

LXinstruments GmbH  
Rudolf-Diesel-Str. 36  
71154 Nufringen  
Germany



## TECHNICAL PRODUCT INFORMATION

### Test & measurement instruments

- ▶ high - quality
- ▶ moderate prices
- ▶ excellent precision

#### Your contact:

Technical support, services, demo & rental equipment, price information & quotes, consulting:

Tel.: +49(0)7032 / 895 93-3

Mail: sales@lxinstruments.com

Web: www.lxinstruments.com

Shop: www.lxinstruments.com/shop

# The Ideal AC Source for High Power Testing Applications

**NEW AFV<sup>+</sup> series 10kVA~2000kVA**

## New Version of High Power Programmable AC Power Source

The AFV<sup>+</sup> series features low THD (total harmonics distortion), high reliability, multiple programming features, intuitive operations and leading power level. This latest high power programmable AC Power source of Preen can simulate different power line disturbances and record error logs. The new control software for the AFV<sup>+</sup> series also provides great convenience for remote control and monitoring .

**THD  $\leq$  0.5%**

Leading Performance on Harmonic Distortions

**Regulation  $\leq$  0.5%**

Precise and Stable Output Performance

**Power Line Disturbances**

Simulate Phase Unbalance, Phase Shifting and Phase Loss

- **Intuitive Touch Screen Control** New Version of Easy-to-use Local Operations
- **New Control Software** User-friendly Control with Comprehensive Functions
- **Three-Phase Independent Adjustment** Easy to Set Different Output Voltage, Simulate Voltage Imbalance and Phase Shift



# High Power Programmable AC Power Source

**RoHS** Compliant **CE**



The AFV<sup>+</sup> series is a high power programmable AC power source utilizing advanced PWM technology to deliver power with THD  $\leq 0.5\%$  and up to 2000kVA. The output frequency is 45~120Hz with accuracy of  $\pm 0.02\%$ , and user can select 45~500Hz or 300-840Hz option to expand the frequency. The AFV<sup>+</sup> series is ideal to simulate different region's voltage and frequency conditions, and can cover applications for home appliance, motor, medical equipment, lighting and EMC laboratory.

The AFV<sup>+</sup> series features STEP and RAMP programmable functions to easily simulate single or continuous output changes. Three phase independent adjustment, optional remote sensing and optional phase angle adjustment all provide convenient control to simulate different kinds of line disturbance. For remote control, the AFV<sup>+</sup> series has standard RS-232, RS-485 & Ethernet interface card and optional GPIB and Analog interfaces for easy setup and programming.

## Product Features

- Wide Output Power Range: 10kVA~2000kVA.
- Optional 0-400V (L-N) or 0-600V(L-N) output voltage.
- With standard remote sensing function, user can avoid voltage drop easing.
- CE & RoHS certified.
- The 7" touch screen shows parameters of voltage, current, frequency, real power, apparent power and sum of each phase's parameters.
- The soft start function can effectively reduce inrush current caused by motor startup.
- Via the Three Phase Independent Adjustment function, the AFV<sup>+</sup> series can deliver each phase voltage differently to multiple single-phase DUTs.
- User can simulate phase shift with the optional Phase Angle Adjustment function.

## Output Power

**10kVA~2000kVA**

## Interfaces



## Applications

- Home Appliance
- Laboratory/Certification Bureau
- Industrial Power Supply
- Electric Vehicles
- Motor & Compressor
- IT / SMT Production Line
- Renewable Energy
- Medical Industry

## QR Code



Product  
Info.



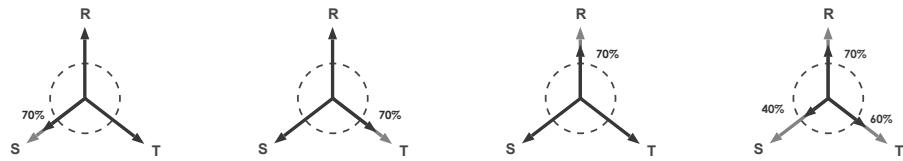
Product  
Video

## Intuitive 7" Touch Screen



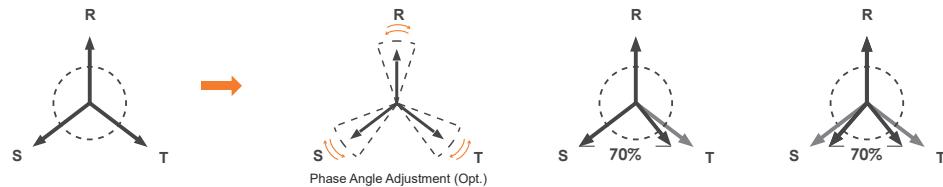
The AFV<sup>+</sup> series employs 7" touch screen to provide intuitive and easy-to-use control and display. Users can quickly access output settings and measurements, including voltage, current, frequency, real power, apparent power, PF and sum of each phase's parameters. Complex sequences and system configurations can also be easily done via the touch screen.

## Three Phase Independent Adjustment



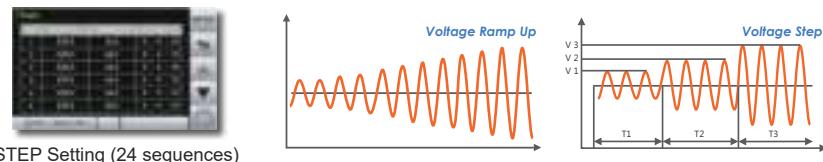
The Three Phase Independent Adjustment function of AFV<sup>+</sup> series can simulate advanced power line disturbance, such as three-phase voltage unbalanced or lost-phase, which can further meet up with testing standard of IEC61000-4-34 (GB/T 17626-34), by setting output voltage of each phase independently. User can simply press the screen icon to switch between balanced voltage setting and independent voltage adjustment .

## Phase Angle Adjustment (Opt.)



The AFV<sup>+</sup> series not only can set three-phase voltage independently, but also can set the phase angle between three phases via the optional Phase Angle Adjustment, for example, user can set phase angle from 120° to 70° to simulate phase shift for different power conditions.

## RAMP and STEP Programming Function



The AFV<sup>+</sup> series' RAMP feature has up to 12 sequences available with parameters of voltage, frequency and time, and the STEP feature has up to 24 sequences available with parameters of voltage, frequency and time. These features provide an easy method to simulate different kinds of power line disturbance.

## Overload Capability (Opt.)

200%	2 sec
150%	5 sec
125%	15 sec

An inductive DUT (Device Under Test), such as motor, compressor or water pump, generates great activation current when activating. As a result, users need to purchase a power supply with much higher capacity than the DUT itself. AFV<sup>+</sup> series has an optional overload capability that can endure/achieve 200% overload capability, easy to activate products of electric motor type that require high activation current.

## Remote Interfaces

RS-232 RS-485 Ethernet Standard Analog GPIB Option

For easy setup and programming, the AFV<sup>+</sup> series has standard RS-232/RS-485/Ethernet interface card. User also can select optional GPIB and Analog interfaces for different remote control requirements.

## Broader Frequency and Higher Voltage (Opt.)



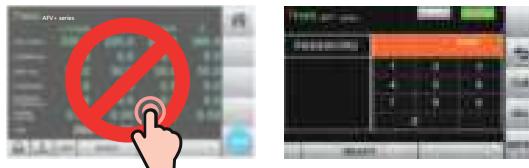
AFV<sup>+</sup> series can output optional frequency up to 840Hz to meet the needs of defense and aircraft industries. It can also be used for double frequency test of transformer. Moreover, AFV<sup>+</sup> series can output up to 400V(L-N)/690V(L-L) or 600V(L-N)/1039V(L-L) (optional) for motors that need higher input voltage.

## Remote Control Software: Preen Program



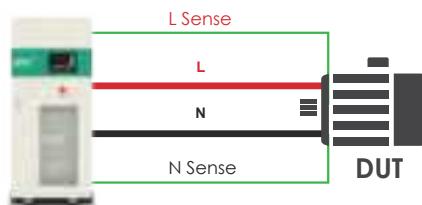
The AFV<sup>+</sup> series offers complimentary remote control software, Preen Program. This graphical user interface provides easy settings and user-friendly configurations for users to fully control the unit. The Preen Program includes GENERAL mode and PROGRAMMABLE mode with STEP and RAMP features available. The preview waveform and report functions also greatly enhance convenience for review parameters and results before or after testing.

## Screen Lock Password Function



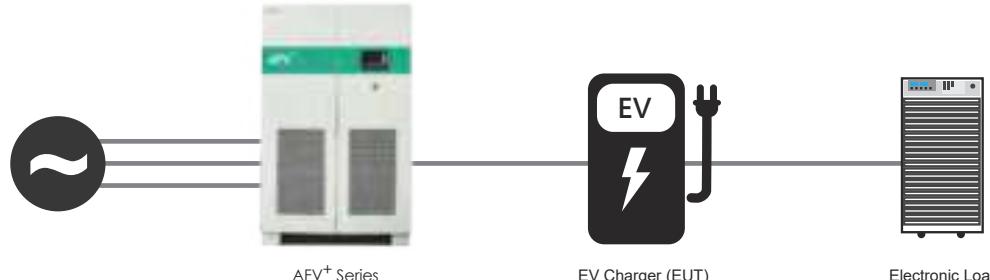
In order to prevent the operator from changing the set parameters by mistake, the new Screen Lock Password function is added on AFV<sup>+</sup> series, so that the operator can only perform the output of the device, and only authorized personnel has the password to unlock the screen and edit parameters, which help to increase the security and effectiveness of testing.

## Remote Sensing



In the factory or laboratory, there is often a certain distance in the configuration of power and load. The Remote Sensing of AFV<sup>+</sup> series is able to compensate the voltage drop caused by the cable length, so the user can avoid the inconvenience of adjusting the voltage.

## EV Charger Application



Before EV charger's ready for installation, it has to do a series of tests to ensure its reliability and safety. For example, input AC characteristic test, control signal test, performance test, safety features etc. are required test items. AFV<sup>+</sup> series is the ideal power source to perform high quality and stable EV charger testing.

## SPECIFICATIONS

### AFV<sup>+</sup> Series Single-Phase Output (10kVA - 150kVA)

Model	AFV-PLUS-31010	AFV-PLUS-31015	AFV-PLUS-31020	AFV-PLUS-31030	AFV-PLUS-31045	AFV-PLUS-31060	AFV-PLUS-31075	AFV-PLUS-31100	AFV-PLUS-31120	AFV-PLUS-31150			
<b>INPUT</b>													
Phase	3Ø / 3Wire + G												
Voltage <sup>1</sup>	380 VAC ±15% (option: 200 VAC, 208 VAC, 400 VAC, or 480 VAC)												
Frequency	47 - 63Hz												
Max. Current <sup>2</sup>	18.8A	28.1A	37.5A	56.3A	84.4A	112.5A	140.7A	198.6A	238.3A	297.9A			
Power Factor	≥0.9 ( Max. Power )												
<b>OUTPUT</b>													
Power ( VA )	10kVA	15kVA	20kVA	30kVA	45kVA	60kVA	75kVA	100kVA	120kVA	150kVA			
Phase	1Ø / 2 Wire + G												
Voltage Ranges	Low (V)	0V-155.0V ( L-N )											
	High (V)	0V-310.0V ( L-N )											
Voltage Resolution	0.1V												
Voltage Accuracy	0.5% F.S.+ 4 counts												
Frequency Range <sup>3</sup>	A : 45-500Hz ; B : 45-120Hz ; C : 300-840Hz												
Frequency Resolution	0.1Hz												
Frequency Accuracy	±0.02% F.S.												
Max. Current (RMS)	Low (A)	83.3A	125A	166.7A	250A	375A	500A	625A	833.3A	1000A	1250A		
	High (A)	41.7A	62.5A	83.3A	125A	187.5A	250A	312.5A	416.7A	500A	625A		
Line Regulation	< 0.5%												
Load Regulation	≤ 0.5% ( Resistive Load )												
Total Harmonic Distortion (THD) <sup>4</sup>	≤ 0.5% ( Resistive Load )												
Response Time	≤ 1ms												
Crest Factor	≥3												
<b>MEASUREMENT</b>													
Voltage Range	0V-310.0V												
Voltage Resolution	0.1V												
Voltage Accuracy	0.5% F.S.+ 4 counts												
Frequency Range	45.0-840.0Hz												
Frequency Resolution	0.01Hz												
Frequency Accuracy	±0.02% F.S.												
Current Range (RMS)	0 - 83.3A	0 - 125A	0 - 166.7A	0 - 250A	0 - 375A	0 - 500A	0 - 625A	0 - 833.3A	0 - 1000A	0 - 1250A			
Current Resolution (RMS)	0.1A												
Current Accuracy (RMS)	0.5% F.S.+4 counts												
Power Range	0 - 10kW	0 - 15kW	0 - 20kW	0 - 30kW	0 - 45kW	0 - 60kW	0 - 75kW	0 - 100kW	0 - 120kW	0 - 150kW			
Power Resolution	0.1kW												
Power Accuracy	1% F.S.+6 counts												
<b>GENERAL</b>													
Efficiency	≥90% at Max. Power							≥85% at Max. Power					
HMI	Touch Screen, 7" Color TFT LCD												
Program Mode	STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)												
Soft Start Function	Setting : Rated Volt. / Rated Freq. / Start Volt. / Start Freq. / Delay Time / Ramp Time												
Protection	Input : N.F.B, Over Voltage, Under Voltage Output : Over Voltage, Over Current, Reverse Current, Over Temperature												
Remote Interface	Standard : RS-485 / RS-232/Ethernet Option : GPIB, Analog												
Operating Temperature	0°C~45°C												
Humidity	0~90% ( Non condensing )												
Altitude	< 1,500m												
Dimensions (H x W x D) <sup>5</sup>	1045 x 628 x 840 mm (Including wheels)	1440 x 628 x 840 mm (Including wheels)			1645 x 828 x 840 mm (Including wheels)	1900 x 1178x 1200 mm							
	41.1 x 24.7 x 33.1inch (Including wheels)	56.7 x 24.7 x 33.1 inch (Including wheels)			64.8 x 32.6 x 33.1 inch (Including wheels)	74.8 x 46.4 x 47.2 inch							
Weight <sup>5</sup>	230kg	280kg	320kg	450kg	580kg	670kg	710kg	980kg	1135kg	1415kg			
	507lbs	617.4lbs	705.4lbs	992.3lbs	1278.9lbs	1477.4lbs	1565.2lbs	2160.5lbs	2502.2lbs	3119.5lbs			

\*1 Please contact us for other input voltage specifications. \*2 The max. current is based on rated input voltage of 380V. \*3 For type A: 45-500Hz, please contact us for output power characteristic curve.

\*4 When output frequency is at 45-65Hz and output voltage is 90V-140V(Low Range) or 180V-280V(High Range) and with resistive load.

\*5 Dimensions and weight are for input voltage 380V. Please contact us for dimensions and weight for other input voltage.

\* All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25°C ± 5°C.

## SPECIFICATIONS

### AFV+ Series Three-Phase Output (10kVA - 120kVA)

Model	AFV-PLUS-33010	AFV-PLUS-33015	AFV-PLUS-33020	AFV-PLUS-33030	AFV-PLUS-33045	AFV-PLUS-33060	AFV-PLUS-33075	AFV-PLUS-33100	AFV-PLUS-33120			
<b>INPUT</b>												
Phase	3Ø / 3Wire + G											
Voltage <sup>*1</sup>	380VAC ±15% (option: 200 VAC, 208 VAC, 240VAC, 400VAC, or 480 VAC)											
Frequency	47 - 63Hz											
Max. Current <sup>*2</sup>	18.8A	28.1A	37.5A	56.3A	84.4A	112.5A	140.7A	198.6A	238.3A			
Power Factor	≥0.9 ( Max. Power )											
<b>OUTPUT</b>												
Power (VA)	10kVA	15kVA	20kVA	30kVA	45kVA	60kVA	75kVA	100kVA	120kVA			
Phase	3Ø / 4 Wire + G											
Voltage Ranges	Low(V) High(V)	0V-155.0V ( L-N ) 0V-310.0V ( L-N )										
Voltage Resolution	0.1V											
Voltage Accuracy	0.5% F.S.+4 counts											
Frequency Range <sup>*3</sup>	A : 45-500Hz ; B : 45-120Hz ; C : 300-840Hz											
Frequency Resolution	0.1Hz											
Frequency Accuracy	±0.02% F.S.											
Max. Current (RMS)	Low(A) High(A)	27.8A 13.9A	41.7A 20.8A	55.6A 27.8A	83.3A 41.7A	125A 62.5A	166.7A 83.3A	208.3A 104.2A	277.8A 138.9A	333.3A 166.7A		
Line Regulation	< 0.5%											
Load Regulation	≤ 0.5% ( Resistive Load )											
Total Harmonic Distortion (THD) <sup>*4</sup>	≤ 0.5% ( Resistive Load )											
Response Time	≤ 1ms											
Crest Factor	≥3											
<b>MEASUREMENT</b>												
Voltage Range	0V-310.0V											
Voltage Resolution	0.1V											
Voltage Accuracy	0.5% F.S.+4 counts											
Frequency Range	45.0-840.0Hz											
Frequency Resolution	0.01Hz											
Frequency Accuracy	±0.02% F.S.											
Current Range(RMS)	0 - 27.8A	0 - 41.7A	0 - 55.6A	0 - 83.3A	0 - 125A	0 - 166.7A	0 - 208.3A	0 - 277.8A	0 - 333.3A			
Current Resolution(RMS)	0.1A											
Current Accuracy(RMS)	0.5% F.S.+4 counts											
Power Range	0 - 10kW	0 - 15kW	0 - 20kW	0 - 30kW	0 - 45kW	0 - 60kW	0 - 75kW	0 - 100kW	0 - 120kW			
Power Resolution	0.1kW											
Power Accuracy	1% F.S.+6 counts											
<b>GENERAL</b>												
Efficiency	≥90% at Max. Power						≥85% at Max. Power					
HMI	Touch Screen, 7" Color TFT LCD											
Program Mode	STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)											
Soft Start Function	Setting : Rated Volt. / Rated Freq. / Start Volt. / Start Freq. / Delay Time / Ramp Time											
Three Phase Independent Adjustment	U-N/V-N/W-N, Adjustment 0-310V											
Protection	Input : N.F.B, Over Voltage, Under Voltage Output : Over Voltage, Over Current, Reverse Current, Over Temperature											
Remote Interface	Standard : RS-485 / RS-232/Ethernet Option : GPIB, Analog											
Operating Temperature	0°C~45°C											
Humidity	0~90% ( Non condensing )											
Altitude	< 1,500m											
Dimensions (H x W x D) <sup>*5</sup>	1045 x 628 x 840 mm (Including wheels)	1440 x 628 x 840 mm (Including wheels)	1645 x 828 x 840 mm (Including wheels)	1900 x 1178x 1200 mm								
	41.1 x 24.7 x 33.1inch (Including wheels)	56.7 x 24.7 x 33.1 inch (Including wheels)	64.8 x 32.6 x 33.1 inch (Including wheels)	74.8 x 46.4 x 47.2 inch								
Weight <sup>*6</sup>	280kg	305kg	360kg	400kg	560kg	670kg	960kg	1170kg	1450kg			
	617.4lbs	672.5lbs	793.8lbs	882.0lbs	1234.8lbs	1477.4lbs	2116.8lbs	2579.9lbs	3197.3lbs			

\*1 Please contact us for other input voltage specifications. \*2 The max. current is based on rated input voltage of 380V. \*3 For type A: 45~500Hz, please contact us for output power characteristic curve.

\*4 When output frequency is at 45-65Hz and output voltage is 90V-140V(Low Range) or 180V-280V(High Range) and with resistive load.

\*5 Dimensions and weight are for input voltage 380V. Please contact us for dimensions and weight for other input voltage.

\*6 All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25°C ± 5°C.

## SPECIFICATIONS

### AFV+ Series Three-Phase Output (150kVA - 2000kVA)

Model	AFV-PLUS-33150	AFV-PLUS-33200	AFV-PLUS-33300	AFV-PLUS-33400	AFV-PLUS-33500	AFV-PLUS-33600	AFV-PLUS-33800	AFV-PLUS-331000	AFV-PLUS-331200	AFV-PLUS-331500	AFV-PLUS-332000										
<b>INPUT</b>																					
Phase	3Ø / 3Wire + G																				
Voltage <sup>*1</sup>	380VAC ±15% (option: 400VAC, 240VAC or 480VAC)																				
Frequency	47 - 63Hz																				
Max. Current <sup>*2</sup>	297.9A	397.2A	629.1A	838.8A	1048.5A	1258.3A	1677.7A	2097.1A	2516.5A	3145.6A	4194.2A										
Power Factor	≥0.9 ( Max. Power )																				
<b>OUTPUT</b>																					
Power (VA)	150kVA	200kVA	300kVA	400kVA	500kVA	600kVA	800kVA	1000kVA	1200kVA	1500kVA	2000kVA										
Phase	3Ø / 4 Wire + G																				
Voltage Ranges	Low(V) High(V)	0V-155.0V (L-N) 0V-310.0V (L-N)																			
Voltage Resolution	0.1V																				
Voltage Accuracy	0.5% F.S.+4 counts																				
Frequency Range <sup>*3</sup>	A : 45-500Hz ; B : 45-120Hz ; C : 300-840Hz																				
Frequency Resolution	0.1Hz																				
Frequency Accuracy	±0.02% F.S.																				
Max. Current (RMS)	416.7A 208.3A	555.6A 277.8A	833.3A 416.7A	1111.1A 555.6A	1388.9A 694.4A	1666.7A 833.3A	2222.2A 1111.1A	2777.8A 1388.9A	3333.3A 1666.7A	4166.7A 2083.3A	5555.6A 2777.8A										
Line Regulation	< 0.5%																				
Load Regulation	≤ 0.5% ( Resistive Load )																				
Total Harmonic Distortion (THD) <sup>*4</sup>	≤ 0.5% ( Resistive Load )																				
Response Time	≤ 1ms																				
Crest Factor	≥3																				
<b>MEASUREMENT</b>																					
Voltage Range	0V-310.0V																				
Voltage Resolution	0.1V																				
Voltage Accuracy	0.5% F.S.+4 counts																				
Frequency Range	45.0-840.0Hz																				
Frequency Resolution	0.01Hz																				
Frequency Accuracy	±0.02% F.S.																				
Current Range (RMS)	0 - 416.7A	0 - 555.6A	0 - 833.3A	0 - 1111.1A	0 - 1388.9A	0 - 1666.7A	0 - 2222.2A	0 - 2777.8A	0 - 3333.3A	0 - 4166.7A	0 - 5555.6A										
Current Resolution (RMS)	0.1A																				
Current Accuracy (RMS)	0.5% F.S.+4 counts																				
Power Range	0 - 150kW	0 - 200kW	0 - 300kW	0 - 400kW	0 - 500kW	0 - 600kW	0 - 800kW	0 - 1000kW	0 - 1200kW	0 - 1500kW	0 - 2000kW										
Power Resolution	0.1kW																				
Power Accuracy	1% F.S.+6 counts																				
<b>GENERAL</b>																					
Efficiency	≥85% at Max. Power																				
HMI	Touch Screen, 7" Color TFT LCD																				
Program Mode	STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)																				
Soft Start Function	Setting : Rated Volt. / Rated Freq. / Start Volt. / Start Freq. / Delay Time / Ramp Time																				
Three Phase Independent Adjustment	U-N/V-N/W-N, Adjustment 0-310V																				
Protection	Input : N.F.B, Over Voltage, Under Voltage Output : Over Voltage, Over Current, Reverse Current, Over Temperature																				
Remote Interface	Standard : RS-485 / RS-232/Ethernet Option : GPIB, Analog																				
Operating Temperature	0°C~45°C																				
Humidity	0~90% ( Non condensing )																				
Altitude	< 1,500m																				
Dimensions (H x W x D) <sup>*5</sup>	1900 x 1178x 1200 mm	2050x 3881x 1539mm	2050 x 4716 x 1520 mm	2050 x 6003 x 1520 mm	2200 x 10827 x1590 mm	2200 x 12990 x1590 mm															
	74.8 x 46.4 x 47.2inch	80.7 x 152.8 x 60.6inch	80.7 x 185.7 x 59.8inch	80.7 x 236.3 x 59.8inch	86.6 x 426.3 x 62.6inch	86.6 x 511.4 x 62.6inch															
Weight <sup>*5</sup>	1835kg 4045.4lbs	2415kg 5324.1lbs	3620kg 7980.7lbs	4670kg 10295.5lbs	5820kg 12830.9lbs	7720kg 17019.6lbs	9240kg 20370.7lbs	11080kg 24427.2lbs	16800kg 37037.6lbs	18720kg 41270.5lbs	19950kg 43982.2lbs										

\*1 Please contact us for other input voltage specifications. \*2 The max. current is based on rated input voltage of 380V. \*3 For type A: 45~500Hz, please contact us for output power characteristic curve.

\*4 When output frequency is at 45-65Hz and output voltage is 90V-140V(Low Range) or 180V-280V(High Range) and with resistive load.

\*5 Dimensions and weight are for input voltage 380V. Please contact us for dimensions and weight for other input voltage.

\* All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25°C ± 5°C.

## ORDERING INFORMATION

### AFV<sup>+</sup> Series Single-Phase Output (10kVA - 150kVA)

Model Number	Description
AFV-PLUS-31010	High Power Programmable AC Power Source (10kVA/310V)
AFV-PLUS-31015	High Power Programmable AC Power Source (15kVA/310V)
AFV-PLUS-31020	High Power Programmable AC Power Source (20kVA/310V)
AFV-PLUS-31030	High Power Programmable AC Power Source (30kVA/310V)
AFV-PLUS-31045	High Power Programmable AC Power Source (45kVA/310V)
AFV-PLUS-31060	High Power Programmable AC Power Source (60kVA/310V)
AFV-PLUS-31075	High Power Programmable AC Power Source (75kVA/310V)
AFV-PLUS-31100	High Power Programmable AC Power Source (100kVA/310V)
AFV-PLUS-31120	High Power Programmable AC Power Source (120kVA/310V)
AFV-PLUS-31150	High Power Programmable AC Power Source (150kVA/310V)
AFV-PLUS-001	Type A: Output Frequency 45-500Hz
AFV-PLUS-002	Type B: Output Frequency 45-120Hz
AFV-PLUS-003	Type C : Output Frequency 300-840Hz <sup>1</sup>
AFV-PLUS-004	Start Angle 0-359°
AFV-PLUS-005	Overload Capability 200% 2 sec, 150% 5 sec, 125% 15 sec
AFV-PLUS-006	Fast Voltage Response Option (with Time Setting Resolution 0.01S) <sup>2</sup>
AFV-PLUS-007	Analog Control Interface
AFV-PLUS-008	GPIB Interface
AFV-PLUS-009	Ethernet Interface
AFV-PLUS-012	Input Voltage 200V
AFV-PLUS-013	Input Voltage 208V
AFV-PLUS-014	Input Voltage 240V
AFV-PLUS-015	Input Voltage 400V
AFV-PLUS-016	Input Voltage 480V
AFV-PLUS-017	Output Voltage 0-400V (L-N)
AFV-PLUS-018	Output Voltage 0-600V (L-N)

\*1 THD ≤ 2%. \*2 THD and Load Regulation ≤ 1%

### AFV<sup>+</sup> Series Three-Phase Output (10kVA - 2000kVA)

Model Number	Description
AFV-PLUS-33010	High Power Programmable AC Power Source (10kVA/310V)
AFV-PLUS-33015	High Power Programmable AC Power Source (15kVA/310V)
AFV-PLUS-33020	High Power Programmable AC Power Source (20kVA/310V)
AFV-PLUS-33030	High Power Programmable AC Power Source (30kVA/310V)
AFV-PLUS-33045	High Power Programmable AC Power Source (45kVA/310V)
AFV-PLUS-33060	High Power Programmable AC Power Source (60kVA/310V)
AFV-PLUS-33075	High Power Programmable AC Power Source (75kVA/310V)
AFV-PLUS-33100	High Power Programmable AC Power Source (100kVA/310V)
AFV-PLUS-33120	High Power Programmable AC Power Source (120kVA/310V)
AFV-PLUS-33150	High Power Programmable AC Power Source (150kVA/310V)
AFV-PLUS-33200	High Power Programmable AC Power Source (200kVA/310V)
AFV-PLUS-33300	High Power Programmable AC Power Source (300kVA/310V)
AFV-PLUS-33400	High Power Programmable AC Power Source (400kVA/310V)
AFV-PLUS-33500	High Power Programmable AC Power Source (500kVA/310V)
AFV-PLUS-33600	High Power Programmable AC Power Source (600kVA/310V)
AFV-PLUS-33800	High Power Programmable AC Power Source (800kVA/310V)
AFV-PLUS-331000	High Power Programmable AC Power Source (1000kVA/310V)
AFV-PLUS-331200	High Power Programmable AC Power Source (1200kVA/310V)
AFV-PLUS-331500	High Power Programmable AC Power Source (1500kVA/310V)
AFV-PLUS-332000	High Power Programmable AC Power Source (2000kVA/310V)
AFV-PLUS-001	Type A: Output Frequency 45-500Hz
AFV-PLUS-002	Type B: Output Frequency 45-120Hz
AFV-PLUS-003	Type C : Output Frequency 300-840Hz <sup>1</sup>
AFV-PLUS-004	Start Angle 0-359°
AFV-PLUS-005	Overload Capability 200% 2 sec, 150% 5 sec, 125% 15 sec
AFV-PLUS-006	Fast Voltage Response Option (with Time Setting Resolution 0.01S) <sup>2</sup>
AFV-PLUS-007	Analog Control Interface
AFV-PLUS-008	GPIB Interface
AFV-PLUS-009	Ethernet Interface
AFV-PLUS-010	Three Phase Angle Adjustment
AFV-PLUS-012	Input Voltage 200V
AFV-PLUS-013	Input Voltage 208V
AFV-PLUS-014	Input Voltage 240V
AFV-PLUS-015	Input Voltage 400V
AFV-PLUS-016	Input Voltage 480V
AFV-PLUS-017	Output Voltage 0-400V (L-N)
AFV-PLUS-018	Output Voltage 0-600V(L-N)

\*1 THD ≤ 2%. \*2 THD and Load Regulation ≤ 1%