

## ■ Features

- Single output from 250W
- Input voltage range: 90-264V
- Output current(0.1-20.83A)
- 3"x 5" form factor
- High variety of output voltages from 24Vdc-55Vdc
- Efficiency to 90%
- Protections: OVP, SCP, and OCP
- UL, cUL, certifications



\*Product images are for illustrative purposes only and may vary from actual design.

## ■ Applications

- Network system, telecommunication system, storage system, industrial equipment, and printers

## ■ Model List\*(See part number scheme for model number details)

Model Number	Input Voltage	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Ripple & Noise	Certificates
SP250T-1121	90-264Vac	250W	12V	0.1A	20.83A	90%	220mV	UL/cUL
SP250T-1241	90-264Vac	250W	24V	0.1A	10.4A	90%	300mV	UL/cUL
SP250T-1481	90-264Vac	250W	48V	0.1A	5.2A	90%	400mV	UL/cUL
SP250T-1551	90-264Vac	250W	55V	0.1A	4.54A	90%	400mV	UL/cUL

Notes:

1. A 0.1uF ceramic and 10uF electrolytic capacitors should be connected to output terminals during ripple and noise test. The oscilloscope bandwidth is set at 20MHz.

## ■ Output Dynamic Response

The following table gives the maximum acceptable voltage transient for the current transients on the output at 50Hz/1KHz

Output+24V	Minimum	Maximum	Slew Rate	Transient Voltage
+24V	0.1A	5.2A	1A/uS	±5%
+24V	5.2A	10.4A	1A/uS	±5%
+48V	0.1A	2.6A	1A/uS	±5%
+48V	2.6A	5.2A	1A/uS	±5%
+55V	0.1A	2.27A	1A/uS	±5%
+55V	2.27A	4.54A	1A/uS	±5%

**Technical Sales / Customer Service:** +1-818-338-7788 • Email: [sales@autec.com](mailto:sales@autec.com)

31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA • [www.autec.com](http://www.autec.com)

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## ■ Technical Data

Input Voltage	90 – 264Vac, 100-240(Nominal)
Frequency	47-63Hz
Input Current	>3.5A@ nominal voltage
Inrush Current	<50A peak@120Vac, 100A@240Vac, Cold start 25°C
Efficiency	90% @ Max. Load, 230Vac
Power Factor	0.95@ Max. Load, and 115Vac/60Hz
Line Regulation	±1%
Load Regulation	±5%
Overshoot	<5% of the nominal output voltage
Hold-Up time	10ms@80% of maximum load, 115Vac/60Hz
Turn-On Delay Time	2 sec.(max), maximum load, 115Vac/60Hz
Rise Time	The rise time from 10% to 90% of output voltage shall be less than 50ms at nominal line and maximum load.
Over Current Protection	27A(12V); 14A(24V); 7A(48V); 6A(55V); The power supply will auto-recover when fault condition has been removed
Over Voltage Protection	+15.6V(12V); +32V(24V); +60V(48V); +65V(55V); The power supply will auto-recover when fault condition has been removed
Short Circuit Protection	The power supply shall be capable of sustaining the application of a short circuit to ground, for any duration . The power shall restart when the fault has been removed and no damage will occur to the power supply.
Operating Temperature	-20°C to 70°C. (Refer Derating Curve Figure 1. & 2.) ambient derate each output as 2.5% per degree from 50°C to 70°C. -20°C, 100Vac start up (Some specification parameters may not be met).
Storage Temperature	-40°C to 85°C
Operating Relative Humidity	20% to 90% (non-condensing)
Storage Relative Humidity	5% to 95% (non-condensing)
MTBF	≥500,000 hours at maximum load, 230Vac/50Hz, 50°C. The calculated MTBF using Telcordia SR332, issue 2
Leakage Current	3.5mA maximum at 264Vac/63Hz
Dimensions	127x76.2x33.4mm

## ■ Safety and EMC Requirements

Safety Requirements	UL/cUL EN60950-1, 2 <sup>nd</sup> Edition, IEC-60950-1, 2 <sup>nd</sup> Edition
EMC Requirements CE	Electrical Fast Transient/Burst(EFT) IEC61000-4-4 level 3 (line to line 2KV, criteria A)
Conduction Noise	FCC Class B, EN55032 Class B
Radiation Noise	FCC Class B, EN55032 Class B
Harmonics	IEC61000-3-2 Class D
Surge	IEC61000-4-5 (meet line to line 1KV, line to Earth 2KV, Criteria A)
ESD	IEC61000-4-2 level 3(for contact +/- 8KV and air +/-15KV, criteria A)
Hi-Pot Test	Input to P.E. 1800Vac for 3sec, 10mA Max. Output to P.E. 500Vdc for 3sec, 10mA Max.
Insulation Resistance	Input to Secondary >20Mohm 500Vdc

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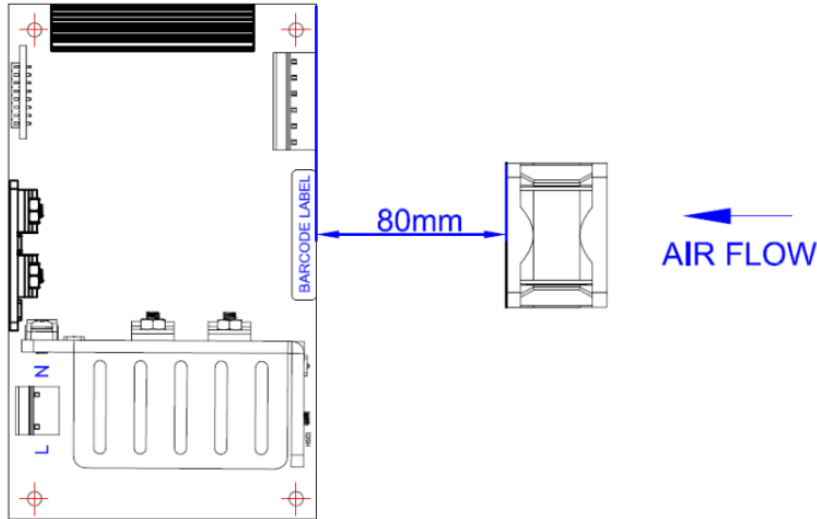
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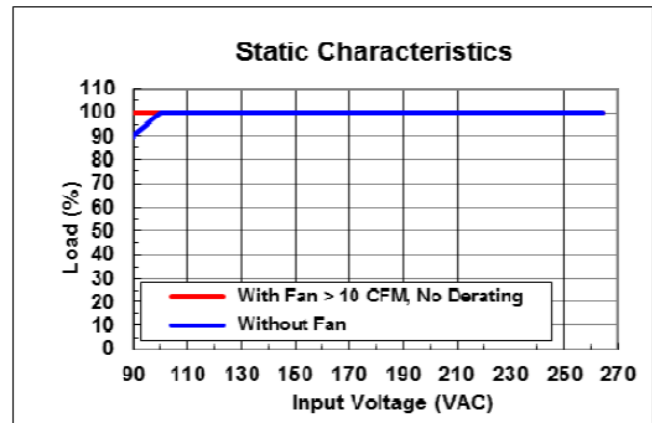
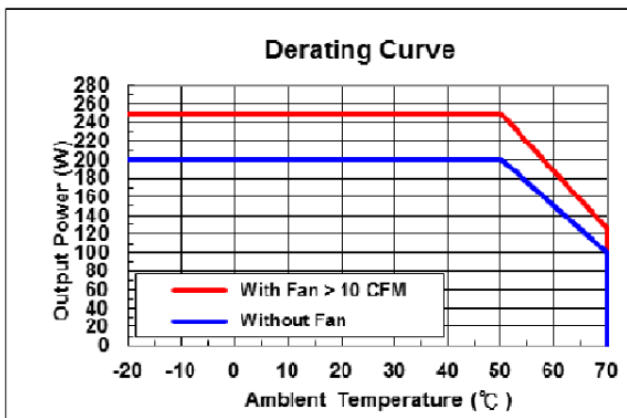
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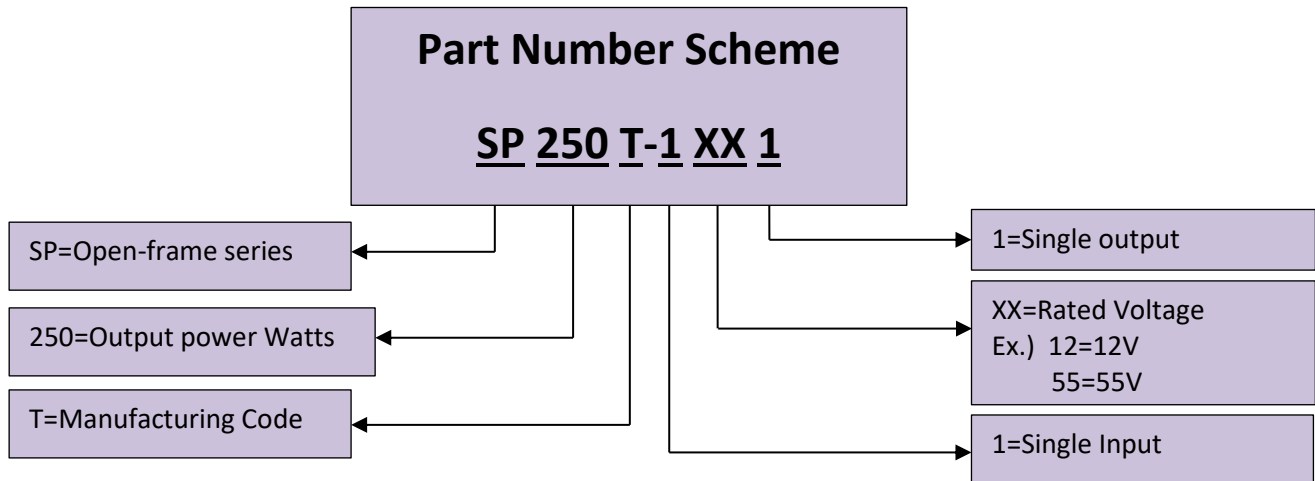
Autec Power Systems' (Autec) Power Supplies are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the Power Supply into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.

■ **Mechanical Diagram**



■ **Derating Curve/Static Characteristics**





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\*Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.