

## Model: GP-ES360P Series 360 Watts single output

### Features

- 5V Use Patented Synchronous Rectification.
- Ball-Bearing Fan Speed Control by Thermal Detection.
- Built-in Constant Current Limiting Design.
- Active PFC with P.F.>0.95.
- Full Load Operation from -20°C ~50°C.
- Protections: Over Load/Over Voltage/Short Circuit/Over Temperature.
- High Efficiency up to 89%.
- Universal AC Input: 90~264VAC.
- Remote ON/OFF Control (Optional).

### Approvals



### Size

215 \* 115 \* 50 mm (L\*W\*H)

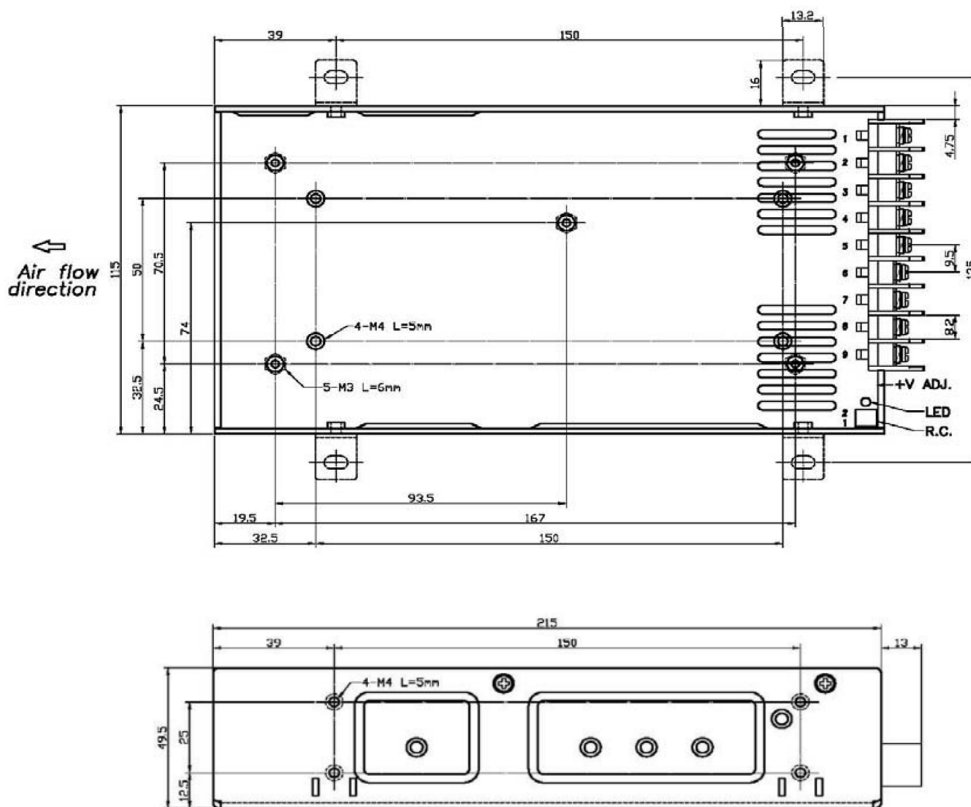


### Specifications

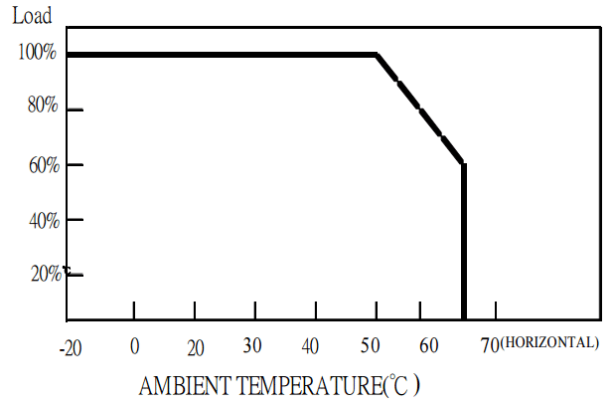
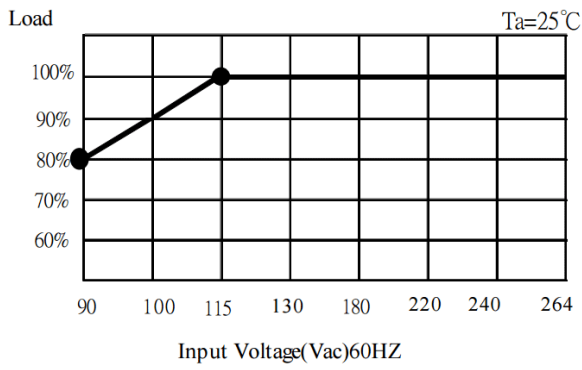
| Model No.   |                          | GP- ES360P-05   | GP- ES360P-12                 | GP- ES360P-15 | GP- ES360P-24 | GP-ES360P-48 |
|-------------|--------------------------|---|-------------------------------|---------------|---------------|--------------|
| Output      | DC Voltage               | 5V  | 12V                           | 15V           | 24V           | 48V          |
|             | Rated Current            | 0-60A   | 0-30A                         | 0-24A         | 0-15A         | 0-7.5A       |
|             | Rated Power              | 300W  | 360W                          | 360W          | 360W          | 360W         |
|             | Ripple & Noise (Max.)    | 100mV   | 120mV                         | 150mV         | 150mV         | 240mV        |
|             | Efficiency (Typ.)        | 81%   | 85%                           | 85%           | 87%           | 89%          |
|             | Voltage Adjustment Range | 4.5-5.5V  | 10-13V                        | 13.5-17V      | 20-27V        | 41-52V       |
|             | Voltage Tolerance        | ± 2%  | ± 1%                          | ± 1%          | ± 1%          | ± 1%         |
|             | Rise Time                | <50ms at full load.   |                               |               |               |              |
|             | Set up time (Max.)       | 1000ms/230VAC, 2500ms/115VAC  |                               |               |               |              |
|             | Hold Time (Typ.)         | >16ms at full load.   |                               |               |               |              |
| Input       | Voltage Range            | 90VAC ~ 264VAC or 127~370VDC.   |                               |               |               |              |
|             | Frequency Range          | 47 ~ 63 Hz.   |                               |               |               |              |
|             | Power Factor Correction  | > 0.95/230VAC 0.98/115VAC.  |                               |               |               |              |
|             | AC Current               | 3A at 115VAC /<br>1.5A at 230VAC  | 5A at 115VAC / 2.5A at 230VAC |               |               |              |
|             | Inrush Current           | 20A at 115VAC/ 40A at 230VAC (COLD START).  |                               |               |               |              |
|             | Leakage Current          | <1mA / 240VAC.  |                               |               |               |              |
| Protections | Over Load                | Over 105~135% output rating and by constant current mode.<br>Recovers automatically after fault condition has been removed. |                               |               |               |              |
|             | Over Temperature         | Key part detect over 85°C ± 5°C and by shutdown output voltage, re-power on to restart.                                     |                               |               |               |              |
|             | Short Circuit            | By constant current mode.<br>Recovers automatically after fault condition has been removed.                                 |                               |               |               |              |
|             | Over Voltage             | 5.75-6.75V  | 14-16V                        | 17.3-21V      | 29-33.6V      | 57-67V       |
|             |                          | Shutdown output voltage, re-power on to restart.  |                               |               |               |              |

|              |  |  |
|--------------|--|--|
| Function     | Remote Control   | CON2: 4~10VDC power OFF, 0~0.8VDC power ON.                              |
| Environment  | Operation Temp.  | -20°C ~50°C full load, 50°C ~65°C (Refer to output load derating curve). |
|              | Operation Humidity   | 20% ~ 90% RH non-condensing.   |
|              | Storage Temp.  | -40 ~ +80°C.   |
|              | Storage Humidity   | 10% ~ 90% RH.  |
|              | Vibration  | 10~500 Hz, 2G 10 min./1 cycle, 60 min. each along X, Y, Z axes.          |
| Safety & EMC | Withstand Voltage  | I/P - O/P: 3K VAC, I/P - FG: 1.5K VAC, O/P - FG: 0.5K VAC.               |
|              | Isolation Resistance   | 100M ohms / 500VDC at 25°C : I/P-O/P, I/P-FG, O/P-FG.                    |
|              | EMI Conduction & Radiation   | Compliance to EN55022 class B, CISPR22 class B.                          |
|              | Harmonic Current   | Compliance to EN61000-3-2,-3.  |
|              | EMS Immunity   | Compliance to EN61000-4-2,3,4,5,6,8,11 Light industry level, criteria A. |
| Others       | MTBF   | 210K hour's min. MIL-HDBK-217F (25°C).                                   |
|              | Dimension(L x W x H)   | 215 x 115 x 50mm; 1050g/pcs  |
| Note         | <ol style="list-style-type: none"> <li>1. All specifications measured at 230VAC and 25°C ambient.</li> <li>2. Ripple &amp; noise are measured at 20MHZ bandwidth oscilloscope and with 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol> |  |

### Mechanical Specification



**Derating Curve**



**Terminal Pin Number Assignment:**

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4~6     | DC OUTPUT -V |
| 2       | AC/N       | 7~9     | DC OUTPUT +V |
| 3       | FG         |         |              |

**Remote ON/OFF (CON2): JWT A2001H02-2P or Equivalent (optional)**

| Pin No. | Assignment | Mating Housing                   | Terminal        |
|---------|------------|----------------------------------|-----------------|
| 1       | RC+        | JWT A2001WR2-2P<br>or Equivalent | JWT A2001TOP-2L |
| 2       | RC-        |                                  | or Equivalent   |