

## DPC-1000 SERIES:



### 1,000 Watt / Single Output

- 11.14 x 5.00 x 1.61" Enclosed with Fan Package

### Features:

- Universal AC Input
- 0~105% Voltage & Current Adjustment Range
- Current Share Function
- Constant Current Limit
- 5V @ 0.5A Aux Output
- Overload / OverVoltage / Short Circuit Protection
- Power OK Signal
- Remote On/Off, Remote Sense Functions
- 1-Year Product Warranty

### INPUT:

Input Voltage	90~264 VAC (Universal AC Input)
Input Frequency	47-63Hz
Input Current	12A maximum at 115VAC
Inrush Current	27A @ 115VAC
Input Protection	Single Fuse
Hold-Up Time	16ms Minimum
Harmonics	EN61000-3-2 Class A Compliant
Leakage	1ma@ 240VAC max

### GENERAL:

Efficiency	87-90%
Operating Temperature	-25 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	>148k Hrs (according to MIL-HBK-217F) at 25°C

### OUTPUT:

Minimum Load	n/a
Output Adjustment	0-105% (typical)
Line Regulation	±1% max
Load Regulation	±1% max
Ripple & Noise	±1% typ. pk-pk @ 20MHz
Overload Protection	Auto-Recovery
Over Voltage	Auto-Recovery
Short Circuit Protection	Auto-Recovery

### STATUS / CONTROL

AUX Power	5V @ 0.5A Aux Output
Remote Sense	250mV Compensation
Remote On/Off	Included
DC OK	Included
Parallel Operation	Forced Current Sharing
Voltage Program	0-105% of Rated Voltage
Current Program	0-105% of Rated Current

### APPROVALS:

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

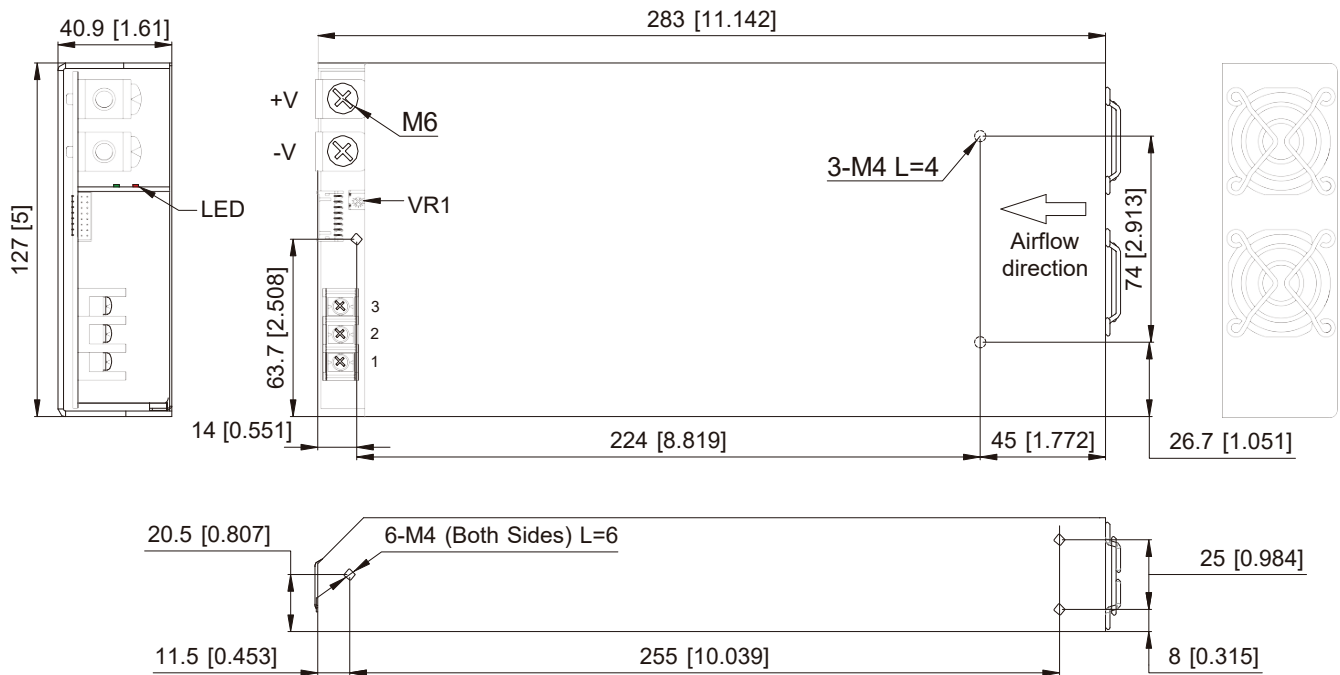
Safety Approvals UL/cUL EN60950-1  
EN 60950-1  
CB IEC 60950-1  
CE Mark (LVD)



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**Output Specifications:**

Model:	V1	OUTPUT CURRENT	EFFICIENCY
DPC-1000-12	12V	62A	87%
DPC-1000-15	15V	50A	88%
DPC-1000-24	24V	40A	89%
DPC-1000-27	27V	37A	89%
DPC-1000-48	48V	21A	90%



AC Input Terminal Pin No. Assignment

Pin No.	Assignment
1	ACL
2	ACN
3	⊥

Control pin number assignment (CN9): JST S16B-PHDSS or equivalent

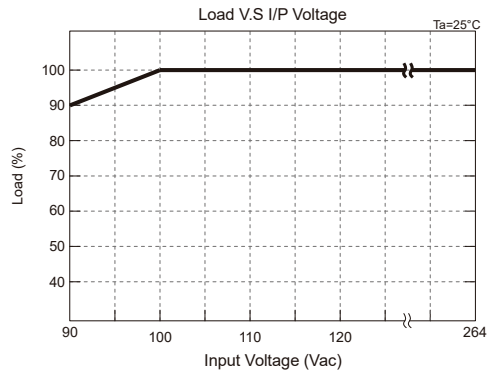
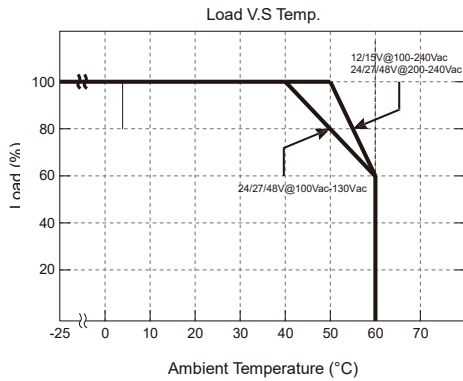
Pin No.	Function	Description
1	VS+	Remote voltage sense (+)
2	VO+	Local output voltage sense (+)
3	VS-	Remote voltage sense (-)
4	VO-	Local output voltage sense (-)
5,6	AUX	+5V / 0.5A Auxiliary power
7	EN+	Remote ON/OFF (+)
8,10,12,14	GND	Ground
9	EN-	Remote ON/OFF (-)
11	P.OK	Power OK
13	VCI	V Program
15	PAR	Parallel operation current share
16	ACI	I Program

## DPC-1000 SERIES:

### LED Status:

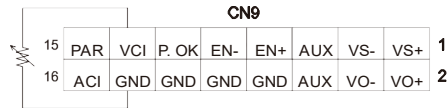
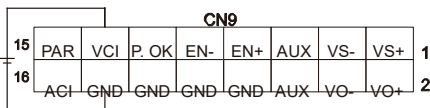
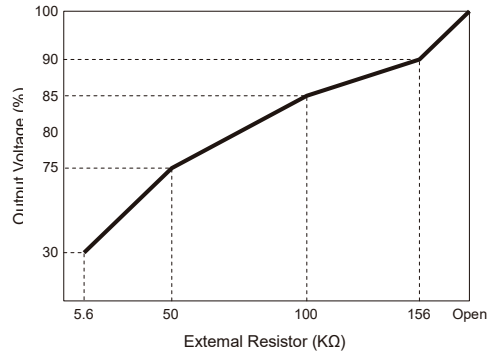
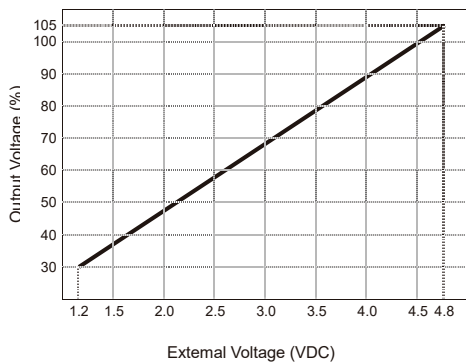
Green LED	LED Signal	Status
Solid		Power OK
Slow Blink		Power Standby
Red LED	LED Signal	Status
Fast Blink		Over Voltage Protection ( OVP )
Solid		Over Load Protection ( OLP )
		Output Short Circuit Protection ( SCP )
		Under Voltage Protection ( UVP )
Slow Blink		Over Temperature Protection ( OTP )
Intermittent Blink		Fan Failure
Interlace Blink		Power Failure

### De-rating Curve:



### Function Manual:

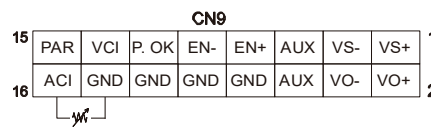
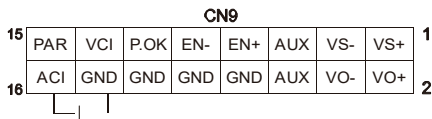
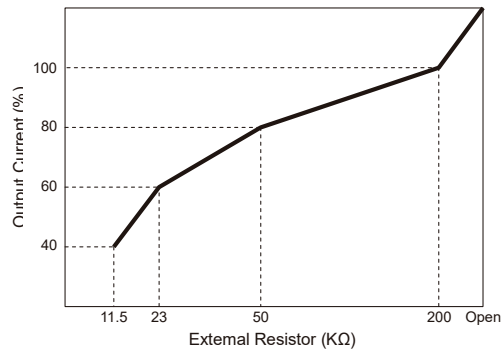
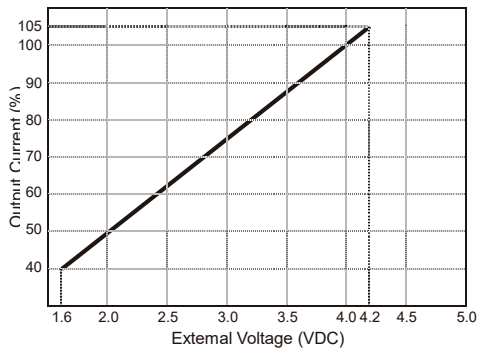
#### 1. Output Voltage Trim



REV. D8  
13/09/09

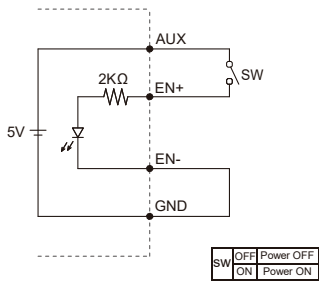
## DPC-1000 SERIES:

### 2. Output Current Trim (For Reference Only)



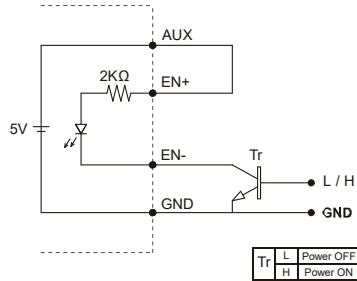
### 3. Remote ON/OFF

(A)



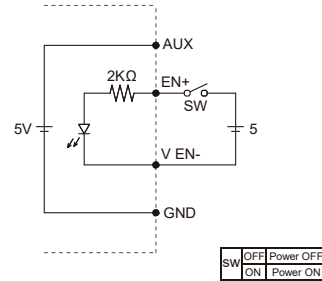
(A) Using internal 5V auxiliary source

(B)



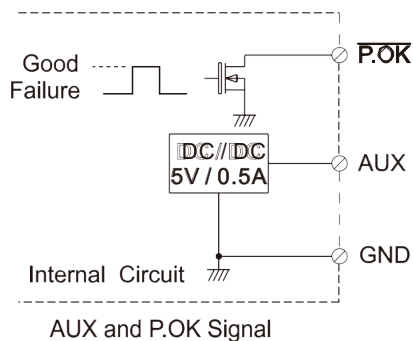
(B) ON / OFF Control by NPN transistor

(C)



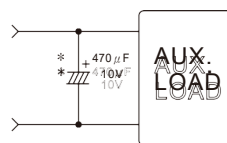
(C) Using external voltage source

### 4. Power OK Signal



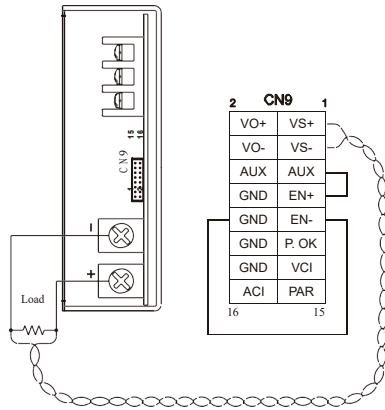
\*Place an additional capacitor to have a better performance of auxiliary power operation.

\*The grounding of "AUX" power should be connected to "GND" port. If "V-" is connected as Grounding, make sure to short the GND and V- ports.

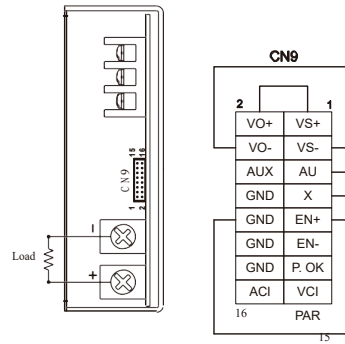


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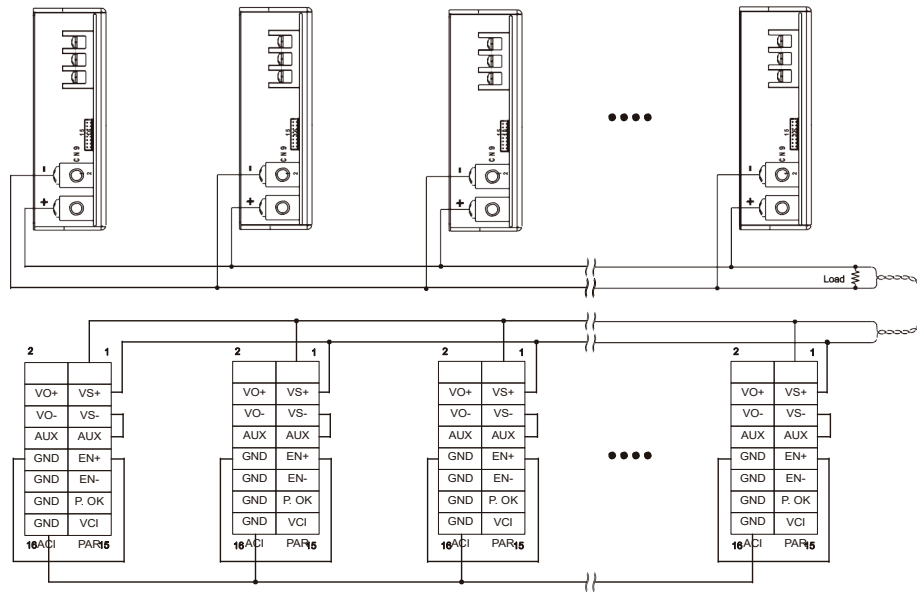
5. Remote Sense



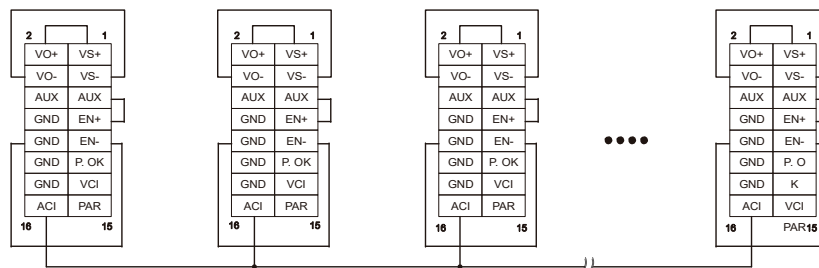
6. Local Sense



7. Current Sharing with Remote Sensing



8. Current Sharing with Local Sensing

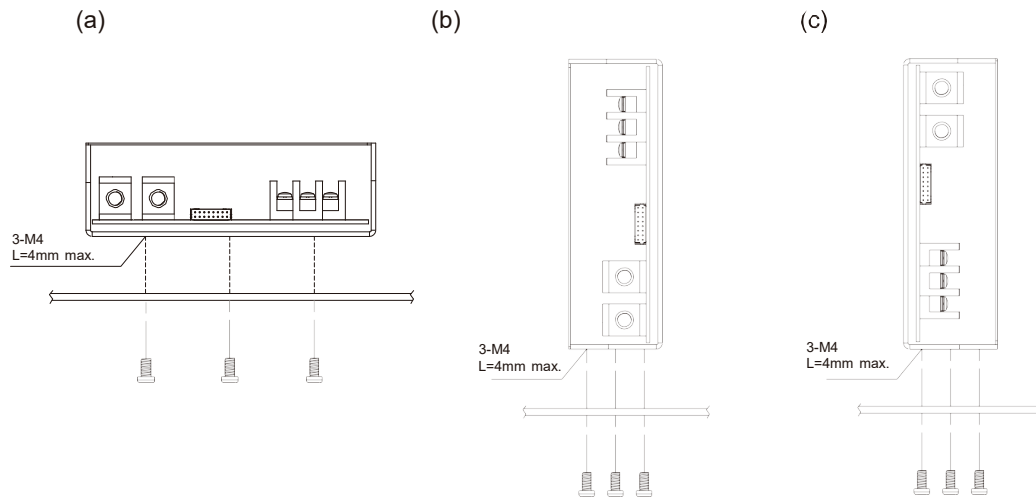


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### ■ Installation Instruction:

#### 1. Mounting Directions

1-1 Recommended standard mounting methods:



#### 2. Mounting Method

2-1 There are ventilating holes on the front and back side panels, do not obstruct; allow 50mm at least for air flow.

2-2 The Maximum allowable penetration of screw is 4mm.  
Incomplete threading should not be penetrated.

2-3 Recommended the torque of mounting screw:  
M4 screw: 1.27N • m (13.0kgf • cm)

