

TECHNICAL DATASHEET **200W ITE POWER SUPPLIES** FSP200-P35 Series



FSP200-P35 Series

FEATURES

- · Class-I design
- Design to meet IEC 60950-1, IEC 60065-1, IEC 62368-1 & IEC 61558-1 (optional *note1) safety standard
- Low profile 3 x 5 x 1.284 inches
- No load power consumption less than 0.21W
- · EN 55032 Class B radiated emission
- · High altitude 5000 meters operation
- · OTP, Brown out protection
- Fan driver 12V

SAFETY STANDARD APPROVAL



DESCRIPTION

This AC-DC switching power supplies in a package of 3 x 5 inches is a Class-I PSU and no load power consumption less than 0.21W. This PSU is capable of delivering 200 watts continuous power at 7 CFM forced air cooling or 150 watts continuous power at convection cooling and 50°C operation temperature. Product is suitable for audio & video, display, house hold (Europe), information, and networking application

INPUT SPECIFICATIONS

90-264 VAC Input voltage: Input frequency: 47-63 Hz Input current: 1.7 A (rms) for 115 VAC 0.8 A (rms) for 230 VAC No load power consumption $\leq 0.21W$ Earth leakage current: Touch current:

OUTPUT SPECIFICATIONS

Output voltage/current: Fan driver: Total output power: Protection: Over voltage: Short circuit: Over current: Over temperature: Brown out: Temperature coefficient: Transient response:

0.75 mA max. @ 264 VAC, 63 Hz 0.25 mA max. @ 264 VAC, 63 Hz

See rating chart. Non-regulated 12V @ 500 mA max.

200W Latch off Auto recovery Auto recoverv Latch off Set at 75VAC All outputs ±0.04% /°C maximum Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature Storage temperature Relative humidity: Derating:

-20°C~+70°C -40°C~+85°C 5% to 95% non-condensing Derate from 100% at +50°C linearly to 50% at +70°C, applicable to both convection and forced-air cooling conditions

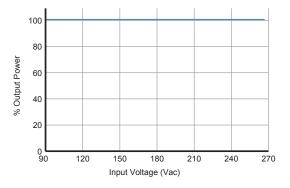
GENERAL SPECIFICATIONS

Power factor:	0.98 minimum @ 115VAC & 100% load 0.93 minimum @ 230VAC & 100% load
Efficiency:	See rating chart.
Power turn-on time:	1.5 Sec maxi.
Hold-up time:	20 mS minimum at 115 VAC @ 150W
	8 mS minimum at 115VAC @ 200W
Line regulation:	±0.5% maximum at full load
Inrush current:	40 A @ 115 VAC, at 25°C cold start, 150W
	80 A @ 230 VAC, at 25°C cold start, 150W
Operating altitude:	5000 meters above sea level
Withstand voltage:	3000 VAC from input to output,
	1500 VAC from input to ground,
	1500 VAC from output to ground
	Input to output 100M ohm @ 500Vdc, 25℃
MTBF:	400,000 hours mini. at full load at 25°C ambient, calculaed
	per BELL CORE SR-332
EMC Performance	
EN55032	Class B conducted, class B radiated
FCC:	Class B conducted, class B radiated
VCCI:	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, class A and D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, ±8 KV air and ±4 KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, ±1 KV
EN61000-4-5:	Surge, ±1 KV diff., ±2 KV com
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 1 A/m
EN61000-4-11:	Voltage dip immunity,
	30% reduction for 500 ms, criteria A
	> OF0/ reduction for 40 rec. criteric A
	>95% reduction for 10 ms, criteria A >95% reduction for 5000 mS, criteria B

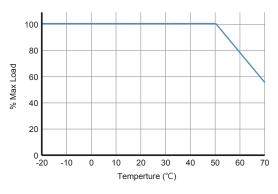


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INPUT VOLTAGE DERATING CURVE



OUTPUT POWER DERATING CURVE



OUTPUT VOLTAGE/CURRENT RATING CHART

	Output					Efficiency		
Model	Voltage	Min. Load	Max. Current convection	Max. Current 7 CFM	Tolerance	Ripple & Noise	Max. Power	115/230 Vac (typical)
FSP200-P35-A12	12 V	0 A	12.5 A	16.67 A	±3%	120 mV	150 W / 200 W	89 / 90%
FSP200-P35-A18	18 V	0 A	8.33 A	11.1 A	±3%	180 mV	150 W / 200 W	90 / 91%
FSP200-P35-A24	24 V	0 A	6.25 A	8.34 A	±3%	240 mV	150 W / 200 W	90 / 91%
FSP200-P35-A54	54 V	0 A	2.78 A	3.70 A	±3%	500 mV	150 W / 200 W	90 / 91%

NOTES:

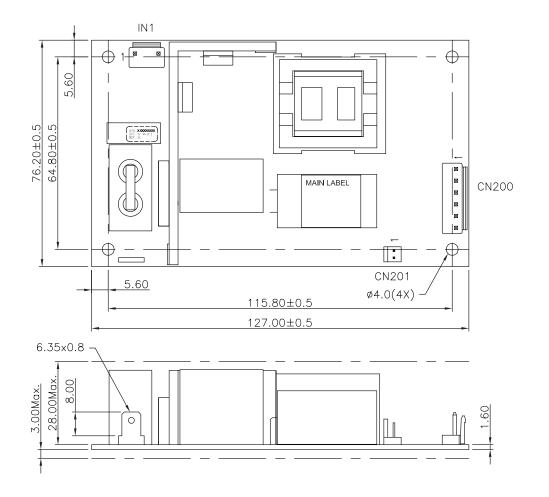
1. Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 47 µF electrical capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

2. The first value of maximum current is at convection cooling. The second value is with 7 CFM forced air provided by user.



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MECHANICAL SPECIFICATIONS



Pin assignment: Input connector (IN1):

Pin No.	Function	Wafer
1	Ν	JST B2P3-VH
2		or equivalent
3	L	

Output connector (CN200):

Pin No.	Function	Wafer		
1, 2, 3	+12V	JST B6P-VH		
4, 5, 6	GND	or equivalent		

Pin assignment of CN201:

Pin No.	Function	Wafer
1	+12V	MOLEX 22-27-2021
2	GND	or equivalent

NOTES:

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Dimensions shown in inches [mm]
Ground pad: 8 x 6.35 x 0.8 mm
Weight: 240 grams (0.529 lbs.) approx.
Please contact with sales office for P/N which PSU comply with EN 61558-1.