
SPPC 36600 1FC	90%		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	Dimensions LxWxD	218 x 116.5 x 41 mm
	controlled by load and	Packing	6 PCS/CTN. G.W: 8.7kgs
	internal temperature)	-	0.04CBM
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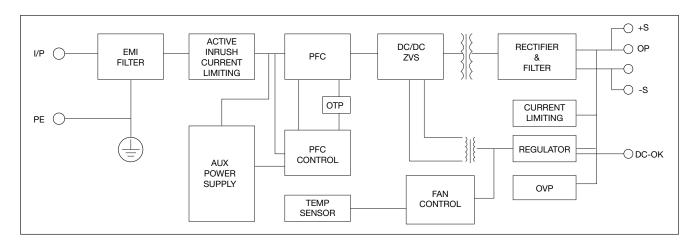
### **Norms and Standard**

Safety standard	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> 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:	EMI conduction and radiation Harmonic current	Compliance to EN55022, Class B Compliance to EN61000-3-
	1.5kVAC; ≤10mA. Secondary PG: 0.5kVDC; ≤10mA		2, Class D

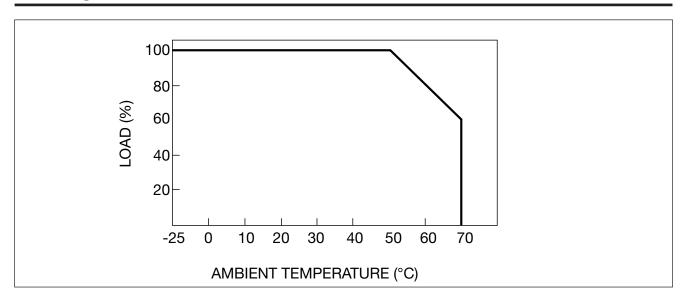
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### **Block Diagram**

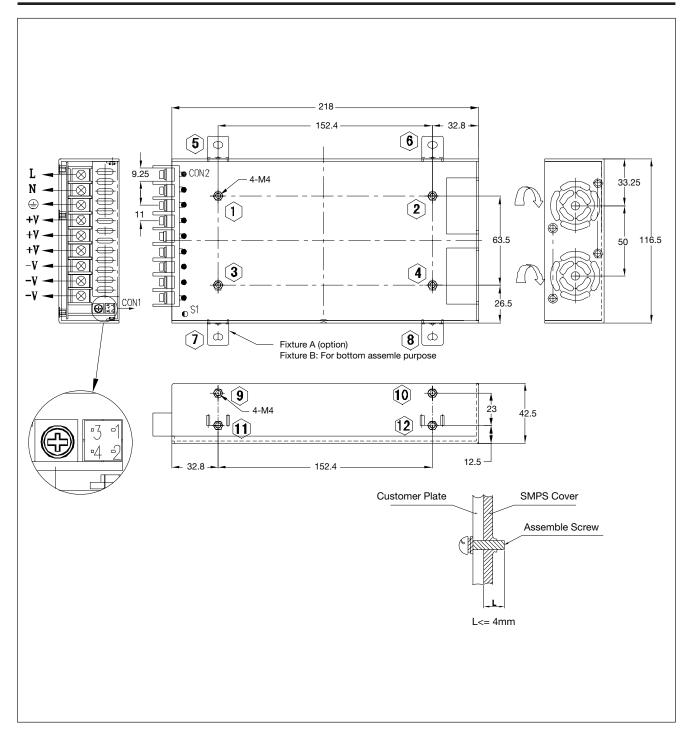


## **Derating Curve**



CARLO GAVAZZI

### **Mechanical Drawing**



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