

## FSP065-P24 B Series

### FEATURES

- Class-II design
- IEC 62368-1 safety standard
- Dimension 2" x 4" x 1.05"
- Input power less than 0.5W at 0.2W load
- Surge,  $\pm 2$  KV diff.,  $\pm 4$  KV com.
- Class B emission for both Class-I and Class-II applications

### SAFETY STANDARD APPROVAL



### 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 DOE requirements. This PSU is capable of delivering 65 watts continuous power at convection cooling and 50°C operation temperature. Product is suitable for both Class-I (with Protected Earth) or Class-II application, such as information, audio & video and networking.

### INPUT SPECIFICATIONS

Input voltage:	90 to 264 VAC
Input frequency:	47-63 Hz
Input current:	1.5 A (rms) for 115 VAC 0.8 A (rms) for 230 VAC
Input power < 0.5w	Load @ 0.2A
Touch leakage current	250 $\mu$ A max. @ 264 VAC, 63 Hz

### OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Total output power:	65 watts maximum
Ripple and noise:	1% peak to peak
Protection:	
OVP:	Auto recovery
OCP & Shorted:	Auto recovery
OTP:	Auto recovery
Temperature coefficient:	All outputs $\pm 0.04\%$ /°C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 $\mu$ s after a 25% step load change

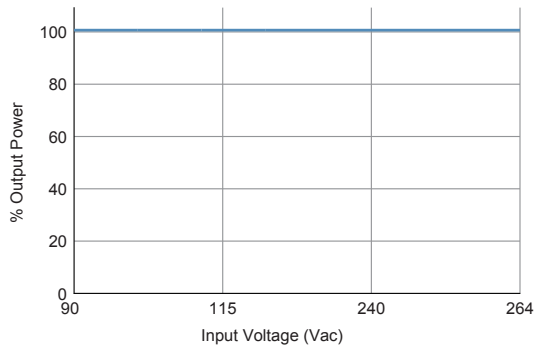
### ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	-20°C to +70°C
Storage temperature:	-40°C to +85°C
Relative humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50°C linearly to 50% at +70°C, applicable to convection and forced-air cooling conditions.

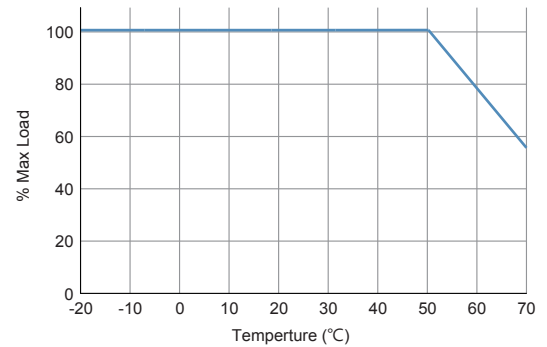
### GENERAL SPECIFICATIONS

Efficiency:	Refer to rating table
Turn-On Delay Time	$\leq 3$ sec at 110VAC
Hold-up time:	10 ms minimum at 110 VAC
Line regulation:	$\pm 0.2\%$ maximum at full load
Inrush current:	30 A @ 115 VAC / 60 HZ 60 A @ 230 VAC / 50 HZ, at 25°C cold start
Withstand voltage:	3000 VAC from input to output
MTBF:	400,000 hours at full load at 25°C ambient temperature, calculated per TELCORDIA 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, $\pm 15$ KV air and $\pm 8$ KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, $\pm 1$ KV
EN61000-4-5:	Surge, $\pm 2$ KV diff., $\pm 4$ 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

### INPUT VOLTAGE DERATING CURVE



### OUTPUT POWER DERATING CURVE



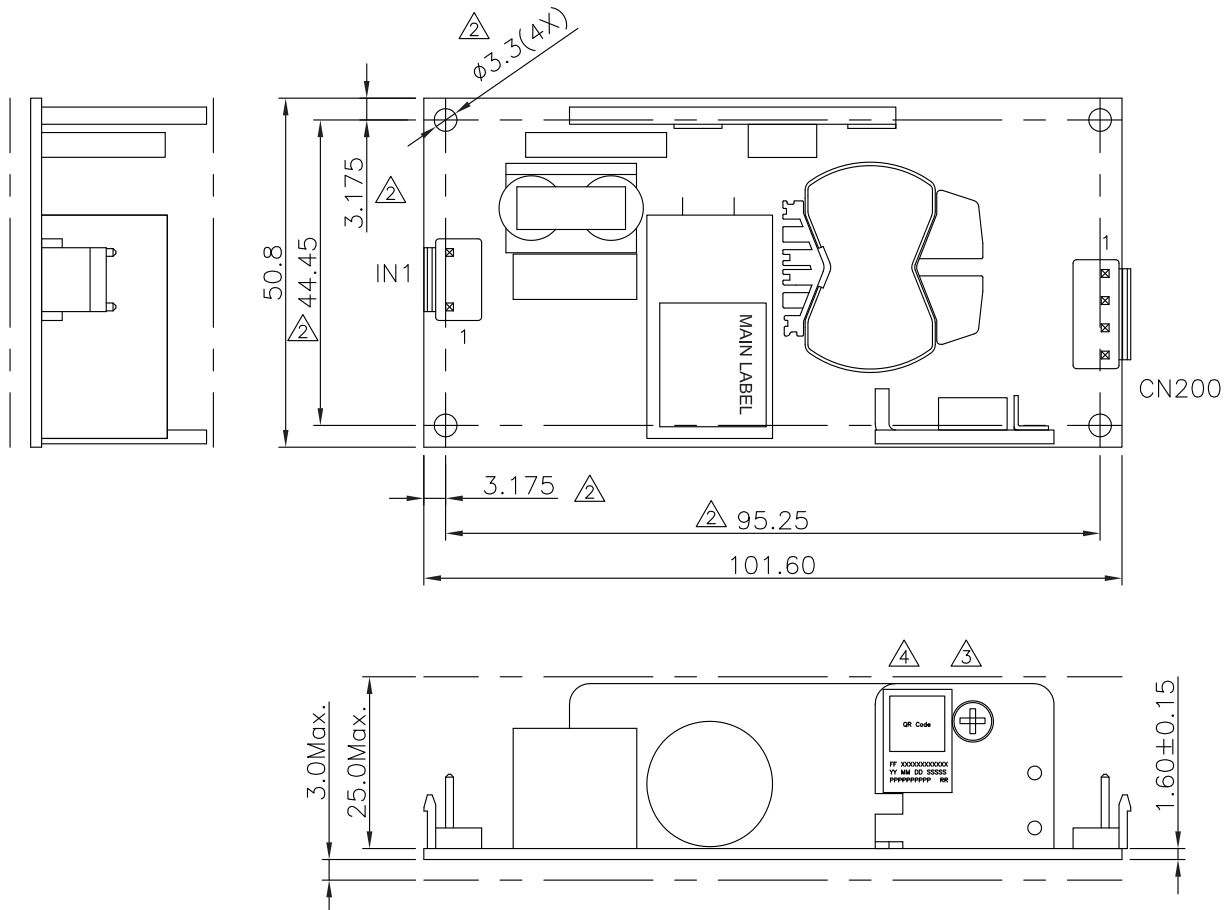
### OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output Voltage	Min. Load	Max. Current	Tolerance	Ripple & Noise <sup>(1)</sup>	Max. Power	Efficiency 115 / 230 Vac typical
FSP065-P24-B12	12 V	0 A	5.40 A	±3%	120 mV	65W	88 / 89%
FSP065-P24-B19	19 V	0 A	3.42 A	±3%	190 mV	65W	88 / 90%
FSP065-P24-B24	24 V	0 A	2.70 A	±3%	240 mV	65W	88 / 90%
FSP065-P24-B54	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  $\mu$ F tantalum (or electrolytic) capacitor in parallel with a 0.1  $\mu$ F ceramic capacitor across the output.

### MECHANICAL SPECIFICATIONS



Pin assignment:

1. IN1:

Pin No.	Function	Wafer
1	N	JST B2P3-VH or Equivalent
2		
3	L	

2. CN200:

Pin No.	Function	Wafer
1	+12V	JST B4P-VH or Equivalent
2	+12V	
3	GND	
4	GND	

#### NOTES:

- Dimensions are shown in mm
- Tolerance 0.5 mm maximum

Weight: 125 grams (0.275 lbs.) approx.