# 35W Single Output Switching Power Supply

**LPV-35 series**

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### SUGGESTED PARTS

- **LPV-35-5**: 5V, 2.4A, 36V
- **LPV-35-12**: 12V, 1.5A, 36V
- **LPV-35-24**: 24V, 1A, 36V
- **LPV-35-36**: 36V

### FEATURES

- Constant voltage design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level (Note.8)
- Fully isolated plastic case
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.12)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

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### GTIN CODE

MW Search: [https://www.meanwell.com/serviceGTIN.aspx](https://www.meanwell.com/serviceGTIN.aspx)

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### SPECIFICATION

**MODEL**

<table>
<thead>
<tr>
<th>Model</th>
<th>DC Voltage</th>
<th>Rated Current</th>
<th>Current Range</th>
<th>Rated Power</th>
<th>Ripple &amp; Noise (max.)</th>
<th>Voltage Tolerance</th>
<th>Line Regulation</th>
<th>Load Regulation</th>
<th>Setup, Rise Time</th>
<th>Hold up Time (Typ.)</th>
<th>Voltage Range</th>
<th>Efficiency (Typ.)</th>
<th>Overload</th>
<th>Leakage Current</th>
<th>Protection Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPV-35-5</td>
<td>5V</td>
<td>5A</td>
<td>0 ~ 6A (Note.7)</td>
<td>30W</td>
<td>60mVp-p</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>±4.0%</td>
<td>500ms, 20ms / 230VAC</td>
<td>50ms / 230VAC</td>
<td>9 ~ 26VAC</td>
<td>110 ~ 150%</td>
<td>0.25mA / 240VAC</td>
<td>Protection type: Hiccup mode, recovers automatically after fault condition is removed</td>
<td></td>
</tr>
<tr>
<td>LPV-35-12</td>
<td>12V</td>
<td>3A</td>
<td>0 ~ 3A</td>
<td>36W</td>
<td>120mVp-p</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>±4.0%</td>
<td>500ms, 20ms / 230VAC</td>
<td>16ms / 115VAC</td>
<td>12 ~ 37VDC</td>
<td>110 ~ 150%</td>
<td>0.25mA / 240VAC</td>
<td>Protection type: Hiccup mode, recovers automatically after fault condition is removed</td>
<td></td>
</tr>
<tr>
<td>LPV-35-15</td>
<td>15V</td>
<td>1.5A</td>
<td>0 ~ 1.5A</td>
<td>36W</td>
<td>120mVp-p</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>±4.0%</td>
<td>500ms, 20ms / 230VAC</td>
<td>16ms / 115VAC</td>
<td>17 ~ 20.25V</td>
<td>110 ~ 150%</td>
<td>0.25mA / 240VAC</td>
<td>Protection type: Hiccup mode, recovers automatically after fault condition is removed</td>
<td></td>
</tr>
<tr>
<td>LPV-35-24</td>
<td>24V</td>
<td>1A</td>
<td>0 ~ 1A</td>
<td>36W</td>
<td>150mVp-p</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>±4.0%</td>
<td>500ms, 20ms / 230VAC</td>
<td>16ms / 115VAC</td>
<td>27.6 ~ 32.4V</td>
<td>110 ~ 150%</td>
<td>0.25mA / 240VAC</td>
<td>Protection type: Hiccup mode, recovers automatically after fault condition is removed</td>
<td></td>
</tr>
<tr>
<td>LPV-35-36</td>
<td>36V</td>
<td>1A</td>
<td>0 ~ 1A</td>
<td>36W</td>
<td>150mVp-p</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>±4.0%</td>
<td>500ms, 20ms / 230VAC</td>
<td>16ms / 115VAC</td>
<td>41.4 ~ 48.6V</td>
<td>110 ~ 150%</td>
<td>0.25mA / 240VAC</td>
<td>Protection type: Hiccup mode, recovers automatically after fault condition is removed</td>
<td></td>
</tr>
</tbody>
</table>

### INPUT

- **Voltage Range**: 47 ~ 63Hz
- **Frequency Range**: 47 ~ 63Hz
- **Efficiency (Typ.)**: 77%
- **AC Current (Typ.)**: 1.1A / 115VAC, 0.7A / 230VAC
- **Input Current (Typ.)**: Cold start 55A (peak 500µs measured at 50% peak) / 230VAC
- **Max. No. of PSUs on 16A Circuit Breaker**: 4 units (circuit breaker of type B) / 7 units (circuit breaker of type C) at 230VAC
- **Leakage Current**: 0.25mA / 240VAC

### PROTECTION

- **Protection Type**: Short down d/c voltage, re-power on to recover
- **Working Temp.**: -30 ~ +65°C (refer to "Derating Curve")
- **Working Humidity**: 20 ~ 90% RH non-condensing
- **Storage Temp. / Humidity**: -40 ~ +80°C, 10 ~ 95% RH
- **Temp. Coefficient**: ±0.03%/°C (0 ~ 50°C)
- **Vibration**: 10 ~ 500Hz, 2G 10min./cycle, period for 80min. each along X, Y, Z axes

### ENVIRONMENT

- **Safety Standards**: UL1310 class 2, CAN/CSA No. 223-M91, BIS (IS15885) (Note.13), IEC62368-1, EAC TP TC 004, IP67, BS EN/EN62368-1 approved
- **Withstand Voltage**: 1kV / 2kV
- **Overvoltage**: 5.75 ~ 6.75V, 13.8 ~ 16.2V, 17.25 ~ 20.25V, 27.6 ~ 32.4V, 41.4 ~ 48.6V
- **Leakage Current**: 0.25mA / 240VAC
- **Protection Type**: Shunt down d/c voltage, re-power on to recover

### OUTPUT

- **Output Voltage**: 5.75 ~ 6.75V, 13.8 ~ 16.2V, 17.25 ~ 20.25V, 27.6 ~ 32.4V, 41.4 ~ 48.6V
- **Leakage Current**: 0.25mA / 240VAC
- **Protection Type**: Shunt down d/c voltage, re-power on to recover

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### OTHERS

- **MTBF**: 5100K hrs min. (Telcordia SR-332 (Bellcore): 743.5K hrs min. MIL-HDBK-217F (25°C))
- **Dimension**: 148x40.3x30mm (L x W x H)
- **Packing**: 0.34Kg, 40pcs / 14.6Kg / 0.70CUFT

**NOTE**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 1/2“ twisted pair wire terminated with a 0.1µF & 47µF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. LPV-35/5-S can provide 6A of output current continuously. Based on the requirement of UL1310 class 2, the output current is only certified up to 5A for the test report of LPV-35-S.
8. For indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
9. The ambient temperature derating of 3.5%/1000m with femail models and of 5%/1000m with fan models for operating altitude higher than 2000m (6560ft).
10. Products sourced from the Americas region may not have the TUV/BIS/CCC logo. Please contact your MEAN WELL sales for more information.
11. For any application note and IP water proof function installation caution, please refer our user manual before using.
12. This product is not intended for LED lighting luminare applications in the EU (in the EU the LPF/NPF/OLG series are recommended).
13. Products sourced from the China regions may not have the BIS logo, please contact your MEAN WELL sales for more information.
14. Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx
### Mechanical Specification

Case No.975A        Unit:mm

![Block Diagram](image)

- **T case**: Max. Case Temperature.

### Recommend Mounting Direction

![Diagram](image)

### Block Diagram

- **fosc**: 65KHz

### Derating Curve

![Derating Curve](image)

### Static Characteristics

![Static Characteristics](image)