

**VPF130E SERIES 130 Watts****KEY FEATURES**

- Universal Input 90-264Vac
- 125W with Natural Convection
- Safety Approval to UL / IEC / EN 62368-1
- EMI for Both Class I (with PE) and Class II (without PE) Configuration
- No Load Power Consumption<0.3W
- -30°C to +80°C Wide Range Operation Temperature
- Operating Altitude 5000M
- Active PFC Function
- I/O Isolation 4000VAC
- 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.                                        |                                         | VPF130E-12S                                                 | VPF130E-24S                                                 | VPF130E-48S                                                 |
|--------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Max Output Wattage (with 8CFM FAN) (W)           |                                         | 130 W                                                       |                                                             |                                                             |
| Max Output Wattage (Conduction Cooling) (Note 6) |                                         | 130 W                                                       |                                                             |                                                             |
| Max Output Wattage (Natural Convection)          |                                         | 105 W (100 VAC) /<br>119 W (115 VAC) /<br>119 W (230 VAC) / | 110 W (100 VAC) /<br>120 W (115 VAC) /<br>120 W (230 VAC) / | 115 W (100 VAC) /<br>125 W (115 VAC) /<br>125 W (230 VAC) / |
| Input                                            | Voltage (Note 3)                        | 90-264 VAC                                                  |                                                             |                                                             |
|                                                  | Frequency (Hz)                          | 47-63 Hz                                                    |                                                             |                                                             |
|                                                  | Current (Full load)                     | < 2.0 A max. (115 VAC) / < 1.0 A max. (230 VAC)             |                                                             |                                                             |
|                                                  | Inrush Current (<2ms)                   | < 50 A max. (115 VAC) / < 85 A max. (230 VAC)               |                                                             |                                                             |
|                                                  | Leakage Current                         | < 0.75mA / 264 VAC (Touch Current)                          |                                                             |                                                             |
|                                                  | Power Factor (at 230 VAC)               | PF>0.9 at Full Load                                         |                                                             |                                                             |
|                                                  | No Load                                 | < 0.3W (115 / 230 VAC)                                      |                                                             |                                                             |
| Output                                           | Voltage (V.DC.)                         | 12V                                                         | 24V                                                         | 48V                                                         |
|                                                  | Voltage Adj Range (V.DC.)               | ±10% Output Voltage                                         |                                                             |                                                             |
|                                                  | Voltage Accuracy                        | ±2%                                                         |                                                             |                                                             |
|                                                  | Current (with 8CFM FAN) (A) (max.)      | 10.833                                                      | 5.417                                                       | 2.708                                                       |
|                                                  | Current (Conduction Cooling) (A) (max.) | 10.833                                                      | 5.417                                                       | 2.708                                                       |
|                                                  | Current (Natural Convection) (A) (max.) | at 100 VAC                                                  | 8.75                                                        | 4.583                                                       |
|                                                  |                                         | at 115 VAC                                                  | 9.917                                                       | 5                                                           |
|                                                  |                                         | at 230 VAC                                                  | 9.917                                                       | 5                                                           |
|                                                  | Line Regulation                         | ±1%                                                         |                                                             |                                                             |
|                                                  | Load Regulation (10-100%)               | ±1%                                                         |                                                             |                                                             |
|                                                  | Minimum Load                            | 0%                                                          |                                                             |                                                             |
|                                                  | Maximum Capacitive Load                 | 4,000µF                                                     | 1,000µF                                                     | 330µF                                                       |
|                                                  | Ripple & Noise (max.) (Note 1)          | 160mV                                                       | 240mV                                                       | 340mV                                                       |
|                                                  | Efficiency (at 230VAC)                  | 90%                                                         | 90%                                                         | 91%                                                         |
|                                                  | Hold-up Time (at 115 VAC) (Note 2)      | 8 ms min.                                                   |                                                             |                                                             |
| Protection                                       | Over Power Protection                   | Protection level 1 (nominal) : Auto recovery, Hiccup mode   |                                                             |                                                             |
|                                                  |                                         | Protection level 2 (instantaneous high current) : Latch     |                                                             |                                                             |
|                                                  | Over Voltage Protection                 | Protection level 1 (nominal) : Auto recovery                |                                                             |                                                             |
|                                                  |                                         | Protection level 2 (instantaneous high voltage) : Latch     |                                                             |                                                             |
|                                                  | Over Temperature Protection             | Auto recovery                                               |                                                             |                                                             |
| Isolation                                        | Short Circuit Protection                | Protection level 1 (nominal) : Continuous, Auto recovery    |                                                             |                                                             |
|                                                  |                                         | Protection level 2 (instantaneous high current) : Latch     |                                                             |                                                             |
|                                                  | Input-Output (Note 4)                   | 4000VAC or 5656VDC                                          |                                                             |                                                             |
|                                                  | Input-PE (Note 4)                       | 2000VAC or 2828VDC                                          |                                                             |                                                             |
|                                                  | Output-PE (Note 4)                      | 1500VAC or 2121VDC                                          |                                                             |                                                             |

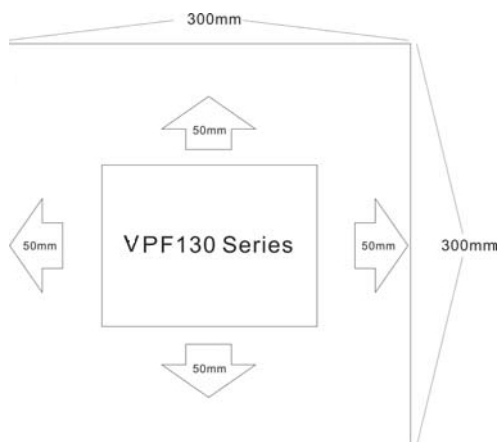
**VPF130E SERIES 130 Watts****ELECTRICAL SPECIFICATIONS**

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

| Model No.   |                                | VPF130E-12S                                                               | VPF130E-24S | VPF130E-48S |
|-------------|--------------------------------|---------------------------------------------------------------------------|-------------|-------------|
| Environment | Operating Temperature (Note 7) | -30°C...+80°C (with derating)                                             |             |             |
|             | Storage Temperature            | -30°C...+80°C                                                             |             |             |
|             | Temperature Coefficient        | ±0.05%/°C                                                                 |             |             |
|             | Altitude During Operation      | 5000m                                                                     |             |             |
|             | Humidity                       | 20~90% RH                                                                 |             |             |
|             | MTBF                           | >400,000 h @ 25°C (MIL-HDBK-217F, Notice 1)                               |             |             |
|             | 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)         | 3.15 x 2.35 x 1.7 Inches ( 80.0 x 59.7 x 43.2 mm ) Tolerance ±0.5 mm      |             |             |
|             | Weight                         | 292 g                                                                     |             |             |
|             | Cooling Method                 | Natural Convection / Conduction Cooling / 8CFM FAN                        |             |             |
| Safety      | Approval                       | UL / IEC / EN 62368-1                                                     |             |             |
| EMC         | Conducted EMI (Note 6)         | EN55032 Class B                                                           |             |             |
|             | Radiated EMI (Note 6)          | EN55032 Class I Class B / Class II Class A                                |             |             |
|             | EMS                            | EN55035                                                                   |             |             |

**NOTE**

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Hold-up Time measured at 90% Vout.
3. Please check the derating curve for more details.
4. Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors from power supply.
5. Please secure the power supply unit to your metal case by using the four screw holes in the corners for either Class I or Class II equipment
6. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have an even and smooth surface (or coated with thermal grease), and VPF130 series must be firmly mounted at the center of the aluminum plate.  
300 x 300 x 3.0 mm

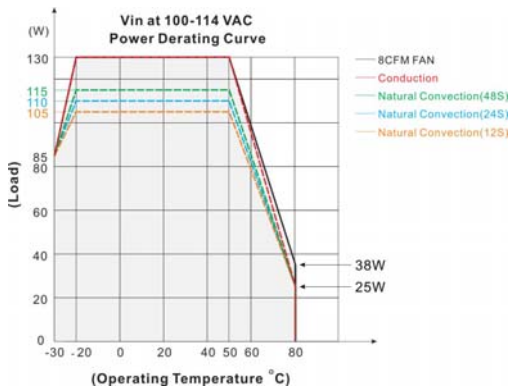


7. Due to varying customer application conditions, the product is tested for maximum operating temperature under full load only. For other regulatory requirements, please contact us.
8. CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.  
(ATTENTION : 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)

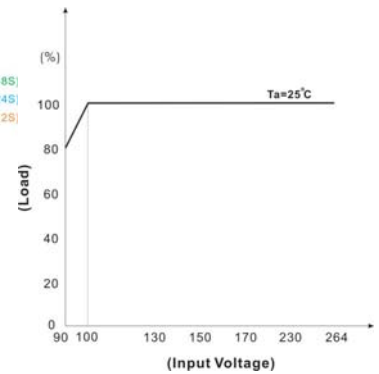
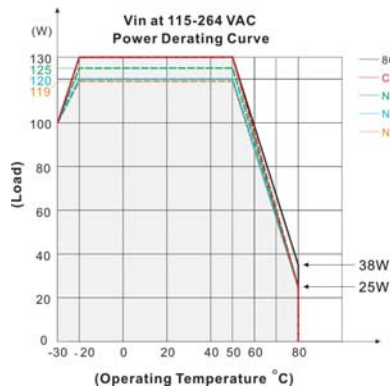


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### DERATING



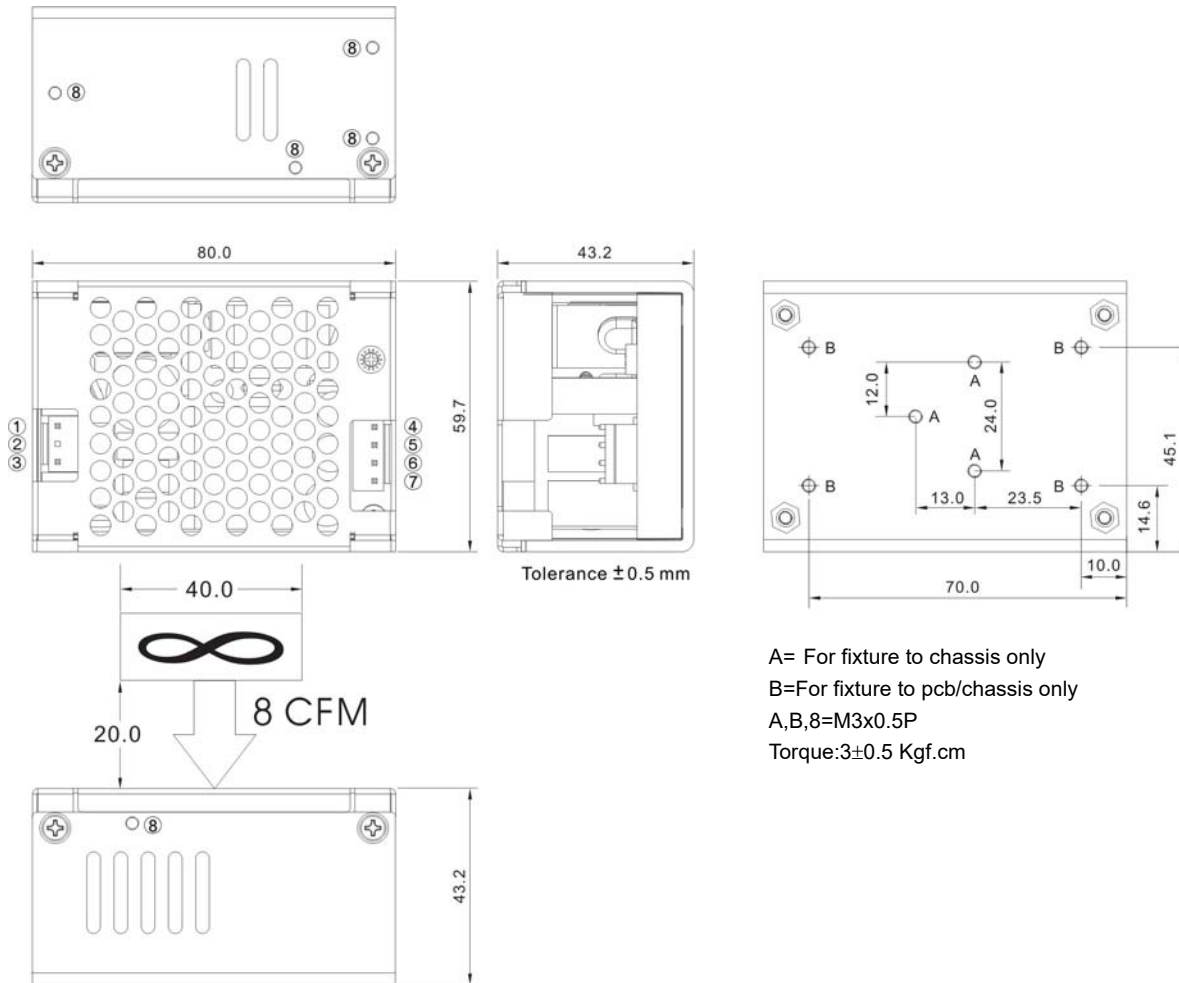
If input voltage is lower than 100VAC, please refer to the output derating V.S. input voltage curve for details





## VPF130E SERIES 130 Watts

### MECHANICAL DIMENSIONS (Top View)



A= For fixture to chassis only  
B=For fixture to pcb/chassis only  
A,B,8=M3x0.5P  
Torque:3±0.5 Kgf.cm

| Brands |           | Alex           |            | JST            |              |
|--------|-----------|----------------|------------|----------------|--------------|
| PIN#   | Single    | Mating Housing | Terminal   | Mating Housing | Terminal     |
| 1      | AC IN (N) | 9396-3         | 96T series | VHR-3N         | SVH-41T-P1.1 |
| 2      | NO PIN    |                |            |                |              |
| 3      | AC IN (L) |                |            |                |              |
| 4~5    | +DC OUT   | 9396-4         | 96T series | VHR-4N         | SVH-41T-P1.1 |
| 6~7    | -DC OUT   |                |            |                |              |
| 8,B    | PE        | —              | —          | —              | —            |

### ASSEMBLY INSTRUCTIONS

\*U Case T=2.5mm

Customer is advised to screw into the threads no more than 2.5mm

