AUTEC POWER SYSTEMS
POWERmatters.

SPJ100 Series

90-100W, 90-264Vac Input, Single to Quad Outputs, Industrial Open-frame PSU

RoHS Compliant

Features

- Single output from 90W-100W
- Input voltage range: 90-264V
- Output current(800mA-7500mA)
- 3”x 5” form factor
- Efficiency to 85%
- Protections: SCP, OCP, and OVP
- Class 1 & Class 2 options
- Cover kit accessory available

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

Applications

- Network system, telecommunication system, storage system, industrial equipment, and consumer electronics

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	Certificates
SPJ100-120-XY	90–264Vac	90W	12V	1A	7.5A	85%	UL/cUL
SPJ100-150-XY	90–264Vac	100W	15V	0.5A	6.67A	85%	UL/cUL
SPJ100-240-XY	90–264Vac	100W	24V	0.1A	4.2A	85%	UL/cUL
SPJ100-480-XY	90–264Vac	100W	48V	0.2A	2.1A	85%	UL/cUL
SPJ100-4000-XY	90–264Vac	100W	V1=5.1V	V1=3A	V1=12A	85%	UL/cUL
			V2=12.25V	V2=0.1A	V2=4A		
			V3=12V	V3=0A	V3=0.8A		
			V4=12V	V4=0A	V4=0.8A		
SPJ100-4001-XY	90–264Vac	100W	V1=5.1V	V1=3A	V1=12A	85%	UL/cUL
			V2=24.5V	V2=0.1A	V2=3A		
			V3=12V	V3=0A	V3=0.8A		
			V4=12V	V4=0A	V4=0.8A		
SPJ100-4002-XY	90–264Vac	100W	V1=5.1V	V1=3A	V1=12A	85%	UL/cUL
			V2=16V	V2=0.1A	V2=3A		
			V3=4.8V	V3=0A	V3=0.8A		
			V4=15.5V	V4=0A	V4=0.8A		
SPJ100-4003-XY	90–264Vac	100W	V1=5.1V	V1=3A	V1=12A	85%	UL/cUL
			V2=12V	V2=0.1A	V2=4A		
			V3=24V	V3=0A	V3=0.8A		
			V4=12V	V4=0A	V4=0.8A		

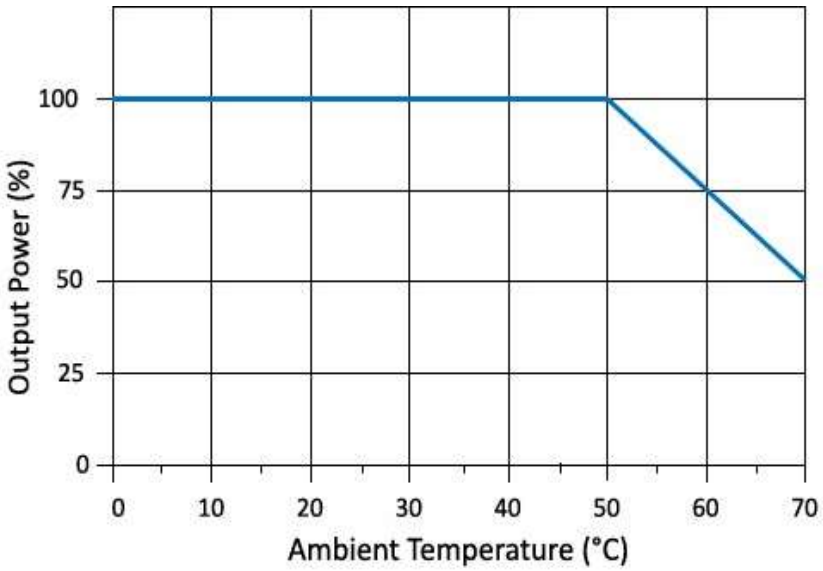
■ Technical Data

AC Input	90-264Vac
Input Frequency	47-63Hz
Input Current	120Vac: 2A max 230Vac: 1A max
Inrush Current	120Vac: 18A, 230Vac: 35A
Leakage Current	120Vac: <500µA, 230Vac: <1000µA
Hold-up Time	120Vac: 10ms, 230Vac: 16ms
Output Power	90-100W
Line Regulation	±0.3%
Load Regulation	V1: ±1%; V2, V3 and V4: ±5%
Transient Response	<10%, 50% to 100% load change, 50/60Hz, 50% duty cycle, 0.1A/µs, recovery time <5ms
Rise Time	<40ms
Set Point Tolerance	V1: ±2%; V2, V3 & V4: ±5%
Over Current Protection	110-170%
Over Voltage Protection	6.2V±0.4V for 5V
Short Circuit Protection	Short term, auto recovery
Switching Frequency	Boost converter: 45kHz, Resonant converter: 45kHz
Operating Temperature	0-70˚C
Storage Temperature	-40-+85˚C
Relative Humidity	95% Rh, noncondensing
Altitude	Operating: 10,000ft.; Nonoperating: 40,000 ft.
MTBF	1.02m Hours, Telcordia-SR332-issue 3
Isolation Voltage	Min. 4242 Vdc between input to output
Cooling	Convection

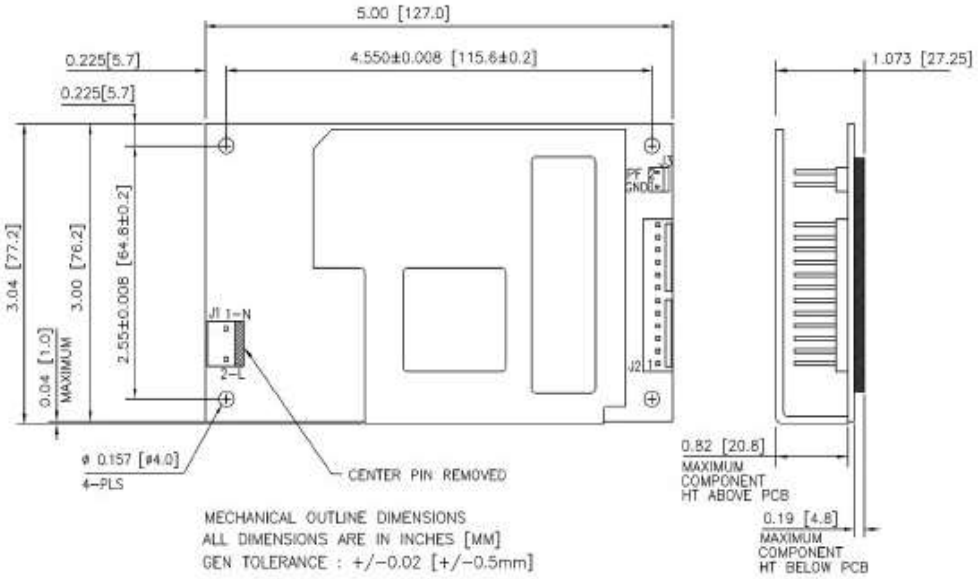
■ Safety and EMC Approval

CE Mark	Complies with LVD Directive
Conducted Emissions	EN55022-B, CISPR22-B, FCC Par15-B, EN50082-1
Static Discharge	EN61000-4-2, Level-3
RF Field Susceptibility	EN61000-4-3, Level-3
Fast Transients/Bursts	EN61000-4-4, Level-3
Radiated Emissions	EN55022-B, CISPR22-B, FCC Part 15-B
Surge Susceptibility	EN61000-4-5, Level-3
Harmonic Current	EN6100-3-2, Class A
Safety Standards	IEC60950-1(2nd edition), EN60950-1, UL60950-1(2nd edition), CSA C22.2 no. 60950-1(2nd edition), Class 1 SELV
Approval Agency	Nemko, UL, cUL

■ Derating Curve



■ Mechanical Diagram



Notes: In case the PCB is mounted in a metal enclosure, using metal hardware ensure the following
1. Stand off, used to mount PCB has OD of 5.4 mm max.
2. Screws, used to fix PCB on stand off, have head dia of 6.0 mm max.
3. Washer, if used, to have dia of 6.5 mm max.

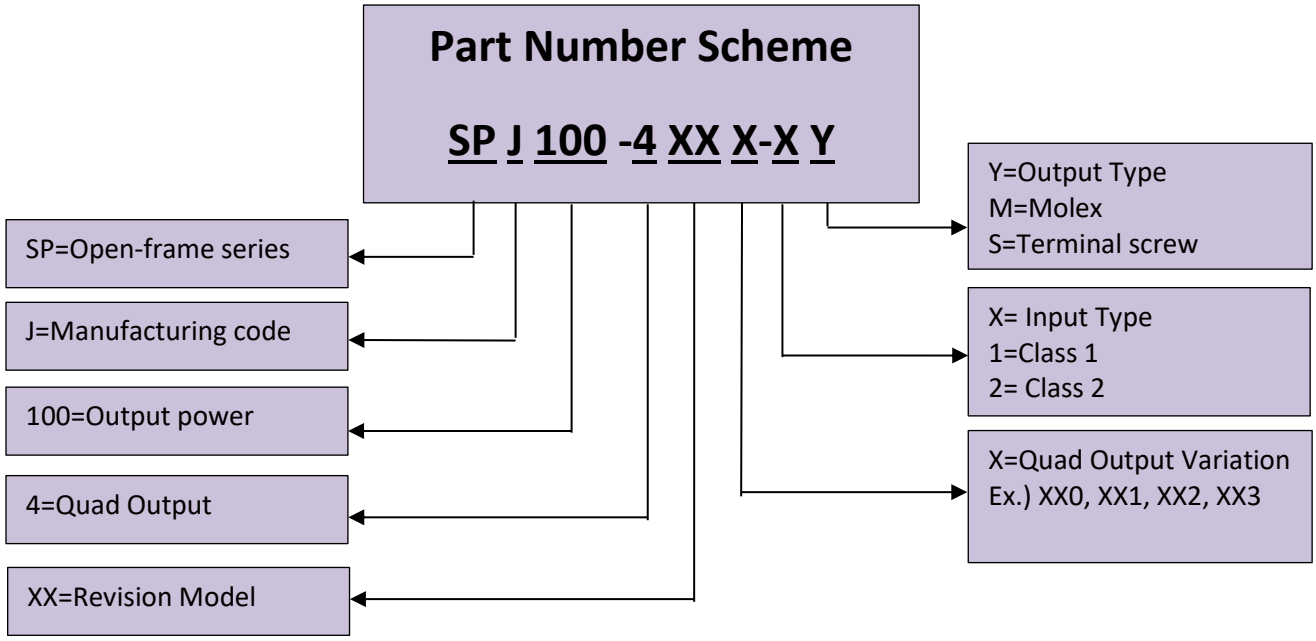
Connectors		
J1	Pin 1	AC Neutral
	Pin 2	AC Line
Spade Connector		Earth
J2	Pin 1, 2, 3, 4,	V1
	Pin 5, 6, 7, 8	RTN
	Pin 9, 10	V2
	Pin 11	V3
	Pin 12	V4
J3	Pin 1	RTN
	Pin 2	Power Fail Good

Mechanical Specifications	
AC Input Connector (J1)	Molex: 26-60-4030 or equivalent Mating: 09-50-3031; Pins: 08-50-0106
Earth	Molex: 19705-4301 Mating: 190030001
DC Output Connector (J2)	Tyco: 1-640445-2 or equivalent Mating: 1-647402-2; Pins: 3-647409-1
Signal Connector (J3)	Molex: 22-23-2021 or equivalent Mating: 22-01-2021
Dimensions	5.0x3.04x1.07 in. (127x77.22x27.18mm)
Weight	250g

Part Number Scheme

SP J 100 -XXX-X Y

- SP=Open-frame series
- J=Manufacturing code
- 100=Output power
- Y=Output Type
M=Molex
S=Terminal screw
- X= Input Type
1=Class 1
2= Class 2
- XXX=Rated Voltage
Ex.) 120=12V
480=48V



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