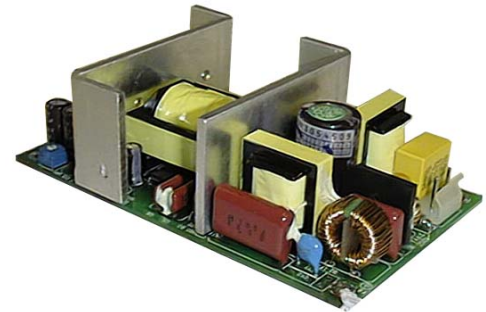


# 120 WATT

## SINGLE OUTPUT SWITCHING POWER SUPPLY/OPEN FRAME

### ZWD120-SX-F-W SERIES



#### GENERAL SPECIFICATION

This specification describes the performance characteristics of a grounded, single phase, 120 watts, single output level open frame switching power supply with PFC.

#### 1) INPUT

Description	Min.	Nominal	Max.	Condition
Input Voltage Range	85-264VAC			
Input Current (RMS)	2.5A max. (RMS) @ 115VAC			
Line Frequency	47Hz	50/60Hz	63Hz	-
Inrush Current	< 30A peak @ 115VAC; < 50A peak @ 230VAC cold start @25°C			
Efficiency	-	70%	-	at full load
Leakage current	< 0.5mA @ 50 / 60Hz. 264VAC input			
Power Factor	>0.99(20%~100% Load)			

#### 2) OUTPUT

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load	Regulation	Ripple P/P
ZWD120-3.3SX-F-W	+3.3V	0A	16A	18A	20A	±2%	50mV
ZWD120-5SX-F-W	+5V	0A	16A	18A	20A	±2%	50mV
ZWD120-12SX-F-W	+12V	0A	9.2A	10A	10.8A	±2%	120mV
ZWD120-15SX-F-W	+15V	0A	7.3A	8A	8.7A	±2%	150mV
ZWD120-24SX-F-W	+24V	0A	4.6A	5A	5.4A	±2%	240mV
ZWD120-30SX-F-W	+30V	0A	4A	-	-	±2%	300mV
ZWD120-36SX-F-W	+32V	0A	3.75A	-	-	±2%	320mV
ZWD120-36SX-F-W	+36V	0A	3.34A	3.7A	-	±2%	360mV
ZWD120-48SX-F-W	+48V	0A	2.3A	2.5A	2.7A	±2%	480mV

1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20MHz bandwidth and 10uF parallel with a 0.1uF capacitor at rated line voltage and load.

Note: B suffix added to model number indicates L bracket option.

- 2.1) Max. Power :
  - 110W for convection cooled
  - 120W with 30CFM forced air
- 2.2) Adjustment range :  $\pm 5\%$
- 2.3) Hold-up time : 20ms at 110 watt load and 115VAC nominal line

### **3) PROTECTION:**

- 3.1) Short circuit protection :
- 3.2) Short circuit protection on all outputs.
- 3.3) Over load protection :
- 3.4) Over load protected @ 110% to 145% above peak rating
- 3.5) Over voltage protection : +5V output: 5.7 to 6.7VDC.
- 3.6) Other output 10% to 20% above nominal output,
- 3.7) latching type. Recycle AC to reset.

### **4) ENVIRONMENTAL**

- 4.1) Operating temperature: 0°C to +50°C ambient derate each output at 2.5% per degree from +50°C to +70°C
- 4.2) Electromagnetic susceptibility: Designed to meet 61000-3-2
- 4.3) Humidity: Non-condensing 5% to 95%
- 4.4) Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. Dwell at four major resonance 0.75G, peak 5Hz to 500Hz, operational
- 4.5) Storage temperature: -40°C to +85°C
- 4.6) Temperature coefficient:  $\pm 0.04\%$  per degree C
- 4.7) MTBF demonstrated: >550,000 hours at full load and 25°C ambient temperature
- 4.8) Warranty: 2 years.

### **5) SAFETY REQUIREMENTS (Meet)**

- UL UL1950
- CSA 22.2-234 Level 3
- TUV EN60950
- CB
- CE Mark

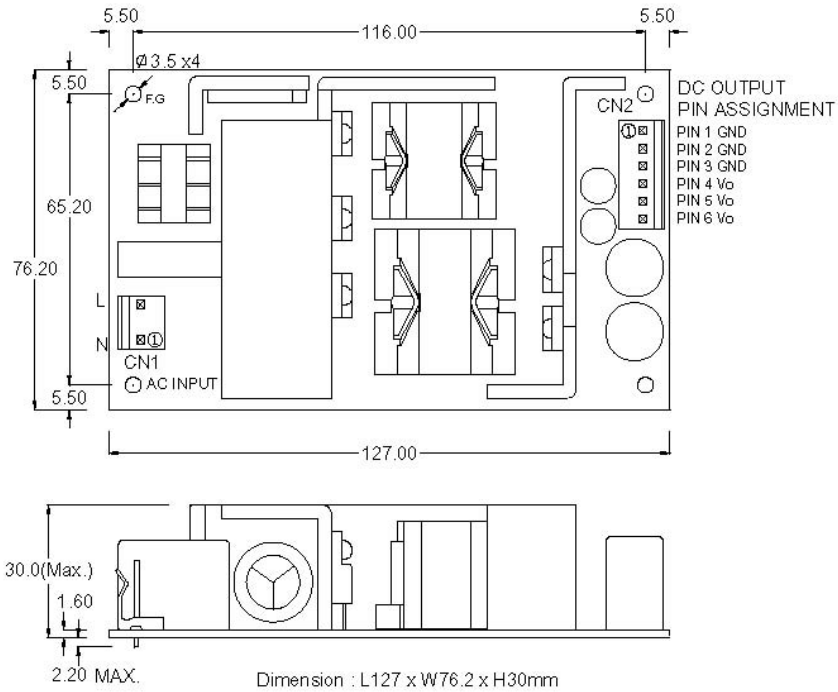
### **6) ELECTROMAGNETIC COMPABILITY**

- EMI :
  - FCC Class B conducted
  - CISPR 22 Class B conducted
  - EN55022 Class B conducted
  - EN61000-3-2



## 7) MECHANICAL DRAWING:

Dimension: L127×W76.2×H30mm (5"×3"×1.18")



### MATCHING CONNECTORS

CN1 = AC INPUT MOLEX P/N: 09-65-2029 (OR EQUIVALENT) FEMALE HOUSING MOLEX P/N: 09-76-1020 (OR EQUIVALENT)  
 CN2 = DC Output MOLEX P/N: 09-65-2068 (OR EQUIVALENT) FEMALE HOUSING MOLEX P/N: 09-52-4064 (OR EQUIVALENT)

