VP ELECTRONIQUE

High Power Programmable AC Power Source

VFV series

Interfaces

Standard: RS-232 | RS-485 | Ethernet

Option: GPIB | Analog | USB

Output Power

10kVA~2000kVA

TAIWAN EXCELLENCE

RoHS Compliant

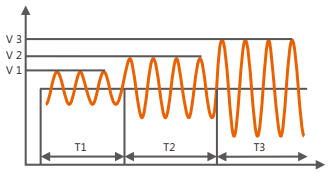
CE

VFV series is a programmable AC power source that can be remotely controlled and integrated with other systems for automatic testing. VFV series provides precise output voltage and frequency which could reach various types of industrial requirements. For the industrial users, such as home appliances, electrical and electronic, medical equipment and lighting, they are able to quickly and accurately simulate standard or abnormal power status via programmable function.

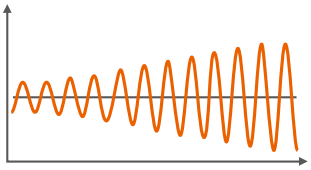
VFV series has built-in programmable STEP and RAMP functions, which is ideal for laboratories, certification and R&D institution's compliance test. This series is coupled with output voltage range of 0-310V and output frequency of standard 45-120Hz or optional 45-500Hz. Moreover, the VFV series provides complete product protections, such as OVP, UVP, OCP, OPP, OTP and short circuit protection.

User-friendly Touch Screen and Remote Control

VFV series is equipped with a 7"/10" touch screen. The intuitive and easy-to-use touch screen allows users to set test sequences immediately and precisely. Through the control interfaces (RS-232 / RS-485 / Ethernet / GPIB / Analog / USB), users can set the desired output parameters and monitor the output value remotely.



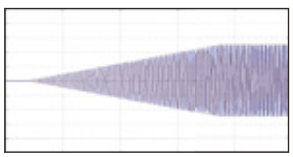
Voltage Step

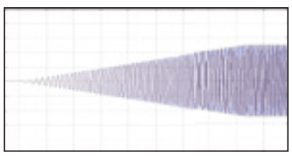

Voltage Ramp

For VFV step mode, users can set voltage or frequency steps easily with 24 built-in memory groups and 255 cycles. Because of the widely used in motor or home appliance industry, the output voltage, output frequency, and running time of each step are designed to be easily set in the memory group.

With VFV gradual mode, 12 built-in memory groups and 255 Cycles allows users set voltage or frequency remotely or through the touch screen. Users can set up output voltage, output frequency, the number of start/end groups.

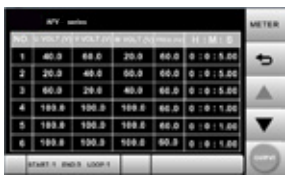
Soft Start Function (Opt.)


Variable Voltage Constant Frequency (VVCF)

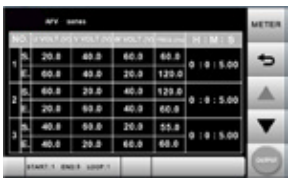

Variable Voltage Variable Frequency (VVVF)

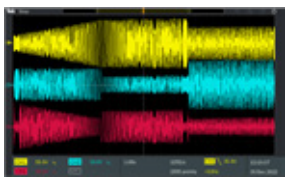
Soft start function can effectively reduce the starting current of motor load or inductive load. The users have more flexibility on selection of power capacity and more efficiency on space usage. They can purchase more cost-effective products.

Three Phase RAMP and STEP Independent Adjustment (opt.)


STEP Setting


STEP Waveform Display


RAMP Setting


RAMP Waveform Display

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

VFV Series Single-Phase Output (10kVA-120kVA)

Model		VFV-31010	VFV-31015	VFV-31030	VFV-31045	VFV-31060	VFV-31080	VFV-31100	VFV-31120
INPUT									
Phase		3Ø / 3 Wire + G							
Voltage		380VAC ±15% (option:208VAC,220VAC)		380VAC ±15% (option: 480VAC)					
Frequency		47- 63Hz							
Max. Current*1		22A	33A	66A	99A	132A	197.4A	246.7A	296.1A
Power Factor		≥ 0.9 (Max. Power)					≥ 0.85 (Max. Power)		
Power	(VA)	10kVA	15kVA	30kVA	45kVA	60kVA	80kVA	100kVA	120kVA
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 *2		Standard : 45-120Hz Option : 45-500Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		± 0.02 % F.S.							
Max. Current (RMS)	Low(A)	83.3A	125A	250A	375A	500A	666.7A	833.3A	1000A
	High(A)	41.7A	62.5A	125A	187.5A	250A	333.3A	416.7A	500A
Line Regulation		< 1%							
Load Regulation		≤ 1% (Resistive Load)							
Total Harmonic Distortion (THD)*3		≤ 1% (Resistive Load)							
Response Time		≤ 2ms							
Crest Factor		≥ 3							
MEASUREMENT									
Voltage Range		0V-310.0V							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+ 4 counts							
Frequency Range		45.0-500.0Hz							
Frequency Resolution		0.01Hz							
Frequency Accuracy		± 0.02 % F.S.							
Current Range (RMS)		0 - 83.3A	0 - 125A	0 - 250A	0 - 375A	0 - 500A	0 - 666.7A	0 - 833.3A	0 - 1000A
Current Resolution (RMS)		0.1A							
Current Accuracy (RMS)		0.5% F.S.+4 counts							
Power Range		0 - 10kW	0 - 15kW	0 - 30kW	0 - 45kW	0 - 60kW	0 - 80kW	0 - 100kW	0 - 120kW
Power Resolution		0.1kW							
Power Accuracy		1% F.S.+6 counts							
GENERAL									
Efficiency		≥ 90% at Max. Power					≥ 85% at Max. Power		
HMI		7" Touch Screen			10" Touch Screen				
Program Mode		STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)							
Protection		Input : N.F.B, Over Voltage, Under Voltage / Output : Over Voltage, Over Current, Over Temperature							
Remote Interface		Standard : RS-232& RS-485 /Ethernet Option: Interface Card (Ethernet/RS-232&RS-485/USB), GPIB or Analog							
Opertional Temperature		0℃ ~ 45℃							
Humidity		0-90% (Non condensing)							
Altitude		< 1,500m							
Dimensions (H x W x D) *4		1045x 600 x 800 mm (including wheels)		1440 x 600 x 800 mm (including wheels)	1645 x 800 x 800 mm (including wheels)		1800 x 1050 x 950 mm		1900 x 1150 x 1200 mm
		41.1 x 23.6 x 31.5 inch (including wheels)		56.7 x 23.6 x 31.5 inch (including wheels)	64.8 x 31.5 x 31.5 inch (including wheels)		70.9 x 41.3 x 38.2 inch		74.8 x 45.3 x 48.0 inch
Weight *4		225kg	270kg	440kg	560kg	650kg	750kg	940kg	1100kg
		496.1lbs	595.4lbs	970.2lbs	1234.8lbs	1433.3lbs	1653.8lbs	2072.7lbs	2425.5lbs

*1 The max. current is based on a rated input voltage of 380V minus 15%. *2 For 45-500Hz option, please contact us for output power characteristic curve.

*3 When the output voltage is at Low : 90-140V or High 180-280V with load power factor of 1. *4 Dimensions and weight are for input voltage 220/380V. 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℃ ± 5℃ .

VFV Series Three-Phase Output (10kVA-120kVA)

Model		VFV-33010	VFV-33015	VFV-33030	VFV-33045	VFV-33060	VFV-33080	VFV-33100	VFV-33120
INPUT									
Phase		3Ø / 3 Wire + G							
Voltage		380VAC ±15% (option: 208VAC, 220VAC)			380VAC ±15% (option: 480VAC)				
Frequency		47- 63Hz							
Max. Current*1		22A	33A	66A	99A	132A	197.4A	246.7A	296.1A
Power Factor		≥ 0.9 (Max. Power)					≥ 0.85 (Max. Power)		
Power	(VA)	10kVA	15kVA	30kVA	45kVA	60kVA	80kVA	100kVA	120kVA
Phase		3Ø / 4 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 *2		Standard : 45-120Hz Option : 45-500Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		± 0.02% F.S.							
Max. Current (RMS)	Low(A)	27.8A	41.7A	83.3A	125A	166.7A	222.2A	277.8A	333.3A
	High(A)	13.9A	20.8A	41.7A	62.5A	83.3A	111.1A	138.9A	166.7A
Line Regulation		≤ 1%							
Load Regulation		≤ 1% (Resistive Load)							
Total Harmonic Distortion(THD)*3		≤ 1% (Resistive Load)							
Response Time		≤ 2ms							
Crest Factor		≥ 3							
Voltage Range		0V-310.0V							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+4 counts							
Frequency Range		45.0-500.0Hz							
Frequency Resolution		0.01Hz							
Frequency Accuracy		± 0.02% F.S.							
Current Range(RMS)		0 - 27.8A	0 - 41.7A	0 - 83.3A	0 - 125A	0 - 166.7A	0 - 222.2A	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 - 30kW	0 - 45kW	0 - 60kW	0 - 80kW	0 - 100kW	0 - 120kW
Power Resolution		0.1kW							
Power Accuracy		1% F.S.+6 counts							
Efficiency		≥ 90% at Max. Power					≥ 85% at Max. Power		
HMI		7" Touch Screen			10" Touch Screen				
Program Mode		STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)							
Protection		Input : N.F.B, Over Voltage, Under Voltage / Output : Over Voltage, Over Current, Over Temperature							
Remote Interface		Standard: RS-232& RS-485 /Ethernet Option: Interface Card (Ethernet/RS-232&RS-485/USB), GPIB or Analog							
Opertional Temperature		0℃ ~ 45℃							
Humidity		0-90% (Non condensing)							
Altitude		< 1,500m							
Dimensions (H x W x D) *4		1045 x 600 x 800 mm (including wheel)	1440 x 600 x 800 mm (including wheel)		1645 x 800 x 800 mm (including wheel)		1800 x 1050 x 950 mm		1900 x 1150 x 1200 mm
		41.1 x 23.6 x 31.5 inch (including wheel)	56.7 x 23.6 x 31.5 inch (including wheel)		64.8 x 31.5 x 31.5 inch (including wheel)		70.9 x 41.3 x 38.2 inch		74.8 x 45.3 x 48.0 inch
Weight *4		255kg	295kg	390kg	540kg	650kg	1000kg	1170kg	1450kg
		562.3lbs	650.5lbs	860lbs	1190.7lbs	1433.3lbs	2205lbs	2579.85lbs	3197.3lbs

*1 The max. current is based on a rated input voltage of 380V minus 15%. *2 For 45-500Hz option, please contact us for output power characteristic curve.
*3 When the output voltage is at Low : 90-140V or High 180-280V with load power factor of 1.
*4 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℃ ± 5℃ .

VP ELECTRONIQUE

SPECIFICATIONS

VFV Series Three-Phase Output (160kVA-1600kVA)

Model		VFV-33160	VFV-33240	VFV-33300	VFV-33400	VFV-33500	VFV-33640	VFV-33800	VFV-331000	VFV-331200	VFV-331600
INPUT											
Phase		3Ø / 3 Wire + G									
Voltage		380Vac ±15% (option: 480Vac)									
Frequency		47-63Hz									
Max. Current[*1]		394.7A	592.1A	740.2A	986.9A	1233.6A	1579A	1973.7A	2467.2A	2960.6A	3947.5A
Power Factor		≥ 0.85 (Max. Power)									
Power	(VA)	160kVA	240kVA	300kVA	400kVA	500kVA	640kVA	800kVA	1000kVA	1200kVA	1600kVA
Phase		3Ø / 4 Wire + G									
Voltage Ranges	Low(V)[*5]	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 [*2]		Standard : 45-120Hz Option : 45-500Hz									
Frequency Resolution		0.01Hz									
Frequency Accuracy		± 0.02 % F.S.									
Max. Current (RMS)	Low(A)	444.4A	666.7A	833.3A	1111.1A	1388.9A	1777.8A	2222.2A	2777.8A	3333.3A	4444.4A
	High(A)	222.2A	333.3A	416.7A	555.6A	694.4A	888.9A	1111.1A	1388.9A	1666.7A	2222.2A
Line Regulation		≤ 1%									
Load Regulation		≤ 1% (Resistive Load)									
Total Harmonic Distortion(THD)[*3]		≤ 1% (Resistive Load)									
Response Time		≤ 2ms									
Voltage Range		0V-310.0V									
Voltage Resolution		0.1V									
Voltage Accuracy		0.5% F.S.+4 counts									
Frequency Range		45.0-500.0Hz									
Frequency Resolution		0.01Hz									
Frequency Accuracy		± 0.02 % F.S.									
Current Range (RMS)		0 - 444.4A	0 - 666.7A	0 - 833.3A	0 - 1111.1A	0 - 1388.9A	0 - 1777.8A	0 - 2222.2A	0 - 2777.8A	0 - 3333.3A	0 - 4444.4A
Current Resolution (RMS)		0.1A									
Current Accuracy (RMS)		0.5% F.S.+4 counts									
Power Range		0 - 160kW	0 - 240kW	0 - 300kW	0 - 400kW	0 - 500kW	0 - 640kW	0 - 800kW	0 - 1000kW	0 - 1200kW	0 - 1600kW
Power Resolution		0.1kW									
Power Accuracy		1% F.S.+6 counts									
Efficiency		≥ 85% at Max. Power									
HMI		10" Touch Screen									
Program Mode		STEP : 24 sets / 255 cycles. (Volt./Freq./Time) RAMP : 12 sets / 255 cycles. (Volt./Freq./Time)									
Protection		Input : N.F.B, Over Voltage, Under Voltage, Output : Over Voltage, Over Current, Over Temperature.									
Remote Interface		Standard: RS-232& RS-485 /Ethernet Option: Interface Card (Ethernet/RS-232&RS-485/USB), GPIB or Analog									
Opertional Temperature		0℃ ~ 45℃									
Humidity		0-90% (Non condensing)									
Altitude		< 1,500m									
Dimensions (H x W x D) [*4]		1900 x 1150 x 1220 mm/ 74.8 x 45.3 x 48.8 inch		2050 x 3880 x 1539 mm/ 80.7 x 152.8 x 60.6 inch			2050 x 4716 x 1520 mm / 80.7 x 185.7 x 59.8 inch		2050 x 6003 x 1520 mm/ 80.7 x 236.3 x 59.8 inch	2200 x 10827 x 1590 mm / 86.6 x 426.3 x 62.6 inch	
Weight [*4]		1850kg	2800kg	3450kg	4450kg	5550kg	7800kg	8800kg	10550kg	16000kg	17600kg
		4079.3lbs	6174lbs	7607.3lbs	9812.3lbs	12237.8lbs	17199lbs	19404lbs	23262.8lbs	35280lbs	38808lbs

*1 The max. current is based on a rated input voltage of 380V minus 15%. *2 For 45-500Hz option, please contact us for output power characteristic curve.

*3 When the output voltage is at Low : 90-140V or High 180-280V with load power factor of 1 .

*4 Dimensions and weight are for input voltage 220/380V. Please contact us for dimensions and weight for other input voltage.

*5 Please contact us for specifications. * All specifications are subject to change without notice. The specifications are tested at ambient temperature of 25

ORDERING INFORMATION

VFV Series Single-Phase Output (10kVA-150kVA)

Model Number	Description
VFV-31010	High Power Programmable AC Power Source (10kVA/310V/45-120Hz)
VFV-31015	High Power Programmable AC Power Source (15kVA/310V/45-120Hz)
VFV-31030	High Power Programmable AC Power Source (30kVA/310V/45-120Hz)
VFV-31045	High Power Programmable AC Power Source (45kVA/310V/45-120Hz)
VFV-31060	High Power Programmable AC Power Source (60kVA/310V/45-120Hz)
VFV-31080	High Power Programmable AC Power Source (80kVA/310V/45-120Hz)
VFV-31100	High Power Programmable AC Power Source (100kVA/310V/45-120Hz)
VFV-31120	High Power Programmable AC Power Source (120kVA/310V/45-120Hz)
VFV-001	Output Frequency 45Hz-500Hz
VFV-002	Soft Start Mode
VFV-005	GPIB Interface
VFV-006	Analog Control Interface
VFV-007	Overload Capability 200% 2 sec, 150% 5 sec, 125% 15 sec[*1]
VFV-008	Interface Card (Ethernet/RS-232&RS-485/USB)
VFV-009	Remote Sensing
VFV-010	Remote Control Software
ACCS-001	USB to RS-485 converter +RS-232/RS-485 Cable M-F type(2M)
ACCS-003	RS-232/RS-485 Cable M-F type(2M)

VFV Series Three-Phase Output (10kVA-2000kVA)

Model Number	Description
VFV-33010	High Power Programmable AC Power Source (10kVA/310V/45-120Hz)
VFV-33015	High Power Programmable AC Power Source (15kVA/310V/45-120Hz)
VFV-33030	High Power Programmable AC Power Source (30kVA/310V/45-120Hz)
VFV-33045	High Power Programmable AC Power Source (45kVA/310V/45-120Hz)
VFV-33060	High Power Programmable AC Power Source (60kVA/310V/45-120Hz)
VFV-33080	High Power Programmable AC Power Source (80kVA/310V/45-120Hz)
VFV-33100	High Power Programmable AC Power Source (100kVA/310V/45-120Hz)
VFV-33120	High Power Programmable AC Power Source (120kVA/310V/45-120Hz)
VFV-33160	High Power Programmable AC Power Source (160kVA/310V/45-120Hz)
VFV-33240	High Power Programmable AC Power Source (240kVA/310V/45-120Hz)
VFV-33300	High Power Programmable AC Power Source (300kVA/310V/45-120Hz)
VFV-33400	High Power Programmable AC Power Source (400kVA/310V/45-120Hz)
VFV-33500	High Power Programmable AC Power Source (500kVA/310V/45-120Hz)
VFV-33640	High Power Programmable AC Power Source (640kVA/310V/45-120Hz)
VFV-33800	High Power Programmable AC Power Source (800kVA/310V/45-120Hz)
VFV-331000	High Power Programmable AC Power Source (1000kVA/310V/45-120Hz)
VFV-331200	High Power Programmable AC Power Source (1200kVA/310V/45-120Hz)
VFV-331600	High Power Programmable AC Power Source (1600kVA/310V/45-120Hz)
VFV-001	Output Frequency 45Hz-500Hz
VFV-002	Soft Start Mode
VFV-003	Three Phase Independent Adjustment
VFV-004	Phase Angle Adjustment
VFV-005	GPIB Interface
VFV-006	Analog Control Interface
VFV-007	Overload Capability 200% 2 sec, 150% 5 sec, 125% 15 sec[*1]
VFV-008	Interface Card (Ethernet/RS-232&RS-485/USB)
VFV-009	Remote Sensing
VFV-010	Remote Control Software
ACCS-001	USB to RS-485 converter +RS-232/RS-485 Cable M-F type(2M)
ACCS-003	RS-232/RS-485 Cable M-F type(2M)