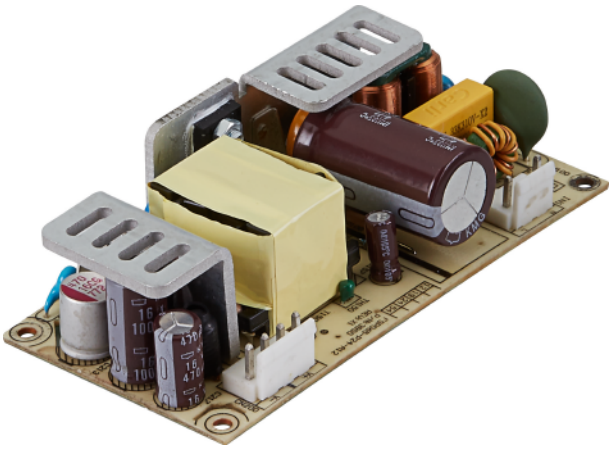
TECHNICAL DATASHEET

65W ITE POWER SUPPLY

FSP065-P24 A Series



FSP065-P24 A Series

FEATURES

- Class-II design
- Design to meet IEC 60950-1 and IEC 62368-1 safety standard
- Compact dimension 2”x4”x1.047”
- Input power less than 0.5w at 0.2w load condition
- EN 55032 Class B radiated emission
- Surge protection ±2 KV diff, ±4 KV com
- High altitude 5000 meters operation

SAFETY STANDARD APPROVAL

E190414

DESCRIPTION

This AC-DC switching power supply in a package of 2 x 4 inches is a Class-II safety construction and features 0.5W low input power consumption at 0.2W load which complies with Energy Star requirements. This PSU is capable of delivering 65 watts of continuous power at convection cooling and 50℃ operation temperature. The product is suitable for information, audio & video, and networking application.

INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
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	≦0.21A
Touch current:	250 uA max. @ 264 VAC, 63 Hz

OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Total output power:	65W
Ripple and noise:	±1%.
Protection:	
Over voltage:	Set at 110~130% of nominal output voltage, auto recovery
Short circuit &Over current:	Output protected to short circuit condition, auto recovery
Over temperature:	Detected by thermistor, auto recovery
Brown out:	Set at 70VAC
Temperature coefficient:	All outputs ±0.04% /℃ maximum
Transient response:	Maximum excursion of 5% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	-20℃~+70℃
Storage temperature:	-40℃~+85℃
Operating humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50℃ linearly to 50% at +70℃, applicable to convection cooling condition

GENERAL SPECIFICATIONS

Efficiency:	See rating chart.
Power turn on time	1.0 Sec maxi.
Hold-up time:	10 mS minimum @ 100% load & 115 VAC
Line regulation:	±0.5% maximum at full load
Inrush current:	55A @ 115VAC @ 25℃ cold start 100A @ 230 VAC @ 25℃ cold start
Operating altitude:	5000 meters above sea level
Withstand voltage:	3000 VAC from input to output,
Isolation Resistance:	Input to output 100M ohm @ 500Vdc, 25℃
MTBF:	400,000 hours minimum at full load at 25℃ ambient, calculated 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
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, ±2 KV diff, ±4 KV com
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 1 A/m
EN61000-4-11:	Voltage dips immunity, >95% reduction for 10 ms, criteria B 30% reduction for 500 ms, criteria C >95% reduction for 5000 mS, criteria C

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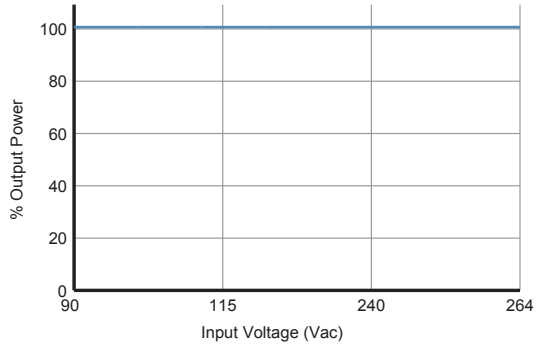
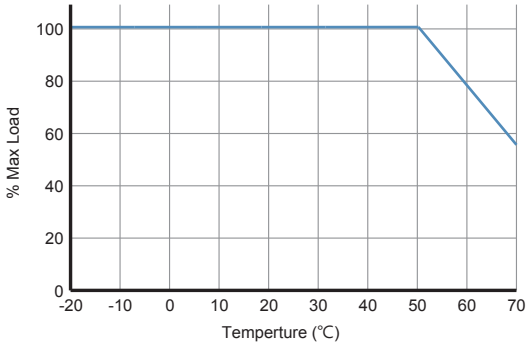
INPUT VOLTAGE DERATING CURVE



OUTPUT POWER DERATING CURVE



OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output Voltage	Min. Load	Max. Current	Tolerance	Ripple & Noise	Max. Power	Efficiency 115 / 230 Vac
FSP065-P24-A12	12 V	0 A	5.40 A	±3%	120 mV	65W	88 / 89%
FSP065-P24-A19	19 V	0 A	3.42 A	±3%	190 mV	65W	89 / 90%
FSP065-P24-A24	24 V	0 A	2.70 A	±3%	240 mV	65W	90 / 90%
FSP065-P24-A54	54 V	0 A	1.20 A	±3%	300 mV	65W	91 / 92%

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 10 μF tantalum capacitor in parallel with a 0.1 μF ceramic capacitor across the output.

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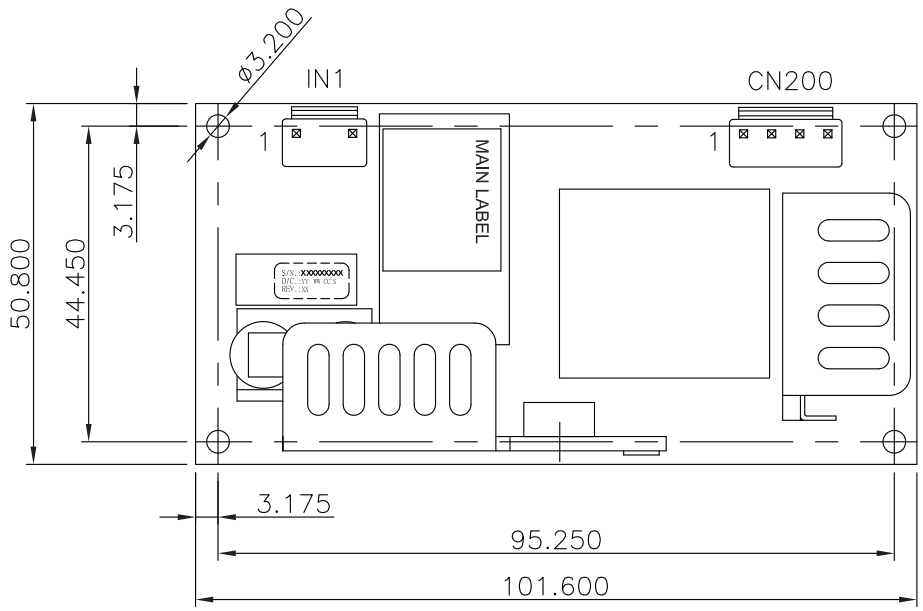
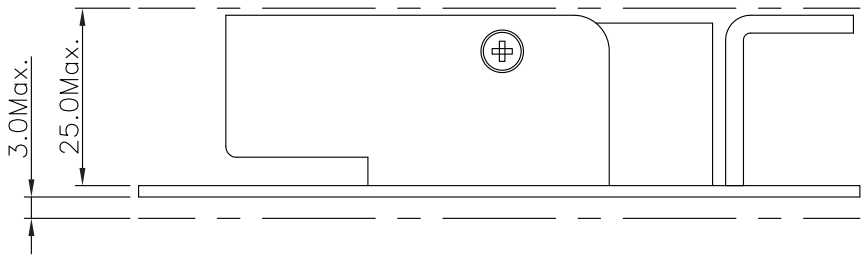
MECHANICAL SPECIFICATIONS





Pin assignment:

1. IN1: JST B2P3-VH or EQU

Pin No.	Function
1	Neutral
2	NC
3	Line

2. CN200: JST B4P-VH or EQU

Pin No.	Function
1, 2	V+
3, 4	RETURN.

3. Dimension (L*W*H):
   101.6 * 50.8 * 26.6 mm
   4" * 2" * 1.047"

4. Weight:
   125 grams. (0.275 lbs.) approx.

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