AUTEC POWER SYSTEMS
...POWERmatters.

## *Model: BPA-R850-3840-CR*

| | |
|---|---|
| *Total Power* | *850 Watts* |
| *Input Voltages* | *180-264 VAC* |
| *Outputs* | *384VDC plus 5VSB* |

## *SPECIAL FEATURES*

- Active Power Factor Correction
- Isolated Output
- Redundant operation
- Single wire current sharing
- Diode isolation
- PS On
- Power Okay
- Inhibit
- I²C interface
- UL, CUL, DEMKO, *to be obtained*
- CE compliant
- ***Custom modifications available***

## *ENVIRONMENTAL SPECIFICATIONS*

Humidity: Up to 95% non-condensing

Storage Temperature: -20° to +85°C

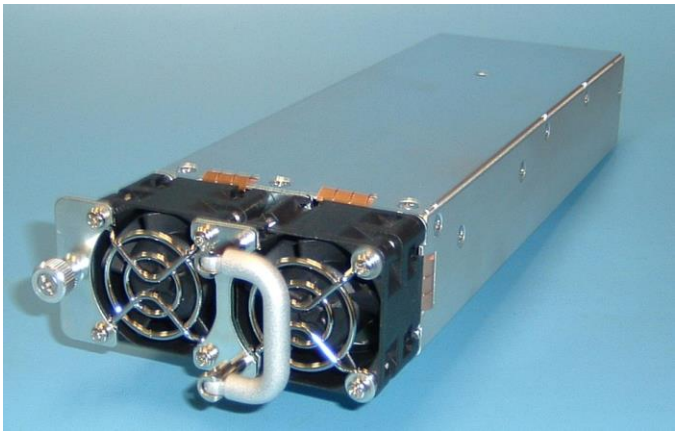
Temperature coefficient: ±0.01% / °C

Ambient Operating Temperature: 0 to +50°C continuous duty, full rating. Derates linearly to 70% of full rating at +70°C.

Cooling: Self contained fan cooling.

## *SAFETY APPROVALS, to be obtained*

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



## *OVERALL MECHANICAL DIMENSIONS*

10.48" L x 3.23" W x 1.55" H
(266.3mm x 82mm x 39.4mm)

## *ELECTRICAL SPECIFICATIONS*

### *Input Specifications*

Input Range…….. 180-264 VAC
Frequency……..47-63 Hz
EMI filter…….. EN55022 Class A, FCC Part 15
Inrush Current……≤32A @ 230 VAC
Input Current…… 5.6A – 3.8A
Isolation (Input to Output)…….. 4242 VDC
Isolation (VO1 to Gnd)…….. 2200 VDC
Isolation (VO1 to Logic Gnd).... 2200 VDC
Efficiency…….. 88%
Active PFC……0.99
Switching Frequency……134KHz.
Leakage……< 1mA

### *Output Specifications*

DC Output……..Maximum continuous output power 850 Watts with self-contained fan cooling.

Line Regulation……±0.05%

Load Regulation…… ±1%

Ripple and Noise……1% Pk to Pk

Transient Response…….. 2% Maximum deviation; returns to initial condition in 1 msec max.

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



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## Model: BPA-R850-3840-CR

### ELECTRICAL SPECIFICATIONS (CONT')

### Output Specifications

Hold-Up Time…… 20msec minimum

OVP……115% to 135% on VO1 output only.

Short-circuit Protection……..Constant current with delayed latching method on VO1 output. The 5VSB utilizes the hiccup method.

Overload Protection……..Constant current with delayed latching method on VO1 output. The 5VSB utilizes the hiccup method. The constant current method allows for a 5-second delay before the power supply shuts down if the output current rating exceeds 110% to 130% of maximum rated output current. The AC must be recycled or the PS ON reset to restart the unit.

Diode Isolation…….. Internal FET isolation provided for N+1 redundant operation.

Current Sharing……VO1 Output will current share within 5% when interconnected by a single wire.

PS ON……..The secondary outputs are enabled only upon mating pin P1-7 to output common on the customer's backplane.

Over Temperature Protection …. The power supply will shut down if temperature is greater than 100°C internal temperature. The power supply is self recovering once the internal temperature falls below 60°C.

Power Okay…….. A TTL high logic signal is provided on pin P1-10 when the input and output voltages are within normal operating conditions.

Inhibit ……A TTL low logic signal sent to pin P1-11 inhibits all outputs except the 5VSB. Upon release of the signal, outputs are restored.

$I^2C$ ……..... Monitors: Power Good, Voltage, Current, Temperature, and Fan

### PIN ASSIGNMENTS

See attached In/Output Rating and Pin Assignment Sheet

### CONNECTOR

Input/Output– Positronic PCIB24W9M400A1/AA

### NOTES

- Specifications subject to change without notice.
- All dimensions in inches/mm
- Warranty: 2 years
- Weight: 3 lbs (est)

### VOLTAGE/CURRENT RATING CHART

| Sample Part Number | Assignment | Voltage | Minimum | Maximum |
|---|---|---|---|---|
| **BPA-R850-3840-CR** | VO1 | 384V | 0A | 2.2A |
| | 5VSB | +5V | 0A | 2.0A |



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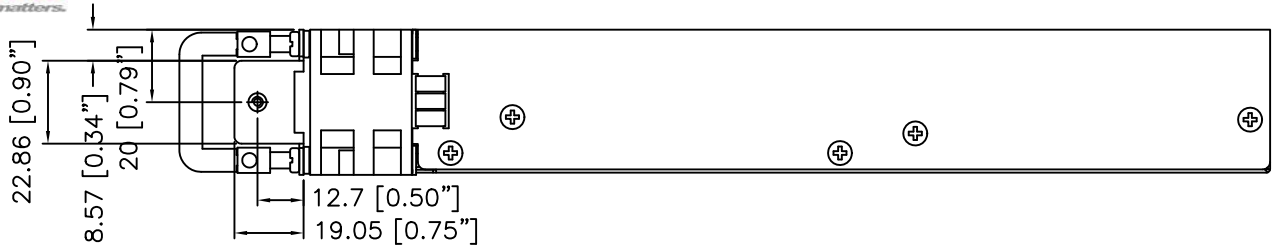
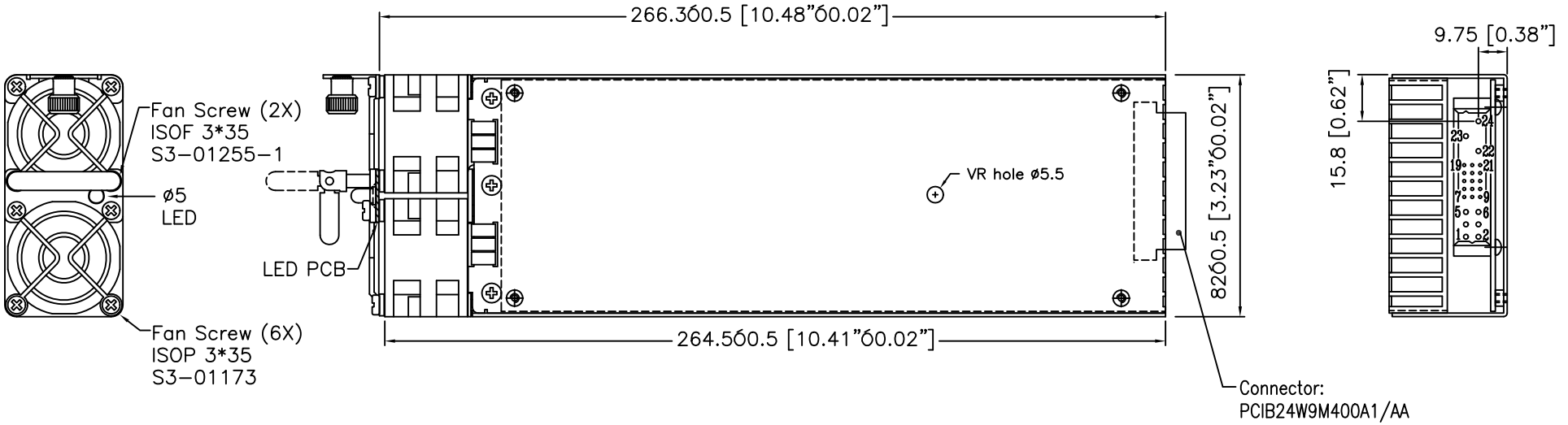
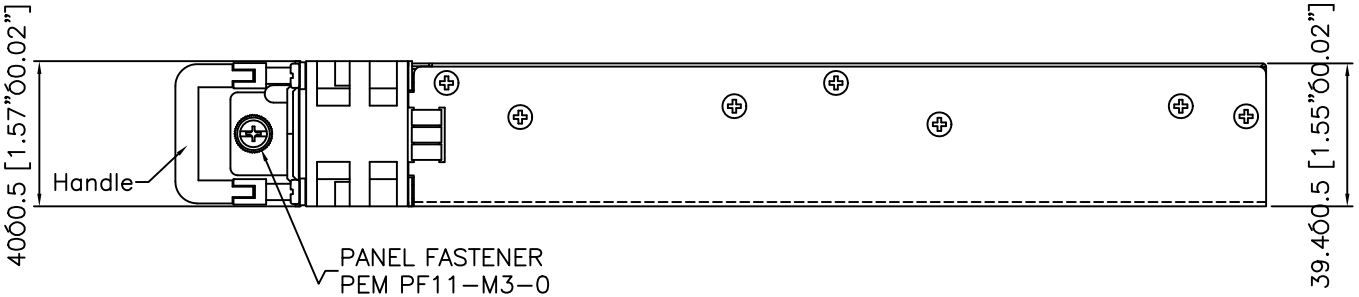
FM-4000-10/REV.D-080502'

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | TITLE | Outline drawing | | |
| UNIT | mm[inches] | REV. NO. | C | SCALE | 0.48 : 1 | MAT'L | t= | DRAWN | H. L. LIN | DRG. NO. | BLU-264 |
| THIRD | | | | TOL. | ± 0.5 | DATE | 06. 02. 2008 | CHECKED | | MODEL NO. | BPA-R850 Series |

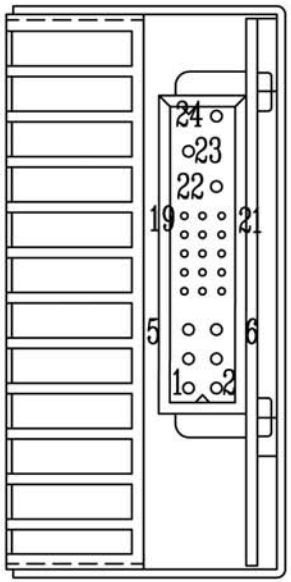
| | |
|---|---|
| SIZE : A4 | FM-4000-34/REV.A-080502' |
| UNIT :mm[inches] | FILENAME: PPSC0494 |
| REV. NO.: A | DATE : 02. 15. 2008 |
| DRAWN: 洪麗珍 L. J. Hun | CHECKED: |

# IN/OUTPUT RATING & PIN ASSIGNMENT

MODEL NO. : BPA-R850-3840

## INPUTS :

| ASSIGNMENT | A.C. VOLTAGE | CURRENT | PIN NBR |
|---|---|---|---|
| L: | 180-240V~ | | P1-24 |
| N: | | | P1-23 |
| GND: | | 50-60Hz | P1-22 |




P1 = POSITRONIC PCIB24W9M400A1/AA

## OUTPUTS :

| ASSIGNMENT | D.C. VOLTAGE | CURRENT | PIN NBR |
|---|---|---|---|
| VO1: | 384V ⎓ | 2.2A | P1-1,2 |
| VO1 RET: | | | P1-3,4 |
| Not Connected: | | | P1-5 |
| 5VSB: | +5V ⎓ | 2A | P1-18 |
| 48VCS: | | | P1-6 |
| PS ON: | | | P1-7 |
| NC.: | | | P1-8,9 |
| INH: | | | P1-11 |
| P. OK: | | | P1-10 |
| FAN_OK: | | | P1-12 |
| TEMP: | | | P1-13 |
| PSU_PRESENT: | | | P1-14 |
| Digital GND: | | | P1-15 |
| SDA: | | | P1-16 |
| SDL: | | | P1-17 |
| A2: | | | P1-19 |
| A1: | | | P1-20 |
| A0: | | | P1-21 |

MAXIMUM OUTPUT POWER: 850W

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