Electric Vehicle Power Supplies

Standard, Modified & Custom Solutions
Electric Vehicle Power Supplies

DCVK168 168 Watts

- Wide Operating Voltage Range of 60-118VDC
- C.C. Mode & C.V. Mode
- Built-In ORing Diode
- All Units Pass Burn-In Test at Full Load
- Output Short Circuit, Over Voltage, Over Load, and Over Temperature Protection
- Output Reverse Polarity Protection
- IP67 Waterproof Rating
- Protection Class II

Input Voltage Range..................60~118VAC
Input Current..........................@60VDC......3.5A
........................................@118VDC......3.1A
Line Regulation..................0.5% to 1%
Load Regulation..................5%
Total Regulation..................≤5%
Ripple & Noise..................200mVp-p
Temperature Coefficient...........±0.04%/°C
Short Circuit Protection.............Yes
EMC..............................................Yes
Safety..............................................UL, CE, FCC, RoHS

Model Number | Input Voltage Range | Setting Voltage Range | Current | Enable | DC Voltage | Imin | Ripple & Noise | Output Power
--- | --- | --- | --- | --- | --- | --- | --- | ---
PSEDC050-33S | 60-118VDC | 14Vo | 12A | 5~16VDC | 1.25mA | 200mVp-p | 168W

PSEV3600 3600 Watts

- AC Input Voltage of 220VAC
- High Efficiency
- -20°C ~ 45°C Operating Temperature
- Short Circuit, Thermal, Reverse Connection, and Battery Broken Protection
- RoHS Compliant
- UL, CE, and FCC Certifications

Input Voltage Range..................220V
Input Frequency......................45 to 65Hz
PFC..............................................≥95%
Short Circuit Protection.............Yes
Reverse Connection Protection........Yes
Battery Broken Protection.............Yes

Model Number | Rated Input Voltage | Battery Standard Voltage | Maximum Charging Voltage | Maximum Charging Current | Output Power
--- | --- | --- | --- | --- | ---
PSEV3600-24S1 | 24V | 29.2V | 120A | 3600W
PSEV3600-36S1 | 36V | 42V | 10A | 3600W
PSEV3600-48S1 | 48V | 54.6V | 7A | 3600W
PSEV3600-60S1 | 60V | 71.4V | 6A | 3600W
PSEV3600-72S1 | 72V | 88.2V | 5A | 3600W

Visit DCVK168 Series Page
Visit PSEV3600 Series Page
Electric Vehicle Power Supplies

**PSEOCH05**

- Universal Input Range of 90-305VAC
- I/O Isolation 4000VAC
- EMC Compliant without External Components
- Compact Size
- Short Circuit, Over Voltage, and Over Power Protection
- Meets IEC/EN 60335-1, UL/IEC/EN 62368-1,
- Short Circuit, Over Voltage, and Over Power Protection
- Compact Size
- EMC Compliant without External Components
- 90~264VAC (120~370VDC)

**Input Voltage Range**: 90~305VAC (120~430VDC)

**Input Frequency**: 47 to 440Hz

**Input Current**: 90mA to 150mA

**Inrush Current**: 30A to 60A

**Line Regulation**: ±0.1 to ±0.2%

**Load Regulation**: ±0.5 to ±1%

**Ripple & Noise**: 100 to 200mVp-p

**Output Capacitance**: 350μF to 470μF

**Efficiency**: 73% to 83%

**Output Power**: 1.46in x 1.08in x 0.69in

**Case Material**: Plastic Resin

**Isolation**: 4000VAC from Input - Output

**Weight**: 0.85oz (24g)

**MTBF**: 450,000 Hours

**Humidity**: 95%RH

**Storage Temperature**: -40 to +85°C

**Operating Temperature**: -40 to +70°C

**Over Voltage Protection**: Zener Diode Clamp

**Over Power Protection**: ≥115% Io

**Short Circuit Protection**: Automatic Recovery

**Protection**
- High Efficiency
- CE, CB, and UL Safety Approvals

**Model Number**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Voltage Range</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Ripple &amp; Noise</th>
<th>Max. Capacitive Load</th>
<th>Efficiency</th>
<th>Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSEOCH05-33S</td>
<td>90<del>305VAC (120</del>430VDC)</td>
<td>3.3V</td>
<td>1515mA</td>
<td>&lt;100mVp-p</td>
<td>3500μF</td>
<td>73%</td>
<td>5W</td>
</tr>
<tr>
<td>PSEOCH05-65S</td>
<td>90<del>305VAC (120</del>430VDC)</td>
<td>6V</td>
<td>1000mA</td>
<td>&lt;100mVp-p</td>
<td>2500μF</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>PSEOCH05-12S</td>
<td>90<del>264VAC (120</del>370VDC)</td>
<td>12V</td>
<td>420mA</td>
<td>&lt;150mVp-p</td>
<td>470μF</td>
<td>81%</td>
<td>5.04W</td>
</tr>
<tr>
<td>PSEOCH05-24S</td>
<td>90<del>264VAC (120</del>370VDC)</td>
<td>24V</td>
<td>210mA</td>
<td>&lt;200mVp-p</td>
<td>150μF</td>
<td>83%</td>
<td></td>
</tr>
</tbody>
</table>

**Visit PSEOCH05 Series Page**

**PSAOD10**

- Universal Input Voltage Range of 90~264VAC or 120~370VDC
- Switching Power Module for PCB Mount
- Low Ripple & Noise
- Isolation Class II
- Short Circuit, Over Voltage, and Over Power Protection
- Fully Encapsulated Plastic Case
- High Efficiency
- CE, CB, and UL Safety Approvals

**Input Voltage Range**: 90~264VAC (120~370VDC)

**Input Frequency**: 47 to 440Hz

**Input Current**: 140mA to 230mA

**Inrush Current**: 30A to 60A

**Line Regulation**: ±0.1 to ±0.2%

**Load Regulation**: ±0.5 to ±1%

**Ripple & Noise**: See Table

**Output Capacitance**: 100 to 200mVp-p

**Efficiency**: 73% to 85%

**Output Power**: 1.46in x 0.79in

**Case Material**: Plastic Resin

**Isolation**: 3000VAC from Input - Output

**Weight**: 1.23oz (35g)

**MTBF**: 450,000 Hours

**Humidity**: 95%RH

**Storage Temperature**: -40 to +85°C

**Operating Temperature**: -40 to +70°C

**Over Voltage Protection**: Zener Diode Clamp

**Over Power Protection**: ≥115% Io

**Short Circuit Protection**: Automatic Recovery

**Protection**
- High Efficiency
- CE, CB, and UL Safety Approvals

**Model Number**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Voltage Range</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Ripple &amp; Noise</th>
<th>Max. Capacitive Load</th>
<th>Efficiency</th>
<th>Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAOD10-5S</td>
<td>90<del>264VAC (120</del>370VDC)</td>
<td>5VDC</td>
<td>2000mA</td>
<td>&lt;150mVp-p</td>
<td>3,500μF</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>PSAOD10-12S</td>
<td>90<del>264VAC (120</del>370VDC)</td>
<td>12VDC</td>
<td>833mA</td>
<td>&lt;150mVp-p</td>
<td>700μF</td>
<td>84%</td>
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<tr>
<td>PSAOD10-15S</td>
<td>90<del>264VAC (120</del>370VDC)</td>
<td>15VDC</td>
<td>667mA</td>
<td>&lt;160mVp-p</td>
<td>390μF</td>
<td>85%</td>
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</tr>
<tr>
<td>PSAOD10-24S</td>
<td>90<del>264VAC (120</del>370VDC)</td>
<td>24VDC</td>
<td>417mA</td>
<td>1% Vout</td>
<td>180μF</td>
<td>85%</td>
<td></td>
</tr>
</tbody>
</table>

**Visit PSAOD10 Series Page**
Electric Vehicle Power Supplies

**PSAEK3000HV-OR**

- 3000 Watts
- Constant Current Limit
- Power OK Signal & Remote ON/OFF Function
- Remote Setting Multiple PSU via RS232, RS485 & I2C
- Programmable Output Voltage (0~105%)
- Programmable Output Current (0~105%)
- Single Outputs Ranging from 150VDC to 400VDC
- Selectable +5V/0.5A or +9V/0.3A Auxiliary Output
- Forced Current Sharing at Parallel Operation
- Built-In Active PFC Function and ORing Diode
- Built-In I2C and RS485 Communication Interface
- EN 62368-1, UL 62368-1 Safety Approvals

Input Voltage Range: 90~264VAC (127~370VDC)
Input Frequency: 47 to 63Hz
Input Current: 14.5A to 19.7mA
Inrush Current: 33A to 65A
Ripple & Noise: 1500 to 4000mVp-p
Hold-Up Time: 14ms
Rise Time: 350ms
Temperature Coefficient: ±0.02%/°C

**Model Number**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Voltage Range</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Ripple &amp; Noise</th>
<th>Max. Efficiency</th>
<th>Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAEK-3000HV-150</td>
<td>90<del>264VAC (127</del>370VDC)</td>
<td>150VDC</td>
<td>20A</td>
<td>1500mVp-p</td>
<td>91%</td>
<td>3000W</td>
</tr>
<tr>
<td>PSAEK-3000HV-200</td>
<td>200VDC</td>
<td>15A</td>
<td>2000mVp-p</td>
<td>91%</td>
<td></td>
<td></td>
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<tr>
<td>PSAEK-3000HV-250</td>
<td>250VDC</td>
<td>12A</td>
<td>2500mVp-p</td>
<td>91%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSAEK-3000HV-300</td>
<td>300VDC</td>
<td>10A</td>
<td>3000mVp-p</td>
<td>92%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSAEK-3000HV-400</td>
<td>400VDC</td>
<td>7.5A</td>
<td>4000mVp-p</td>
<td>92%</td>
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</table>

Visit PSAEK3000HV-OR Series Page

**DCCE24S2428-1000**

- 28 Watts
- Bidirectional DC/DC Converter
- High Efficiency
- Constant Voltage and Constant Current Mode
- Continuous Short Circuit Protection
- 3KVDC Isolation
- RoHS Compliant
- EN62368-1 Safety Approval

Input Voltage Range: 15~36VDC
Start-Up Voltage: 9VDC
Disable Static Current: 2mA to 5mA
Input Filter: Pi Type
Voltage Accuracy: ±5%
Current Accuracy: ±10%
Operating Frequency: 400kHz
Ripple & Noise: 200mVp-p
Start-Up Time: 150ms max.
Temperature Coefficient: ±0.05%/°C

**Model Number**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Direction</th>
<th>Input Voltage Range</th>
<th>CV Output Voltage</th>
<th>CC Output Current</th>
<th>Ripple &amp; Noise</th>
<th>Efficiency</th>
<th>Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCCE24S2428-1000</td>
<td>Forward</td>
<td>28VDC (15-36VDC)</td>
<td>24VDC</td>
<td>1000mA</td>
<td>200mVp-p</td>
<td>86%</td>
<td>28W</td>
</tr>
<tr>
<td></td>
<td>Reverse</td>
<td>24VDC (15-36VDC)</td>
<td>28VDC</td>
<td>1000mA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visit DCCE24S2428-1000 Series Page

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- 100% Final Electrical Hi-Pot Testing
- Employees certified and trained to PC-610 Workmanship Standards
- Extensive Burn-In Capability, Standard, or Customer Specific
- 100% Final Electric and Hi-Pot Testing

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