AFV series

Preen®

Programmable AC Power Source 10~2000kVA



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

- 7 inchesTouch Screen
- Three Phase Independent Control
- ▼ Soft Start Feature

- Efficiency
 - >85%-90%
- ▼ Complete Interface Options: RS232 / RS485 / GPIB
- ▼ Complete Protection

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

7" Touch Screen

Touch Screen Operation

High Efficiency

>85%-90%

Ideal for Motor Testing

Soft Start Feature

Multiple Programmable Features

STEP/GRADUAL

Complete Protection

OVP/UVP/OCP/OPP/OTP

High Power AC Source

■ Applications



Electric Motor Test









Switching Power Supply





Intuitive Touch Screen



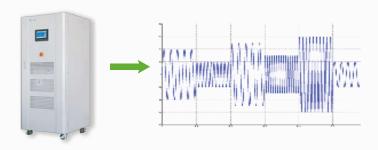
Users are allowed to operate the product via the touch screen on the front panel, which provides an easy operation for users to quickly set the product output.

Three Phase Independent Control (opt.)



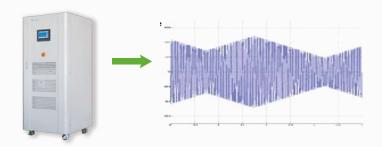
Users are allowed to control three-phase output voltage and output frequency independently. The product can be used as one unit of three-phase power supply or as three units of single-phase power supply.

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.

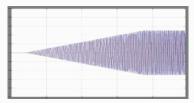
GRADUAL Feature



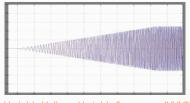
Preen AFV series provides up to 12sequences in the the GRADUAL feature. Through the GRADUAL feature, users are allowed to set the product output, such as start/end output voltage, start/end output frequency and dwell time of performing the GRADUAL feature in each of the adjustable sets, and then the 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			
	Phase		3Ø4W + G										
Input	Voltage 1		115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V $$; Rated Input Voltag \pm 15%										
	Frequenc	cy Range	47~63Hz										
	Power Factor		0.9						0.85				
	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)										
Output	Frequency Range		45~65Hz (opt. 45~500Hz)										
	Frequency Regulation		≤0.01%										
	Maximum Current		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		±1% (Resistive Load)										
	THD		≤2% (Resistive Load)										
System	Efficiency		≥90% ≥85%										
	Response Time		≤2ms										
	Crest Factor		3:1										
	Protection		OVP, UVP, OCP, OPP, OTP and Short Circuit Protection										
Management	Voltage		Voltage: Resolution: 0.1V; Accuracy: 0.5% F.S. + 4 Counts										
Measurement	Current Frequency		Resolution: 0.1A; Accuracy: 0.5% F.S.+ 4 Counts										
Damata Int		L.y	Resolution: 0.1Hz; Accuracy: 0.5% F.S. + 4 Counts										
kemote Int	Remote Interface		RS-485: Standard RS-232/GPIB: Optional 0°C~45°C										
	Opertional Temp.		0~45 C 0~90% (Non-condensing)										
General	Humidity Altitude		<1500m										
Dimensions (W*D*H) mm (3)		1)	(2	0		3	4	(
Weight(kg) (3)			240	290	360	580	670	830	935	1092			
Weight (kg)			240	230	300	360	0/0	030	933	1032			

		11100-	·		nase Outpu								
Model			AFV-33010	AFV-33015	AFV-33030	AFV-33045 45	AFV-33060	AFV-33080	AFV-33100				
Power (kVA)			10	15	30	60	80	100					
	Phase		3Ø4W + G										
Input	Voltage 1		115V/200V, 120V/208V, 220V/380V, 230V/400V, 240V/415V or 277V/480V $$; Rated Input Voltag \pm 15%										
	Frequency Range		47~63Hz 0.9 0.85										
	Power Factor					3.0							
	Maximmum 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)										
Output	Frequency Range		45~65Hz (opt. 45~500Hz)										
	Frequency Regulation		≤0.01%										
	Maximum Current		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		±1% (Resistive Load)										
	THD		≤2% (Resistive Load)										
System	Efficiency		≥90%										
	Response Time		≤2ms										
	Crest Factor		3:1										
	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										
Remote Inte	erface		RS-485: Standard RS-232/GPIB: Optional										
	Opertional Temperature		0°C~45°C										
General	Humidity		0~90% (Non-condensing)										
	Altitude		<1500m										
Dimensions (W*D*H) mm 3				2		(3	(4)				
Weight(kg) 3			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 Voltag \pm 15%										
	Frequency Range		47~63Hz										
	Power Factor		0.85										
	Maximmum Current 2		251.7	335.5	503.3	629.1	838.8	1048.5	1342.1	1677.7	2097.1	2516.5	3355.4
	Phase		3Ø4W + G										
	Voltage	Low(V)	0V~150.0V (L-N)										
		High(V)	0V~300.0V (L-N)										
Output	Frequency Range		45~65Hz (opt. 45~500Hz)										
		Regulation		222.2	222.2	4167	FFF 6	≤ 0.01%	000.0	11111	12000	16667	2222.2
	Maximum Current		166.7 333.3	222.2 444.4	333.3 666.7	416.7 833.3	555.6 1111.1	694.4 1388.9	888.9 1777.8	1111.1 2222.2	1388.9 2777.8	1666.7 3333.3	2222.2 4444.4
	Line Regulation		333.3	444.4	000.7	655.5	1111.1	< 1%	1///.8	2222.2	2///.8	3333.3	4444.4
	Load Regulation		± 1% (Resistive Load)										
	THD		≤ 2% (Resistive Load)										
System	Efficiency		≥ 85%										
,	Response Time		≤2ms										
	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										
Measurement	Current		Resolution: 0.1A; Accuracy: 0.5% F.S.+ 4 Counts										
	Frequency		Resolution: 0.1Hz; Accuracy: 0.5% F.S. + 4 Counts										
Remote Inte	Remote Interface			RS-485: Standard RS-232/GPIB: Optional									
	Opertional Temperature		0°C~45°C										
General	Humidity		0~90% (Non-condensing)										
	Altitude		1500m										
Dimensions(W*D*H)mm 3			(-		8	C	ð		8		9	
Weight(kg) 3			1170	1400	2220	2465	3335					_	= 1

AFV Series Case Dimension Overview



- P.S.: 1 Please contact us for other voltage specification.
 - 2 The rated input voltage is 220V/380V.
 - 3 For AFV seires 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



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



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

Power Conditioner UPS

- Solid State & Inductive types
- Up to 1500kVA

Applications







EMC Chamber



ATE System



Communication Equipment



Laboratory



Medical Equipment



Airport Apron / Hangar



Military Aircraft / Helicopter



Aircraft Manufacturing



Control Room/ Data Center



Home Appliance



Navy System



Transport System



Electronics



Motor / Engine



Defense Equipment