

Panasonic
ideas for life

24V DC Power Supplies

FP-PS24 Series



FP-PS24-0120E

FP-PS24-024E

FP-PS24-060E

Features

- High power density with minimal losses
- Up to 91.5% efficiency (FP-PS24-060E)
- Wide ambient temperature range from -10°C to +70°C, without performance loss
- Safety approvals (IEC60950, UL60950, CSA22.2-60950, EN60950)
- Protection class II, without grounding
- Easy mounting and wiring
- Extremely compact with optimal air cooling

FP-PS24 Power Supplies

Specifications

Item	FP-PS24-024E	FP-PS24-060E	FP-PS24-0120E	
Ambient temperature	-10°C to +70°C, without needing cooling fans			
Storage temperature	-25 to +85°C			
Humidity	Max. 95%, no condensation			
Vibration	IEC 60068-2-27, 20g - 6ms, 10g - 11ms; 4 shocks/axis, 18 shocks total			
Shock	IEC 60068-2-6, 2-17.8Hz: ±1.6mm; 17.8 - 500Hz: 2g 2 hours/axis			
Primary side	Rated input voltage	100 – 240V AC, 50 – 60Hz		
	Power supply voltage	85-264V DC, 47-63Hz (DC 100-375V), wide range power supply, switching ranges unnecessary		
	Input current	Fulfills the requirements of EN61000-3-2 (limits for harmonic current emissions)		
	Fuse	Internal in power supply T4AH/250V, not accessible		
Secondary side	Output voltage	24V DC nominal		
	Accuracy, output voltage	±1% over the complete load and input voltage range		
	Adjustable range with potentiometer	23V – 29V		
	Output capacity (max.)	1A continuous at 24V 1.25A (25% above nominal load) Dynamic for 7s, max. 1.5A (50 % above nominal load) dynamic for 2.5s, max.	2.5A continuous at 24V 3.15A (25% above nominal load) Dynamic for 7s, max. 3.75A (50 % above nominal load) dynamic for 2.5s, max.	5.0A continuous at 24V 6.25A (25 % above nominal load) dynamic for 7s, max.sec. 7.5A (50 % above nominal load) dynamic for 3s, max.x. 3 sec
	Output capacity (min.)	0A		
	Current limiting (typ.)	2A continuous, 2A dynamic	2.7A continuous, 5A dynamic	5.3A continuous, 9.5A dynamic
Restwelligkeit (< 20MHz)	= 40mVSS measured at 20MHz, 50 Ohms terminated			
Efficiency	VAC = 230V	88.0%	91.5%	90.0%
	VAC = 115V	87.0%	90.0%	89.0%
	VAC = 100V	86.0%	88.0%	89.0%
Lifetime of the capacitors	All capacitors used are special 105°C long-life-types with a minimum lifetime of 50,000 hours @ Tu = 50°C (power supply-air flow temperature)			
Safety and function tests	100% testing			
Startup duration	Depends on the load, typically 5-10ms			
Safety	Output	Safety extra low voltage (SELV) EN 60950		
	Class of protection	Class II (with additional constructive measures)		
	Degree of protection	IP20		
	Leakage current	< 0,25mA (47-63Hz Netzfrequenz und UEin-max.)		
Dimensions (WxHxD)	105.5 x 30 x 75 mm	104.5 x 44.8 x 75 mm	105.5 x 70 x 85 mm	
Weight	Approx. 170g	Approx. 250g	Approx. 500g	

Dimensions

