

**Model: BPA-R1000-120**

|                |                    |
|----------------|--------------------|
| Total Power    | 1000 Watts         |
| Input Voltages | 90-264 VAC         |
| Outputs        | Single plus 3.3VSB |

**SPECIAL FEATURES**

- Active Power Factor Correction
- Wide Range Input
- Redundant operation
- Single wire current sharing
- FET isolation
- Power Good
- PS\_On
- PS\_Kill
- Variable Fan Speed Control
- I<sup>2</sup>C interface with PMBUS Standard
- UL, CUL, and DEMKO Approvals
- CE compliant
- Custom modifications available

**ENVIRONMENTAL SPECIFICATIONS**

Humidity: Up to 95% non-condensing

Storage Temperature: -20° to +85°C

Temperature coefficient: ±0.01% / °C

Ambient Operating Temperature: 0 to +50°C continuous duty, full rating. Derate linearly to 50% of full rating at +71°C.

Altitude: Will operate properly at 10,000ft

Cooling: Self-contained fan cooling.

**SAFETY APPROVALS**

UL 60950-1 Second Edition  
 CUL 60950-1 Second Edition  
 DEMKO EN60950-1 Second Edition



**VOLTAGE/CURRENT RATING CHART**

| Output ID | Voltage | Min. | Max. | Peak 30Sec | Peak 5mSec |
|-----------|---------|------|------|------------|------------|
| VO1       | +12V    | 0A   | 83A  | 90A        | 100A       |
| 3.3VSB    | +3.3VSB | 0A   | 8A   | N/A        | N/A        |

**ELECTRICAL SPECIFICATIONS**

**Input Specifications**

Input Range..... 90-264 VAC  
 Frequency..... 47-60 Hz  
 EMI filter..... EN55022 Class B, FCC Part 15  
 Inrush Current..... ≤20A @ 110 VAC  
 Input Current..... 14A  
 Isolation..... 4242 VDC (Input to Output)  
 Efficiency..... 90% at 220VAC  
 Active PFC..... 0.99  
 Switching Frequency..... 134KHz.  
 Leakage..... ≤1.5mA @ 264 VAC

**Output Specifications**

DC Output..... Maximum continuous output power 1000 Watts with self-contained fan cooling. Peak of 90A for 30 seconds, maximum peak 100A for 5ms.

Line Regulation..... ±0.05%

Load Regulation..... ±2% on all outputs.

Ripple and Noise..... 1% Pk to Pk

Transient Response..... 2% Maximum deviation; returns to initial condition in 1msec max, for load changes from 50% to 100%.

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## Model: BPA-R1000-120

### ELECTRICAL SPECIFICATIONS (CONT')

#### Output Specifications

Long Term Stability..... 0.01% after 20 minute warm-up.

Hold-Up Time..... 16msec minimum

OVP.....110% to 130% on all outputs. AC must be recycled to restart the unit.

Short-circuit Protection.....Latching method on all outputs

Overload Protection.....The power supply will shut down when the output power rating exceeds 110% to 115% of maximum rated output for a minimum of 1 minute or exceeds 125% of maximum rated output current for a minimum of 10ms. AC must be recycled to restart the unit.

Diode Isolation..... Internal FET isolation provided for redundant operation.

Current Sharing.....all outputs will current share within 5% when interconnected by a single wire.

Remote Sense.....All outputs. 12V will have differential remote sense and 3.3V will have single ended remote sense.

AC Fail.....A TTL low signal provided 10ms prior to DC outputs dropping out of regulation.

PS\_On.....The secondary outputs are enabled only upon mating pin A1to output common on the customer's backplane.

Power Good..... A TTL low logic signal is provided when the output voltages are within normal operating conditions.

PS\_Seated.....Pin A4 on the power supply is used to identify that the power supply has been installed into the customer's backplane.

PWRON/PS\_Kill .....The output is enabled only upon mating B4 to output common on the customer's backplane. PS\_Kill disables power supply functionality prior to long pins disconnecting.

LED Indicators ..... The power supply has 2 bicolor LED's providing the power supply status and the fan status. If all outputs are operating within specifications the status LED will be green. Red LED indicates power supply out of specification. The fan LED will be controlled via the I<sup>2</sup>C bus.

Thermal Protection.....The power supply has a built in thermal sensor to protect against abnormal temperature conditions.

I<sup>2</sup>C/PMBUS.....Monitors input current, input voltage, temperature, output voltage, and output current; controls Fan speed, Fan LED and connects to a serial NVRAM which is programmed with serial number. PMBUS Standard to allow monitoring of overall operation of power supply.

### OVERALL MECHANICAL DIMENSIONS

11.3"L x 3.3"W x 1.59"H  
(287.5mm x 84.2mm x 40.5mm)

### CONNECTORS

AC input – IEC320 C14 Inlet

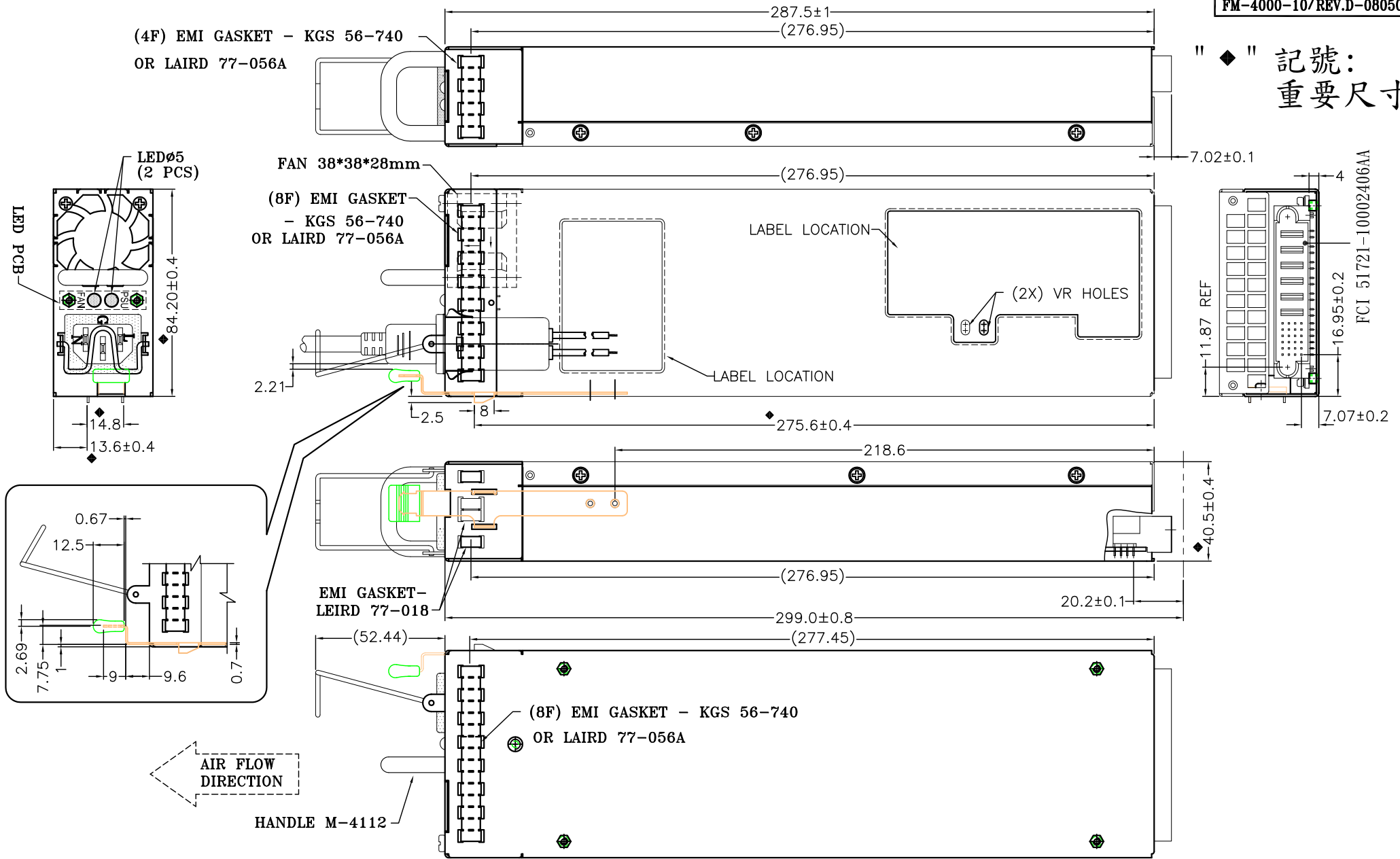
DC output – FCI 51721

### NOTES

- Specifications subject to change without notice.
- All dimensions in inches/mm
- Warranty: 2 years
- Weight: 3.75lbs

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◆ " 記號：  
重要尺寸



|         |           |                 |               |  |  |  |  |  |  |  |  |
|---------|-----------|-----------------|---------------|--|--|--|--|--|--|--|--|
| TITLE   |           | OUTLINE DRAWING |               |  |  |  |  |  |  |  |  |
| DRAWN   | H. L. LIN | DRG. NO.        | BLU-398       |  |  |  |  |  |  |  |  |
| CHECKED |           | MODEL NO.       | BPA-R1000-120 |  |  |  |  |  |  |  |  |

|       |            |          |   |       |           |       |              |
|-------|------------|----------|---|-------|-----------|-------|--------------|
| UNIT  | mm[inches] | REV. NO. | F | SCALE | 0.48 : 1  | MAT'L | t=           |
| THIRD | $\phi$     |          |   | TOL.  | $\pm$ 0.5 | DATE  | 06. 04. 2010 |



300-1 (B2) Route 17, Loch, NJ 07644

MODEL NO. : BPA-R1000-120 LF

**INPUTS :**

| ASSIGNMENT | A.C. VOLTAGE | CURRENT | PIN NBR |
|------------|--------------|---------|---------|
| L:         | 100-277V~    | 14A     | L       |
| N:         |              |         | N       |
| G:         |              | 50-60Hz | G       |

**IN/OUTPUT RATING & PIN ASSIGNMENT**

|                        |                          |
|------------------------|--------------------------|
| SIZE : A4              | FM-4000-34/REV.A-080502' |
| UNIT : mm[inches]      | FILENAME: PPSC0544       |
| REV. NO.: H            | DATE : 01. 26. 2011      |
| DRAWN: 吳琪梅<br>C. M. WU | CHECKED:                 |

**OUTPUTS :**

| ASSIGNMENT | D.C. VOLTAGE  | CURRENT | PIN NBR        |
|------------|---------------|---------|----------------|
| V01:       | +12V ---      | 83A     | P2-PB4,PB5,PB6 |
| DC COM:    |               |         | P2-PB1,PB2,PB3 |
| DC COM:    |               |         | P2-A6,B6,C6,D6 |
| 3.3VSB:    | +3.3V ---     | 8A      | P2-A5,B5,C5,D5 |
| 12VS+:     | (shorter pin) |         | P2-B2          |
| 12VS-:     |               |         | P2-A2          |
| 12VCS:     |               |         | P2-B3          |
| 3.3VS+:    | (shorter pin) |         | P2-D4          |
| 3.3VCS:    |               |         | P2-C4          |
| PS_ON:     | (shorter pin) |         | P2-A1          |
| PS_SEATED: | (shorter pin) |         | P2-A4          |
| PS_KILL:   | (shorter pin) |         | P2-B4          |
| SDA:       |               |         | P2-C1          |
| SCL:       |               |         | P2-C2          |
| P.OK:      |               |         | P2-C3          |
| ADDR0:     |               |         | P2-D1          |
| ADDR1:     |               |         | P2-D2          |
| FAN_TACH:  |               |         | P2-D3          |
| AC_OK:     |               |         | P2-B1          |
| NA:        |               |         | P2-A3          |

**MAXIMUM OUTPUT POWER: 1000W**

|    |    |    |    |    |    |     |     |     |     |     |     |
|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| D1 | D2 | D3 | D4 | D5 | D6 | PB1 | PB2 | PB3 | PB4 | PB5 | PB6 |
| C1 | C2 | C3 | C4 | C5 | C6 |     |     |     |     |     |     |
| B1 | B2 | B3 | B4 | B5 | B6 |     |     |     |     |     |     |
| A1 | A2 | A3 | A4 | A5 | A6 |     |     |     |     |     |     |

A1 pin is shorter  
 B4 pin is shorter  
 B2 pin is shorter  
 D4 pin is shorter  
 A4 pin is shorter

