

Specification and Standards

Model SWF240P-24/-36/-48

Parameter		SWF240P-24	SWF240P-36	SWF240P-48V	
Input Condition	Rated Input Voltage	100 to 240VAC			
	Allowable Input Voltage	85 to 264VAC			
	Input Current (typ) 1	2.9A (VIN = 100V)			
	Rated Frequency	50 / 60 Hz			
	Allowable Frequency Range	47 to 63 Hz			
	Power Factor (typ) 1	0.9			
	Efficiency (typ) 1	88% (VIN = 100V) / 92% (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	10.0A	6.7A	5.0A	
	Maximum Peak Current 8	20.0A	13.4A	10.0A	
	Allowable Output Current Range	0 to 20.0A	0 to 13.4A	0 to 10.0A	
	Rated Output Power	240W			
	Constant Voltage Accuracy 5	±3%			
	Ripple Noise 1,4	300mVP-P	300mVP-P	400mVP-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 Protection ⁶		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 ² (2 G)		
		Vibration Detection	x, y, z		
		Vibration Time	One hour in each of three directions		
	Shock Resistance	98 m / 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 MΩ (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 / 100μF electrolytic capacitor and a 0.1μF 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.