

## DPO-500 SERIES:



### 500 Watt / Single Output

- 5.00 x 3.00 x 1.28" UL94V-0 Plastic Case

### Features:

- Open Frame Switching Power Supply
- Remote ON/OFF Function
- 240 Watt with Free Air Convection
- 500 Watt with 30CFM FAN
- Built-in 12V/0.3A Auxiliary Output
- Standby 5V@1A with Fan, @0.6A without Fan
- High Efficiency up to 92%
- With P.F.C. Function >0.95
- Ultra Compact Size: 5.0 x 3.0 x 1.28 Inches
- 3-Year Product Warranty

### INPUT:

Input Voltage	90~264 VAC (Universal AC Input)
Input Frequency	47-63Hz
Inrush Current	70A @ 230 VAC Cold Start (max)
Input Current	6A maximum tat 115VAC
Input Protection	Single Fuse
Hold-Up Time	8ms Minimum
Leakage Current	<500µA ( Class I) / 250µA (Class II)
Harmonics	EN61000-3-2 Class A Compliant

### GENERAL:

Efficiency	88-92%
Operating Temperature	-40 to +70°C, derate 2.5% / °C above 50°C
Storage Temperature	-40°C to +85°C
Cooling	Convection Cooled
Operating Humidity	5-95% RH, Non-Condensing
Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.
MTBF	>160k Hrs (according to MIL-HBK-217F) at 25°C

### OUTPUT:

Minimum Load	n/a
Output Adjustment	±5% (typical)
Line Regulation	±1% max
Load Regulation	±1% typ. pk-pk @ 20MHz
Ripple & Noise	Auto-Recovery
Overload Protection	Auto-Recovery
Over Voltage	Auto-Recovery
Short Circuit Protection	

### STATUS / CONTROL

Standby Power	5vsb @ 1,00 A
Remote Sense	250mV Compensation
Remote On/Off	Included
DC OK	Included

### APPROVALS:

Emissions EN55022 "B", FCC Part 15 Subject J Class B

Safety Approvals UL/cUL EN60950-1  
 CB IEC 60950-1  
 CE Mark (LVD)

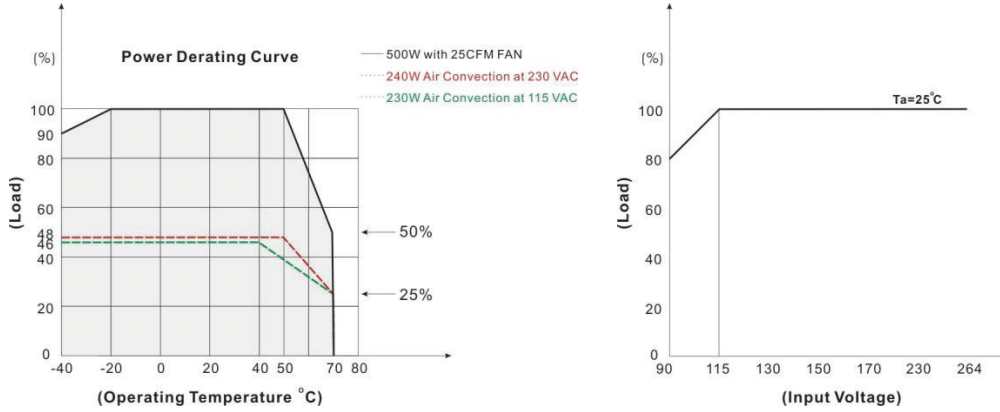


## DPO-500 SERIES:

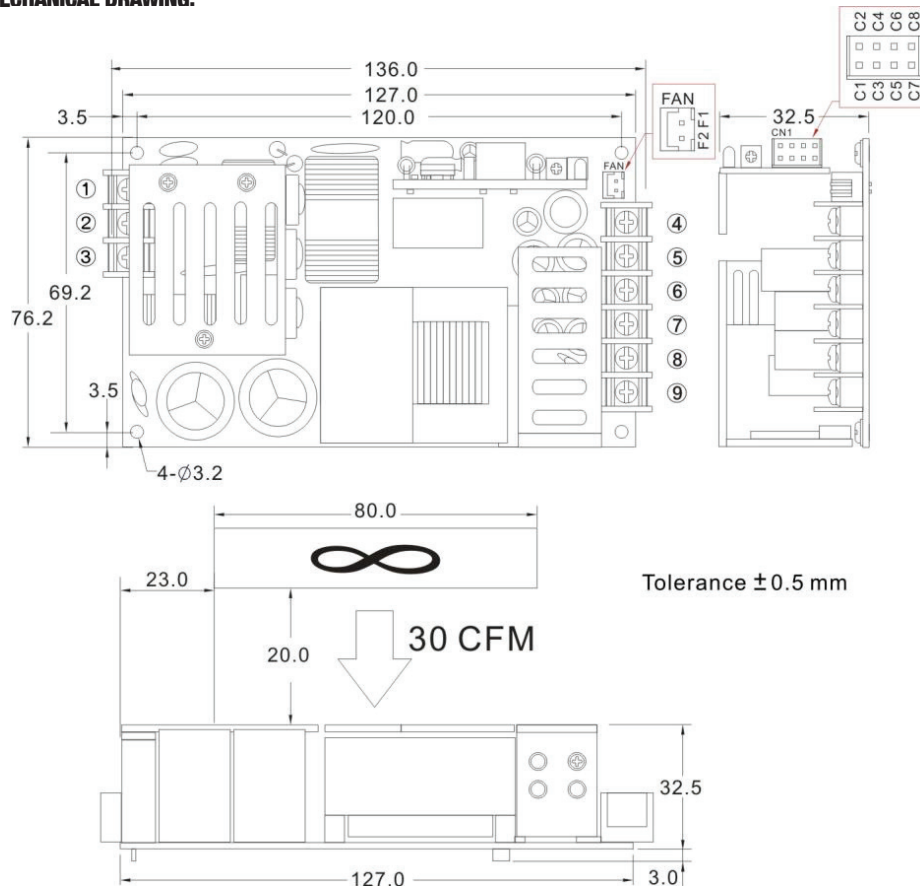
### Output Specifications:

Model:	V1	CONVECTION RATING AT 115 VAC INPUT	OUTPUT RATING WITH 30 CFM	EFFICIENCY
DPO500-12S	12V	19.16 A	41.5 A	88%
DPO500-24S	24V	9.58 A	20.8 A	90%
DPO500-48S	48V	4.8 A	10.41 A	92%

### DERATING CURVES:



### MECHANICAL DRAWING:



PIN#	Single
1	FG
2	AC IN (N)
3	AC IN (L)
4~6	+DC OUT
7~9	-DC OUT

Connector Pin (FAN)	
PIN#	Single
F1	+12V
F2	GND

Connector Pin (CN1)	
PIN#	Single
C1	-5VSB
C2	+5VSB
C3	GND
C4	DC OK
C5	-RC
C6	+RC
C7	-S
C8	+S

## DPO-500 SERIES:

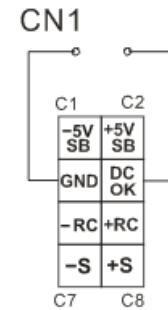
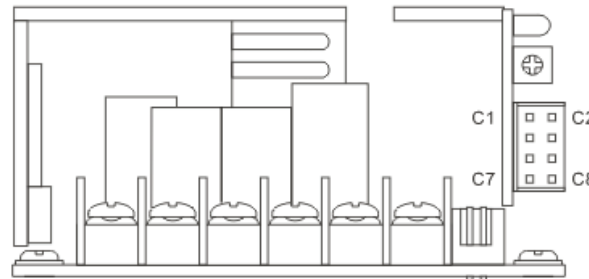
### FUNCTION DESCRIPTION of CN1

Pin No.	Function	Description
C1	-5VSB	This pin connects to the negative terminal(-V). Return for DC-OK and -RC signal output.
C2	+5VSB	Stand by voltage output ground 3.7~6V, referenced to pin C8(+5VSB). The maximum load current is 0.6A.
C3	GND	This pin connects to the negative terminal(-V). Return for DC-OK and -RC signal output.
C4	DC OK	DC-OK Signal is a DC output, referenced to pin C6(DC-OK GND).
C5	-RC	This pin connects to the negative terminal(-V). Return for DC-OK and -RC signal output.
C6	+RC	Turns the output on and off by electrical or dry contact between pin C4 (-RC), Short: Power OFF, Open: Power ON.
C7	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
C8	+S	Positive sensing. The +S signal should be connected to the negative terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.

### FUNCTION MANUAL & APPLICATION NOTE

#### 1. DC-OK Signal

Between DC-OK and GND	Output Status
3.7~6V	ON
0~1V	OFF



#### 2. Remote Control

It can be turned ON/OFF by using the "Remote Control" function.

Between +RC and -RC	Output Status
SW ON (Short)	OFF
SW OFF (Open)	ON

