

## **DESCRIPTION**

This AC-DC switching power supplies in a package of 2 x 4 inches is a compact Class-II PSU that suitable for Telecomm and general application. This PSU is capable of delivering 65 watts continuous power at convection cooling.

## **FEATURES**

- Class-II design
- Compact dimension 2"x4"x1.17"
- EN 55032 Class B radiated emission
- Surge protection ±2 KV diff, ±4 KV com
- High altitude 5000 meters operation
- OVP, OPP, OTP protection

# FSP065-P24 Series



RoHS **(**E

## 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 ≤0.3A

consumption

Earth leakage current: 1.5 mA max. @ 264 VAC, 63 Hz

# **OUTPUT SPECIFICATIONS**

Output voltage/current: See rating chart.

Total output power: 65W Ripple and noise: ±1%.

Protection:

OVP Latch off
OPP Latch off
Shorted Auto recovery
OTP Latch off

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:  $0^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ Storage temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ 

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

# **SAFETY STANDARD APPROVAL**



UL 60950-1, CSA 22.2 No.60950-1



**TUV EN 60950-1** 

#### **GENERAL SPECIFICATIONS**

Efficiency: 87% @ 115Vac, 89% @ 230Vac typical
Hold-up time: 10 mS minimum @ 100% load & 115 VAC

Line regulation:  $\pm 0.5\%$  maximum at full load Inrush current: 55A @ 115VAC @ 25% cold start 100A @ 230 VAC @ 25% cold start Withstand voltage: 3000 VAC from input to output,

MTBF: 400,000 hours minimum at full load at  $25^{\circ}$ C

ambient, calculated per MIL-HDBK-217F

EMC Performance

EN55032 / EN55022 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

ENOTO00-3-2. Harmonic distortion, class

EN61000-3-3: Line flicker

EN61000-4-2: ESD, ±15 KV air and ±8 KV contact

EN61000-4-3: Radiated immunity, 3 V/m
EN61000-4-4: Fast transient/burst, ±2 KV
EN61000-4-5: Surge, ±2 KV diff, ±4 KV com
EN61000-4-6: Conducted immunity, 3 V/ms
EN61000-4-8: Magnetic field immunity, 3 A/m

EN61000-4-11: Voltage dip immunity,

30% reduction for 500 ms, criteria A >95% reduction for 10 ms, criteria A >95% reduction for 5000 mS, criteria B

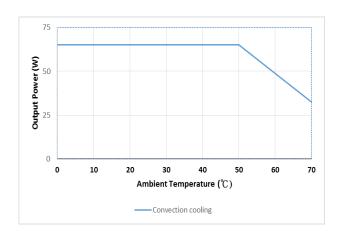
## **OUTPUT VOLTAGE / CURRENT RATING CHART**

Model	Output Voltage	Min. Load	Max. Current	Tolerance	Ripple & Noise <sup>(1)</sup>	Max. Power	Efficiency 115 / 230 Vac
FSP065-P24-12N	12 V	0 A	5.4 A	±3%	120 mV	65W	86 / 87%
FSP065-P24-24N	24 V	0 A	2.7 A	±3%	240 mV	65W	87 / 89%
FSP065-P24-48N	48 V	0 A	1.35 A	±3%	480 mV	65W	87 / 89%
FSP065-P24-54N	54 V	0 A	1.2 A	±3%	540 mV	65W	87 / 89%

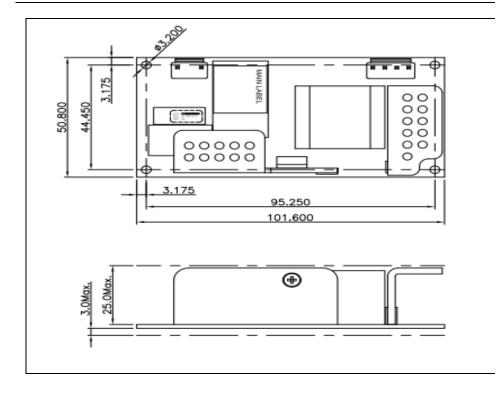
#### Notes:

(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 capacitor in parallel with a 0.1  $\mu$ F ceramic capacitor across the output.

# **OUTPUT DERATING CURVE**



# **MECHANICAL SPECIFICATIONS**



### Note:

 Input: JST B2P3-VH(LF)(SN) or EQU

Pin 1	Neutral
Pin 2	Line

Output: JST B4P-VH(LF)(SN) or EQU

Pin 1, 2	+12V		
Pin 3, 4	+12V RTN		

3. Dimension (L\*W\*H): 101.6 \* 50.8 \* 29.6 mm 4" \* 2" \* 1.17"

4. Weight:134 grams. (0.295 lbs.) approx.