AFV series
Programmable AC Power Source
10~2000kVA

Complete Interface Options:
RS232 / RS485 / GPIB
Three Phase Independent Control
Efficiency
>85%-90%

Output Power
10-2000kVA
Multiple Programmable Features
Fast Response Time

7 inches Touch Screen
Three Phase Independent Control
Soft Start Feature

Complete Protection

Up to 2000kVA

http://www.PreenPower.com

AC POWER CORP
http://www.PreenPower.com
Preen’s AFV series is a programmable AC power supply, provides complete output voltage and output frequency to achieve various types of industrial requirements. Additionally, the AFV series provides programmable features, such as STEP feature and GRADUAL feature, which are ideal for R&D and compliance test.

With the advanced SPWM and DDS waveform technology, the AFV series provides high quality and stable output with output level up to 2000kVA. The AFV series adopts the touch screen to support user operation, which provides impressive users experience while operating the product. Users are allowed to remotely control the product via the standard interface: RS485 or the optional interface: RS232/GPIB. Additionally, the AFV series provides complete product protection, such as OVP, UVP, OCP, OPP, OTP and short circuit protection, and the product will immediately alarm users and stop the product output while the product protection is enabled.

### AFV series

**Programmable AC Power Source**

- **High Output Power**: 10-2000kVA
- **High Efficiency**: >85%-90%
- **Multiple Programmable Features**: STEP/GRADUAL
- **Touch Screen Operation**: 7” Touch Screen
- **Ideal for Motor Testing**: Soft Start Feature
- **Complete Protection**: OVP/UVP/OCP/OPP/OTP

### High Power AC Source

**Applications**

- Electric Motor Test
- Home Appliances
- EMC Chamber
- Switching Power Supply
- Product Test and R&D
- Transformer Test

*AC POWER CORP.*
**Key Features of AFV Series**

**Intuitive Touch Screen**

Users are allowed to operate the product via the touch screen on the front panel, which provides an easy operation for users to quickly set the product output.

**Three Phase Independent Control (opt.)**

Users are allowed to control three-phase output voltage and output frequency independently. The product can be used as one unit of three-phase power supply or as three units of single-phase power supply.

**STEP Feature**

Preen AFV series provides up to 24 sequences in the STEP feature. Through the STEP feature, users are allowed to set the product output, such as output voltage, output frequency and dwell time of performing the STEP feature in each of the adjustable sets, and then the product output will change step by step accordingly. Additionally, the product can automatically repeat the STEP feature according to the setting product output up to 255 times, which is suitable for electric motor and home application test.

**GRADUAL Feature**

Preen AFV series provides up to 12 sequences in the GRADUAL feature. Through the GRADUAL feature, users are allowed to set the product output, such as start/end output voltage, start/end output frequency and dwell time of performing the GRADUAL feature in each of the adjustable sets, and then the product output will change according to the setting slew rate. Additionally, the product can automatically repeat the GRADUAL feature according to the setting product output up to 255 times.

**Soft Start Feature (optional)**

Variable Voltage Constant Frequency (VVCF) / Variable Voltage Variable Frequency (VVVF)

With the soft start feature, the product effectively reduces inrush current generated while turning on inductive loads, such as motor and air conditioning compressor and etc. Accordingly, the product is suitable for electric motor industries to run reliability test.

http://www.PreenPower.com
## AFV Series: Three-Phase Input / Single-Phase Output (10-120kVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>AFV-31010</th>
<th>AFV-31015</th>
<th>AFV-31030</th>
<th>AFV-31045</th>
<th>AFV-31060</th>
<th>AFV-31080</th>
<th>AFV-31100</th>
<th>AFV-31120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (kVA)</td>
<td>10</td>
<td>15</td>
<td>30</td>
<td>45</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
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</table>

### Input
- Phase: 3Ø4W + G
- Voltage: 115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V; Rated Input Voltage ±15%
- Frequency Range: 47~63Hz
- Power Factor: 0.9

### Output
- Phase: 3Ø4W + G
- Voltage:
  - Low(V): 0V~150.0V (L-N)
  - High(V): 0V~300.0V (L-N)
- Frequency Range:
  - Low(V): 45~65Hz (opt. 45~500Hz)
  - High(V): 45~65Hz (opt. 45~500Hz)
- Frequency Regulation: ≤0.01%
- Maximum Current:
  - High(A): 41.7, 62.5, 125.0, 187.5, 250.0, 333.3, 416.7, 500.0
  - Low(A): 83.3, 125.0, 250.0, 375.0, 500.0, 666.7, 833.3, 1000.0
- Line Regulation: <1%
- Load Regulation: 
  - Low(V): ≤1% (Resistive Load)
  - High(V): ≤2% (Resistive Load)
- Efficiency: >90%
- Response Time: ≤2ms
- Crest Factor: 3:1
- Protection: OVP, UVP, OCP, OPP, OTP and Short Circuit Protection
- General:
  - Operational Temp: 0℃~45℃
  - Humidity: 0~90% (Non-condensing)
  - Altitude: <1500m
- Dimensions (W*D*H mm):
  1. 300
  2. 310
  3. 410
  4. 580
  5. 670
- Weight (kg):
  1. 890
  2. 935
  3. 1092

## AFV Series: Three-Phase Input / Three-Phase Output (10~100kVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>AFV-33010</th>
<th>AFV-33015</th>
<th>AFV-33030</th>
<th>AFV-33045</th>
<th>AFV-33060</th>
<th>AFV-33080</th>
<th>AFV-33100</th>
<th>AFV-33120</th>
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</thead>
<tbody>
<tr>
<td>Power (kVA)</td>
<td>10</td>
<td>15</td>
<td>30</td>
<td>45</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
</tr>
</tbody>
</table>

### Input
- Phase: 3Ø4W + G
- Voltage: 115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V; Rated Input Voltage ±15%
- Frequency Range: 47~63Hz
- Power Factor: 0.9

### Output
- Phase: 3Ø4W + G
- Voltage:
  - Low(V): 0V~150.0V (L-N)
  - High(V): 0V~300.0V (L-N)
- Frequency Range:
  - Low(V): 45~65Hz (opt. 45~500Hz)
  - High(V): 45~65Hz (opt. 45~500Hz)
- Frequency Regulation: ≤0.01%
- Maximum Current:
  - High(A): 13.9, 20.8, 41.7, 62.5, 83.3, 111.1, 138.9
  - Low(A): 27.8, 41.7, 83.3, 125.0, 166.7, 222.2, 277.8
- Line Regulation: <1%
- Load Regulation: 
  - Low(V): ≤1% (Resistive Load)
  - High(V): ≤2% (Resistive Load)
- Efficiency: >90%
- Response Time: ≤2ms
- Crest Factor: 3:1
- Protection: OVP, UVP, OCP, OPP, OTP and Short Circuit Protection
- General:
  - Operational Temp: 0℃~45℃
  - Humidity: 0~90% (Non-condensing)
  - Altitude: <1500m
- Dimensions (W*D*H mm):
  1. 300
  2. 310
  3. 410
  4. 580
  5. 670
- Weight (kg):
  1. 890
  2. 935
  3. 1092
AFV Series: Three-Phase Input / Three-Phase Output (120~1600kVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>AFV-33120</th>
<th>AFV-33160</th>
<th>AFV-33240</th>
<th>AFV-33300</th>
<th>AFV-33400</th>
<th>AFV-33500</th>
<th>AFV-33640</th>
<th>AFV-33800</th>
<th>AFV-331000</th>
<th>AFV-331200</th>
<th>AFV-331600</th>
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</thead>
<tbody>
<tr>
<td>Power (kVA)</td>
<td>120</td>
<td>160</td>
<td>240</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>640</td>
<td>800</td>
<td>1000</td>
<td>1200</td>
<td>1600</td>
</tr>
<tr>
<td>Input Phase</td>
<td>3Ø4W + G</td>
<td>3Ø4W + G</td>
<td>3Ø4W + G</td>
<td>3Ø4W + G</td>
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<td>3Ø4W + G</td>
<td>3Ø4W + G</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>47~63Hz</td>
<td>47~63Hz</td>
<td>47~63Hz</td>
<td>47~63Hz</td>
<td>47~63Hz</td>
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<td>47~63Hz</td>
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<td>47~63Hz</td>
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<tr>
<td>Power Factor</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
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<td>0.85</td>
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</tr>
<tr>
<td>Maximum Current</td>
<td>251.7</td>
<td>335.5</td>
<td>503.3</td>
<td>629.1</td>
<td>838.8</td>
<td>1048.5</td>
<td>1342.1</td>
<td>1677.7</td>
<td>2097.1</td>
<td>2516.5</td>
<td>3355.4</td>
</tr>
</tbody>
</table>

Output

<table>
<thead>
<tr>
<th>Phase</th>
<th>3Ø4W + G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage Low(V)</td>
<td>0V~150.0V (L-N)</td>
</tr>
<tr>
<td>Voltage High(V)</td>
<td>0V~300.0V (L-N)</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>45<del>65Hz (opt. 45</del>500Hz)</td>
</tr>
<tr>
<td>Frequency Regulation</td>
<td>≤ 0.01%</td>
</tr>
<tr>
<td>Maximum Current High(A)</td>
<td>166.7</td>
</tr>
<tr>
<td>Maximum Current Low(A)</td>
<td>333.3</td>
</tr>
</tbody>
</table>

System

| Line Regulation | < 1% |
| Load Regulation | ± 1% (Resistive Load) |
| System Efficiency | ≤ 2% (Resistive Load) |
| Response Time | ≥ 85% |
| Crest Factor | < 2 ms |
| Protection | OVP, UVP, OCP, OPP, OTP and Short Circuit Protection |

Measurement

| Voltage | Resolution: 0.1V; Accuracy: 0.5% F.S. + 4 Counts |
| Current | Resolution: 0.1A; Accuracy: 0.5% F.S. + 4 Counts |
| Frequency | Resolution: 0.1Hz; Accuracy: 0.5% F.S. + 4 Counts |

General

| Operational Temperature | 0°C~45°C |
| Humidity | 0~90% (Non-condensing) |
| Altitude | 1500m |

Dimensions (W*D*H) mm

| ① | 600*850*945(mm) |
| ② | 600*850*1340(mm) |
| ③ | 800*860*1545(mm) |
| ④ | 1050*970*1800(mm) |
| ⑤ | 1150*1240*1900(mm) |
| ⑥ | 1100*1200*1900(mm) |
| ⑦ | 850*900*1550(mm) |
| ⑧ | 1000*1100*1800(mm) |
| ⑨ | 1100*1200*1900(mm) |

Weight(kg)

| ① | 1170 |
| ② | 1400 |
| ③ | 2220 |
| ④ | 2465 |
| ⑤ | 3335 |

P.S.: ① Please contact us for other voltage specification.
② The rated input voltage is 220V/380V.
③ For AFV series over 400kVA, please contact us for details.
*All specifications are subject to change without notice.
AC POWER CORP.

Specialized in power electronics, Preen (AC Power Corp.) has been developing products based on its core technology of Power Conversion. Product Line includes AC Power Sources, DC Power Supplies, Power Supplies for Defense Industry, Renewable Energy Simulators, Line Conditioners and UPS. Boasting one of the broadest product line in the industries, Preen specializes in High Power Source and has developed AC power source up to 2MVA with high power density.

**Product Lines**

- **AC Power Source**
  - Up to 1000Hz
  - 500VA ~ 2,000kVA
  - Regenerative Function

- **DC Power Supply**
  - Up to 2,000V
  - 2kW ~ 300kW
  - Fast Response & Low Ripple

- **Power Conditioner & UPS**
  - Solid State & Inductive types
  - Up to 1500kVA

**Applications**

- Renewable Energy
- Laboratory
- Aircraft Manufacturing
- Transport System
- EMC Chamber
- Medical Equipment
- Control Room/Data Center
- Electronics
- ATE System
- Airport Apron/Hangar
- Home Appliance
- Motor/Engine
- Communication Equipment
- Military Aircraft/Helicopter
- Navy System
- Defense Equipment

Preen®

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