

AFV series

Programmable AC Power Source
10~2000kVA

Preen[®]



▼ Output Power
10-2000kVA

▼ Multiple Programmable Features

▼ Fast Response Time

▼ 7 inches
Touch Screen

▼ Three Phase Independent Control

▼ Soft Start Feature

▼ Efficiency
>85%-90%

▼ Complete Interface Options:
RS232 / RS485 / GPIB

▼ Complete Protection

AC POWER CORP

Distributed by: Reliant EMC LLC, 3311 Lewis Ave, Signal Hill CA 90755, 408-916-5750, www.reliantemc.com

AC + DC
Power Solutions

Programmable AC Power Source

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.

High Output Power

10-2000kVA

High Efficiency

>85%-90%

Multiple Programmable Features

STEP/GRADUAL

7" Touch Screen

**Touch Screen
Operation**

Ideal for Motor Testing

Soft Start Feature

Complete Protection

OVP/UVP/OCP/OPP/OTP

High Power AC Source

Applications



Electric Motor Test



Home Appliance



EMC Chamber



Switching Power Supply



Product Test and R&D



Transformer Test



Key Features of AFV Series

Intuitive Touch Screen



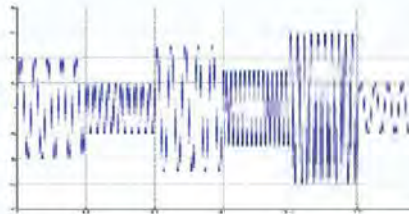
Users are allowed to operate the product via the touch screen on the front panel, which provides an easy operation for users to quickly set the product output.

Three Phase Independent Control (opt.)



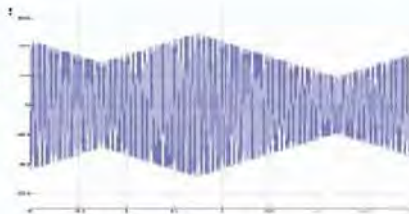
Users are allowed to control three-phase output voltage and output frequency independently. The product can be used as one unit of three-phase power supply or as three units of single-phase power supply.

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.

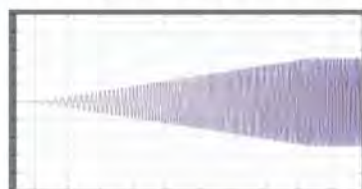
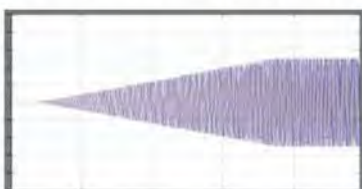
GRADUAL Feature



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)



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.

AFV Series: Three-Phase Input / Single-Phase Output (10-120KVA)

Model		AFV-31010	AFV-31015	AFV-31030	AFV-31045	AFV-31060	AFV-31080	AFV-31100	AFV-31120
Power (kVA)		10	15	30	45	60	80	100	120
Input	Phase	3Ø4W + G							
	Voltage ①	115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V ; Rated Input Voltage $\pm 15\%$							
	Frequency Range	47~63Hz							
	Power Factor	0.9							
Output	Max. Current ②	18.7	28.1	56.1	84.2	112.2	167.8	209.7	251.7
	Phase	1Ø2W + G							
	Voltage Low(V)	0V~150.0V (L-N)							
	High(V)	0V~300.0V (L-N)							
System	Frequency Range	45~65Hz (opt. 45~500Hz)							
	Frequency Regulation	$\leq 0.01\%$							
	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
Measurement	Line Regulation	$< 1\%$							
	Load Regulation	$\pm 1\%$ (Resistive Load)							
	THD	$\leq 2\%$ (Resistive Load)							
	Efficiency	$\geq 90\%$							
Remote Interface	Response Time	$\leq 2\text{ms}$							
	Crest Factor	3 : 1							
	Protection	OVP, UVP, OCP, OPP, OTP and Short Circuit Protection							
	Voltage	Voltage: Resolution: 0.1V; Accuracy: 0.5% F.S. + 4 Counts							
General	Current	Resolution: 0.1A; Accuracy: 0.5% F.S. + 4 Counts							
	Frequency	Resolution: 0.1Hz; Accuracy: 0.5% F.S. + 4 Counts							
Remote Interface		RS-485: Standard RS-232/GPIB: Optional							
Dimensions (W*D*H) mm ③	Operational Temp.	0°C~45°C							
	Humidity	0~90% (Non-condensing)							
	Altitude	$< 1500\text{m}$							
Weight(kg) ④		240	290	360	580	670	830	935	1092

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

Model		AFV-33010	AFV-33015	AFV-33030	AFV-33045	AFV-33060	AFV-33080	AFV-33100
Power (kVA)		10	15	30	45	60	80	100
Input	Phase	3Ø4W + G						
	Voltage ①	115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V ; Rated Input Voltage $\pm 15\%$						
	Frequency Range	47~63Hz						
	Power Factor	0.9						
Output	Maximum Current ②	18.7	28.1	56.1	84.2	112.2	167.8	198.1
	Phase	3Ø4W + G						
	Voltage Low(V)	0V~150.0V (L-N)						
	High(V)	0V~300.0V (L-N)						
System	Frequency Range	45~65Hz (opt. 45~500Hz)						
	Frequency Regulation	$\leq 0.01\%$						
	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
Measurement	Line Regulation	$< 1\%$						
	Load Regulation	$\pm 1\%$ (Resistive Load)						
	THD	$\leq 2\%$ (Resistive Load)						
	Efficiency	$\geq 90\%$						
Remote Interface	Response Time	$\leq 2\text{ms}$						
	Crest Factor	3 : 1						
	Protection	OVP, UVP, OCP, OPP, OTP and Short Circuit Protection						
	Voltage	Resolution: 0.1V; Accuracy: 0.5% F.S. + 4 Counts						
General	Current	Resolution: 0.1A; Accuracy: 0.5% F.S. + 4 Counts						
	Frequency	Resolution: 0.1Hz; Accuracy: 0.5% F.S. + 4 Counts						
Remote Interface		RS-485: Standard RS-232/GPIB: Optional						
Dimensions (W*D*H) mm ③	Operational Temperature	0°C~45°C						
	Humidity	0~90% (Non-condensing)						
	Altitude	$< 1500\text{m}$						
Weight(kg) ④		300	310	410	580	670	890	960

AFV Series: Three-Phase Input / Three-Phase Output (120~1600kVA)

Model		AFV-33120	AFV-33160	AFV-33240	AFV-33300	AFV-33400	AFV-33500	AFV-33640	AFV-33800	AFV-331000	AFV-331200	AFV-331600
Power (kVA)		120	160	240	300	400	500	640	800	1000	1200	1600
Input	Phase	3Ø4W + G										
	Voltage ①	115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V ; Rated Input Voltage $\pm 15\%$										
	Frequency Range	47~63Hz										
	Power Factor	0.85										
	Maximum Current ②	251.7	335.5	503.3	629.1	838.8	1048.5	1342.1	1677.7	2097.1	2516.5	3355.4
Output	Phase	3Ø4W + G										
	Voltage	Low(V) 0V~150.0V (L-N)										
		High(V) 0V~300.0V (L-N)										
	Frequency Range	45~65Hz (opt. 45~500Hz)										
	Frequency Regulation	$\leq 0.01\%$										
	Maximum Current	High(A) 166.7	222.2	333.3	416.7	555.6	694.4	888.9	1111.1	1388.9	1666.7	2222.2
		Low(A) 333.3	444.4	666.7	833.3	1111.1	1388.9	1777.8	2222.2	2777.8	3333.3	4444.4
System	Line Regulation	$< 1\%$										
	Load Regulation	$\pm 1\%$ (Resistive Load)										
	THD	$\leq 2\%$ (Resistive Load)										
	Efficiency	$\geq 85\%$										
	Response Time	$\leq 2\text{ms}$										
	Crest Factor	3 : 1										
Measurement	Protection	OVP, UVP, OCP, OPP, OTP and Short Circuit Protection										
	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										
Remote Interface		RS-485: Standard RS-232/GPIB: Optional										
General	Operational Temperature	0°C~45°C										
	Humidity	0~90% (Non-condensing)										
	Altitude	1500m										
Dimensions(W*D*H)mm ③		⑤		⑥		⑦		⑧		⑨		
Weight(kg) ③		1170	1400	2220	2465	3335	—	—	—	—	—	—

AFV Series Case Dimension Overview

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



⑦



⑧



⑨



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

Distributed by:
 Reliant EMC LLC,
 3311 Lewis Ave, Signal Hill CA 90755,
 408-916-5750, www.reliantemc.com

Preen®

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.

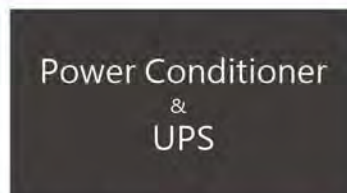
Product Lines



- Up to 1000Hz
- 500VA ~ 2,000kVA
- Regenerative Function



- Up to 2,000V
- 2kW ~ 300kW
- Fast Response & Low Ripple



- 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®

Distributed by: Reliant EMC LLC, 3311 Lewis Ave, Signal Hill CA 90755, 408-916-5750, www.reliantemc.com