

## KEY FEATURES

- Enclosed ITE Switching Power Supply
- Remote ON/OFF Function
- Standby 5V@1A
- High Efficiency up to 92%
- With P.F.C. Function >0.9
- Current Share Function
- Ultra Compact Size: 6.7 x 3.66 x 1.61 Inches
- 3-Year Product Warranty



## ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

| Model No               |                                    | VPF700C-12S  | VPF700C-15S | VPF700C-24S | VPF700C-28S | VPF700C-48S |
|------------------------|------------------------------------|--|-------------|-------------|-------------|-------------|
| Max Output Wattage (W) |                                    | 625W   |             | 700W        |             |             |
| Input                  | Voltage (Note 6)                   | 90-264 VAC   |             |             |             |             |
|                        | Frequency (Hz)                     | 50 / 60 Hz   |             |             |             |             |
|                        | Current (Full load)                | <8 A max. (115 VAC) / <3.5 A max. (230 VAC)        |             |             |             |             |
|                        | Inrush Current (<2ms) (Cold Start) | < 55 A max. (115 VAC) / < 90 A max. (230 VAC)      |             |             |             |             |
|                        | Leakage Current                    | < 0.1 mA max. (Input-Output)                       |             |             |             |             |
|                        | Power Factor (at 230 VAC)          | PF>0.9 at Full Load                                |             |             |             |             |
| Output                 | Voltage (V.DC.)                    | 12V  | 15V         | 24V         | 28V         | 48V         |
|                        | Voltage Accuracy                   | ±2%  |             |             |             |             |
|                        | Voltage Adj. Range (V.DC)          | ±5% Output Voltage                                 |             |             |             |             |
|                        | Current (A) (max.)                 | 52.08  | 41.66       | 29.16       | 25          | 14.58       |
|                        | Line Regulation (115-264 VAC)      | ±0.5%  |             |             |             |             |
|                        | Load Regulation (10-100%) (typ.)   | ±1%  |             |             |             |             |
|                        | Minimum Load                       | 1%   |             |             |             |             |
|                        | Maximum Capacitive Load            | 5,000µF  | 3,750µF     | 2,500µF     | 2,000µF     | 1,250µF     |
|                        | Ripple & Noise (typ.)              | 160mV  | 160mV       | 240mV       | 280 mV      | 480mV       |
|                        | Efficiency (at 230 VAC)            | 89%  | 90%         | 91%         | 92%         | 92%         |
|                        | Hold-up Time (at 115 VAC)          | 5 ms min.  |             |             |             |             |
| Protection             | Over Power Protection              | Auto recovery                                      |             |             |             |             |
|                        | Over Voltage Protection            | Auto recovery                                      |             |             |             |             |
|                        | Over Temperature Protection        | Auto recovery                                      |             |             |             |             |
|                        | Short Circuit Protection           | Auto recovery or Latch                             |             |             |             |             |
| Isolation              | Input-Output (V.AC)                | 4000VAC or 5656VDC                                 |             |             |             |             |
|                        | Input-PE (V .AC)                   | 2000V  |             |             |             |             |
|                        | Output-PE (V.AC) 1500V             |  |             |             |             |             |
| Function               | 5V Stand by                        | 5VSB: 5V@1A ; Tolerance ±10%                       |             |             |             |             |
|                        | DC OK Signal (Power Good)          | Turn ON: 3.7~5.7V ; Turn OFF: 0~1V                 |             |             |             |             |
|                        | Remote Control                     | +RC / -RC: Power ON=open ; Power OFF=short         |             |             |             |             |
|                        | Current Share                      | CN4:CS, +V, -V are connected mutually in parallel. |             |             |             |             |

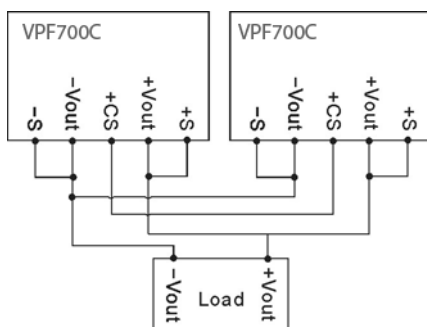
## ELECTRICAL SPECIFICATIONS

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|-----------------|----------------------------|---|-------------|-------------|-------------|--|
| Environment     | Operating Temperature      | -30°C...+70°C (with derating)   |             |             |             |  |
|                 | Storage Temperature        | -35°C...+85°C   |             |             |             |  |
|                 | Temperature Coefficient    | ±0.03%/°C ( 0~50°C )  |             |             |             |  |
|                 |                            | ±0.06%/°C ( -30~0°C )   |             |             |             |  |
|                 | Altitude During Operation  | 5000m   |             |             |             |  |
|                 | Humidity 95%               | RH  |             |             |             |  |
|                 | Atmospheric Pressure       | 56 kPa to 106 kPa   |             |             |             |  |
|                 | MTBF                       | >100,000 h @ 25°C (MIL-HDBK-217F)   |             |             |             |  |
|                 | Vibration                  | IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes) |             |             |             |  |
| Shock IEC60068- | 2-27                       |   |             |             |             |  |
| Physical        | Dimensions (L x W x H)     | 6.7 x 3.66 x 1.61 Inches ( 170.2 x 93.0 x 41.0 mm ) Tolerance ±0.5 mm     |             |             |             |  |
|                 | Weight 890                 | g   |             |             |             |  |
| Safety          | Approval                   | UL / IEC / EN 62368   |             |             |             |  |
| EMC             | Conducted and Radiated EMI | EN55032 / EN55011 (conducted class B, Radiated Class A)                   |             |             |             |  |
|                 | EMS                        | EN55024 / EN60601-1-2 4th edition   |             |             |             |  |

## NOTE

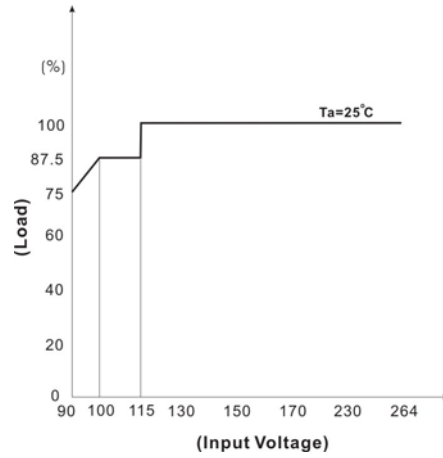
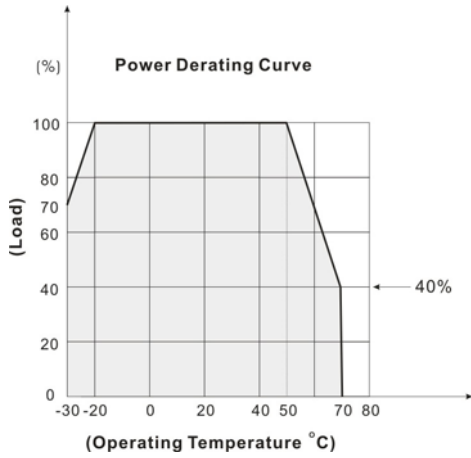
- Ripple & Noise are measured at 20MHz of bandwidth by using a 6" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- Hold-up Time measured at 90% Vout.
- Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors
- Current Share:
  - The output voltage difference of each parallel single element should be less than 0.2 Vout.
  - Output power at parallel operation = rated power per unit x number of unit x 90%
  - Connect in parallel no more than 2 units. Please contact us for advice if more than 2 is needed.
  - Minimum Load Should be 15%.



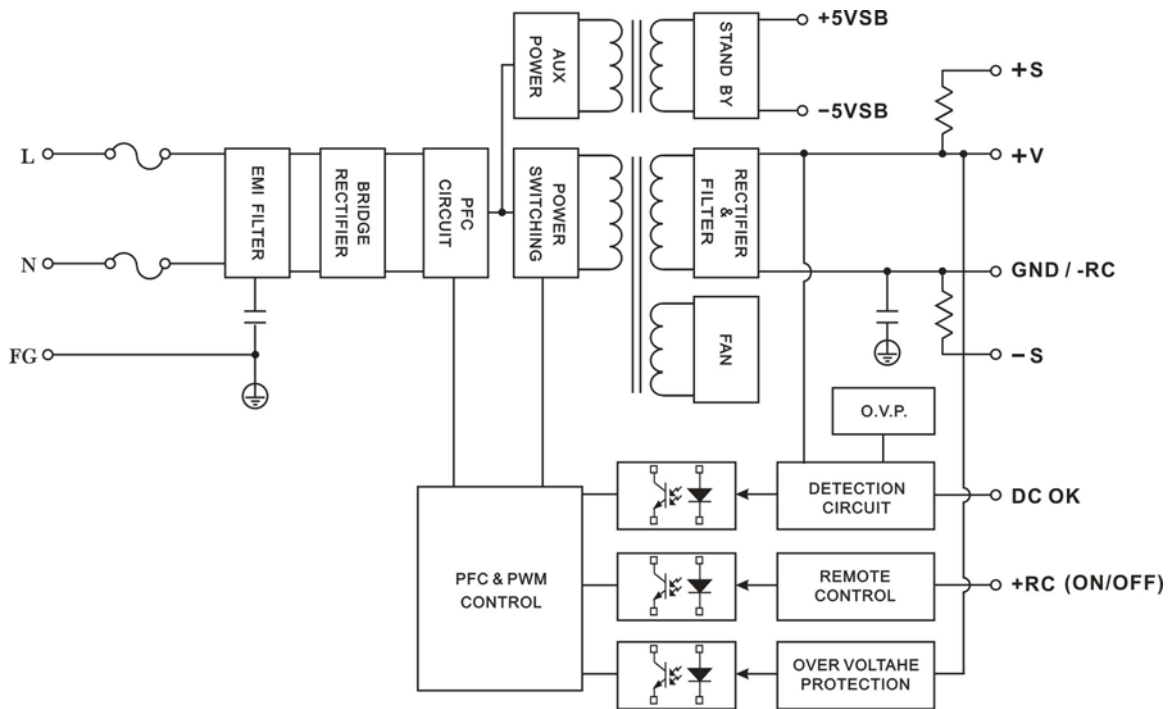
5. **CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.**

6. Please check the derating curve for more details.

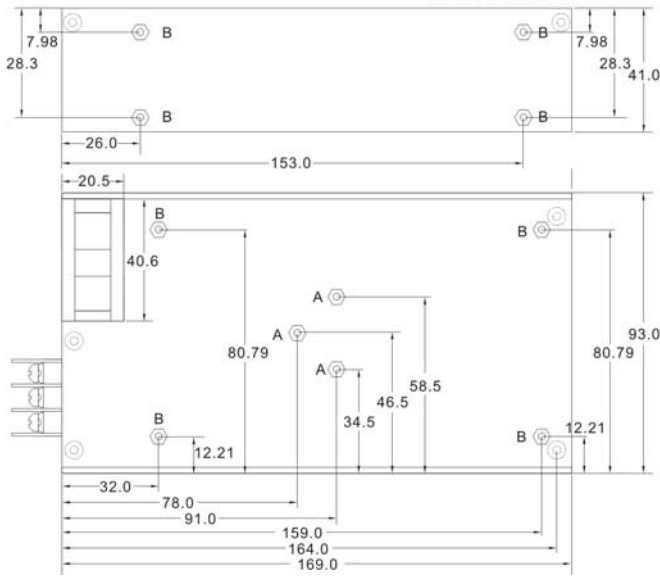
### DERATING



### BLOCK DIAGRAM



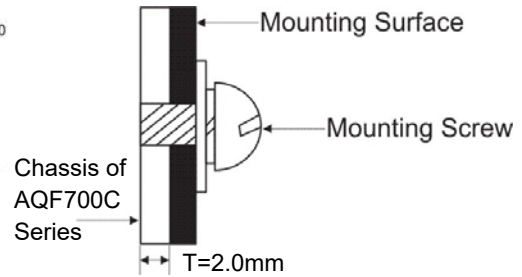
**MECHANICAL DIMENSIONS ( Top View )**



A= For fixture to chassis only  
A=M3x0.5P  
B=For fixture to pcb/chassis only  
B=M3x0.5P

**ASSEMBLY INSTRUCTIONS**

\*U Case T =2.0mm  
Customer is advised to screw into the threads no more than 2.0mm



| Brands |           | Terminal  |   |   |   |
|--------|-----------|---|---|---|---|
| PIN#   | Single    |   |   |   |   |
| A,B PE |           | —   | — | — | — |
| 1 FG   |           | ANYTEK YK-301-3P  |   |   |   |
| 2      | AC IN (N) |   |   |   |   |
| 3      | AC IN (L) |   |   |   |   |
| 4 +DC  | OUT       | Terminal :<br>M5 Pan HD screw in 2 positions<br>Torque to 8 lbs-in(90 cNm) max. |   |   |   |
| 5 -DC  | OUT       |   |   |   |   |

| Connector Pin (CN1) |        |                |          |                |                |
|---------------------|--------|----------------|----------|----------------|----------------|
| Brands C            |        | herng Weei     |          | JST            |                |
| PIN#                | Single | Mating Housing | Terminal | Mating Housing | Terminal       |
| C1 +S               |        | PHD-H20-2X4P   | PHD-T20  | PHDR-08VS      | SPHD-001T-P0.5 |
| C2 -S               |        |                |          |                |                |
| C3 CS               |        |                |          |                |                |
| C4 -5V              | SB     |                |          |                |                |
| C5 GND              | / -RC  |                |          |                |                |
| C6 +RC              |        |                |          |                |                |
| C7 PG               |        |                |          |                |                |
| C8 +5V              | SB     |                |          |                |                |

### FUNCTION DESCRIPITON of CN1

| Pin No. | Function  | Description  |
|---------|-----------|--|
| C1 +S   |           | Current Share Function Pin   |
| C2 -S   |           |  |
| C3 CS   |           |  |
| C4      | -5V SB    | This pin connects to the negative terminal(-V). Return for DC-OK signal output.                                  |
| C5      | GND / -RC | This pin connects to the negative terminal(-V). Return for DC-OK 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      | +PG       | DC-OK Signal is a DC output. (DC-OK )  |
| C8      | +5V SB    | Stand by voltage output ground 4.5~5.5V, referenced to pin C4 or C5(GND). The maximum load current is 1A.        |

We reserve the right to make alterations in the product materials and specifications without prior notification and consent to improve reliability, function or design or otherwise.