

## Specification and Standards

### Model SWF100P-24/-36/-48

Parameter		SWF100P-24	SWF100P-36	SWF100P-48V
Input Condition	Rated Input Voltage	100 to 240VAC		
	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 / s <sup>2</sup> (2 G)	
		Vibration Detection	x, y, z	
		Vibration Time	One hour in each of three directions	
	Shock Resistance		98 m / s <sup>2</sup> (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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### Model SWF100P-24/-36/-48

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 $\Omega$ (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 / 100 $\mu$ F electrolytic capacitor and a 0.1 $\mu$ 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.