Specification and Standards

Model SWF100P-24/-36/-48

	Parameter			SWF100P-36	SWF100P-48V
	Rated Input Voltage			100 to 240VAC	
Input Condition	Allowable Input Voltage		85 to 264VAC		
	Input Current (typ) 1		1.4A (VIN = 100V)		
	Rated Frequency		50 / 60 Hz		
	Allowable Frequency Range		47 to 63 Hz		
	Power Factor (typ) 1		0.9		
	Efficiency (typ) 1		86% (VIN = 100V) / 89% (VIN = 240V)		
	Inrush Current (typ) 2		15A (VIN = 100V) / 30A (VIN = 200V)		
	Leakage Current (max) 1		0.75 mA (VIN = 240V)		
Output Conditions 3	Rated Output Voltage		24V	36V	48V
	Output Voltage Variation 9		21.6 to 26.4V	32.4 to 39.6V	43.2 to 52.8V
	Rated Output Current		4.2A	2.8A	2.1A
	Maximum Peak Current 8		8.4A	5.6A	4.2A
	Allowable Output Current Range		0 to 8.4A	0 to 5.6A	0 to 4.2A
	Rated Output Power		100W		
	Constant Voltage Accuracy 5		±3%		
	Ripple Noise 1,4		150mVP-P	150mVP-P	250mVP-P
	Output Holding Time (min) 1		20ms		
	Start-up Time (typ) 1		500ms		
Additional Functions	Over current Protection		Detection above 101% of maximum peak current (automatic recovery)		
	Over voltage Protection6		Detection above 115% of maximum output voltage (output cut-off)		
	Over temperature Protection		Not Provided		
	Remote Sensing		Not Provided		
	Operations Display		Not Provided		
Environmental Conditions	Operating Temperature Range		−10°C to 70°C		
	Storage Temperature Range		−25°C to 85°C		
	Operating Humidity Range		30% to 90%		
	Storage Humidity Range		20% to 90%		
	Cooling Requirements		Natural air cooling		
	Vibration Resistance	Vibration Frequency	10 to 55 Hz		
		Sweep Time	3 minutes		
		Acceleration	19.6 m / s² (2 G)		
		Vibration Detection	х, у, z		
		Vibration Time	One hour in each of three directions		
	Shock Resistance		98m / s^2 (10 G); conduct this test on an oak board with a flat surface and a thickness of 10 mm or more; lift one edge of the bottom side of the unit 50 mm and drop it on the board; drop 3 times on each of the 4 edges		
	Installation Conditions		Derating may be required due to mounting orientation		
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Parameter			Value		
Insulation 7	Insulation Withstand Voltage	Input-Output	3000 VAC one minute (leakage current 15 mA or less)		
		Input-FG	2000 VAC one minute (leakage current 15 mA or less)		
		Output-FG	500 VAC one minute (leakage current 15 mA or less)		
	Insulation Resistance	Input-Output	100 M Ω (measured with 500 VDC)		
		Input-FG			
		Output-FG			
Applicable Standards	Safety Standards		UL60950-1, C-UL(CSA60950-1)		
			SEMKO (EN60950-1) certified		
			Designed to meet Electrical Appliance and Safety law		
	Conducted Emissions		Designed to meet FCC Class B		
			Designed to meet EN55022		
			Designed to meet VCCI Class B		
	EMC		Designated to meet harmonic current IEC61000-3-2		

- 1. Specified under rated input/output conditions at an ambient temperature of 25°C.
- 2. More current above noted values may flow at restart (ambient temperature of 25°C).
- 3. Output conditions are measured at a point 15 cm from the output connector, with a 63V / 100μ F electrolytic capacitor and a 0.1μ F film capacitor connected to that point.
- 4. Ripple noise is measured with a 100 MHz oscilloscope using a 1:1 probe.
- 5. The constant voltage accuracy is measured with a static input variation, a static load variation, a time drift, and an ambient temperature variation.
- 6. Reset is performed by reapplying input voltage.
- 7. Insulation conditions are specified at normal temperature and humidity.
- 8. Start-up is to be performed at less than the rated output current.
- The maximum Peak current shall be within 10s, duty cycle 35% or less.
- 9. In the case where output voltage is variable, set a voltage such that Output Voltage Variation, Rated Output Current, and Rated Output Power are not exceeded.