AC&DC Power Source

Hangyu Power System (Shanghai) Co., Ltd.

HY-PLASU Series

Programmable Linear AC Power Source

High Precision Waveform Pure

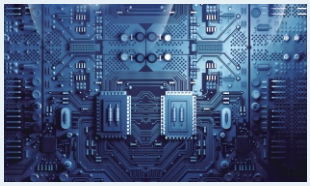
Military quality power supply expert
To provide customers with accurate, intelligent and convenient test power supply solutions

HY-PLASU Series Programmable Linear AC Power Source

Waveform Pure,High Precis ion,High Reliability

Application Field

- Household appliance industry
- Testing laboratory
- Industrial power supply
- Motor/Compressor
- IT manufactures electronics
- New energy
- Medical treatment
- Low interference occasion



Product Features

- Output frequency range 45Hz-70Hz
- Output capacity range 300VA-30kVA
- Output voltage L-N 0-150Vrms/300Vrms/1kVrms
- Three-phase voltage independent adjustable, phase difference 0-359.99° adjustable
- Linear power technology, low ripple, low noise, ultra-low distortion rate
- Support front panel programming, without upper computer software control
- The voltage rise and fall slopes are adjustable
- Power output soft start function
- 16 bits D/A high precision converter for accurate output
- 16 bits A/D high precision converter, more accurate read back
- Multiple protection functions OVP, OCP, and OTP
- 19 inch standard rack size
- 7-inch ultra large LCD display screen
- Touch screen operation & digital key input
- Multi-stage adjustment knob
- The power input is controlled by circuit breaker, which is more secure
- Output the ON/OFF button
- Fan intelligent speed control design, reduce noise
- Front/side air in, rear air out, saving heat dissipation space
- Supports Modbus protocol
- Standard interface: RS-485&RS-232
- Choose buy interface：LAN&CAN
  GPIB
  Analog quantity programming and monitoring (Isolation type)

HY-PLASU Series Product Selection Table

Product Model Naming Rules

Product Series	Input Phase Number	Output Phase Number	Output Capacity	Choose And Buy Function
HY-PLASU	1	3	003	- CF
Series name	1: indicates the input phase 3: Input three phases	1: Output single phase 3: Output three phase	Output capacity 3KVA	The short for Choose And Buy Function, see Choose And Buy Function

Selection example:

Product model:HY-PSASU 13003-CF

Input single-phase, output three-phase, output capacity 3kVA,Custom features that users choose to purchase

Choose And Buy Function

- T2	Operating temperature -20℃ to 45℃
- CF	User defined features (please specify when ordering

■ In the selection table, special specifications outside the voltage/frequency/output capacity range are accepted for customization

Product Model	Output Capacity	Input	Output	Product Model	Output Capacity	Input	Output	Phase Voltage (L-N,Vrms)	Output Frequency
HY-PLASU 1103L	300VA	Single phase	Single phase	HY-PLASU 1303L	300VA	Single phase	Three phase	0-150V 0-300V (Standard configuration) High and low output 0-600V 0-1000V (optional)	45-70Hz
HY-PLASU 1105L	500VA			HY-PLASU 1306L	600VA				
HY-PLASU 11001	1kVA			HY-PLASU 1309L	900VA				
HY-PLASU 11002	2kVA			HY-PLASU 1315L	1.5kVA				
HY-PLASU 11003	3kVA			HY-PLASU 13003	3kVA				
HY-PLASU 31005	5kVA	Three phase		HY-PLASU 3345L	4.5KVA	Three phase			
HY-PLASU 31010	10kVA			HY-PLASU 33006	6kVA				
				HY-PLASU 33010	10kVA				
				HY-PLASU 33015	15kVA				
				HY-PLASU 33030	30kVA				

*When the equipment runs continuously for more than 30 minutes at the specified operating temperature, all technical indicators can be guaranteed.

Single Phase Output

	Single In Single Out					Three In Single Out	
Product model	PLASU 1103L	PLASU 1105L	PLASU 11001	PLASU 11002	PLASU 11003	PLASU 31005	PLASU 31010
Power	300VA	500VA	1kVA	2kVA	3kVA	5kVA	10kVA
Model size	4U	4U	4U	10U	18U	24U	Non-standard cabinet
	*1) 4U, standard 19-inch rack mount, or desktop (fixed foot mat);2) 10U, standard 19-inch rack type, or floor type (with movable universal casters and brakes); 3) , 18U and above non-standard cabinets, floor type cabinets, with movable universal casters and brakes.						
Circuit mode	IGBT/PWM pulse width modulation mode						
Communication mode	Standard: RS-485 & RS-232 Options: LAN, CAN, GPIB, Analog quantity programming and monitoring (Isolation type)						

Input

Connection mode	Single-phase two-wire + Ground wire(LN+PE)	Three-phase three-wire + ground wire & three-phase four-wire + ground wire (ABC+PE/ABCN+PE)
Input phase	Single phase 1Φ	Three-phase 3Φ
Input waveform	Sinusoidal wave	Sinusoidal wave
Input voltage	220Vrms±10%	380Vrms±10%
Input frequency	47Hz-63Hz	47Hz-63Hz

Output

Output phase		Single phase 1Φ						
Rated set voltage		L-N 0-300Vrms Continuously adjustable (high grade), L-N 0-150Vrms continuously adjustable (low grade) Max1000Vrms continuously adjustable (optional model, output current will be reduced proportionally)						
Rated electric current	Top grade	1A	1.67A	3.34A	6.67A	10A	16.67A	33.34A
	Low grade	2A	3.34A	6.67A	13.34A	20A	33.4A	66.67A
	* Note	High grade maximum current calculated based on 300V voltage; The maximum low current is calculated based on the 150V voltage.						
Max electric current	Top grade	1.25A	2.1A	4.2A	8.4A	12.5A	20.84A	41.7A
	Low grade	2.5A	4.2A	8.34A	16.7A	25A	41.8A	83.4A
	* Note	High grade maximum current calculated based on 300V voltage; The maximum low current is calculated based on the 150V voltage.						
Frequency		45Hz-70Hz continuously adjustable						

Property

Input adjustment rate	≤0.5%F.S. (Resistance test)
Load adjustment rate	≤0.5%F.S. (Resistance test)
Waveform distortion (THD)	Sinusoidal wave, THD≤0.5% (resistance test)* Test when the output voltage is more than 50% of the rated voltage
Frequency stability	≤0.02%F.S.
Voltage stability	≤0.5%F.S.
Voltage crest coefficient	1.414±0.05
Noise	≤65dB(A), use 1m to weigh the measurement

HY-PLASU Series Technical Parameter

Programming And Readback Accuracy & Resolution

Settings	Voltage output programming accuracy	±0.3%F.S.
	Frequency output programming accuracy	±0.01%F.S.
	Voltage setting resolution	0.01V
	Frequency setting resolution	0.01Hz
Read back	Voltage output read back accuracy	±0.3%F.S.
	Current output read back accuracy	±0.3%F.S.
	Frequency output read back accuracy	±0.01%F.S.
	Voltage read back resolution	0.01V
	Current read back resolution	0.01A
	Frequency read back resolution	0.01Hz

Protection Function

Protection function	Indoor use; Installation overvoltage class: II; Pollution level: P2; II equipment
Overload capacity	125% current 15s, 150% current 5s, 200% current 2s, 300% current Stop output immediately
Memory function	Parameters of the last run
Preset function	Adjust the output voltage and frequency online

Environmental Condition

Environment	Indoor use; Installation overvoltage class: II; Pollution level: P2; Class II equipment
Operating ambient temperature	0°C to 45°C; Choose from -20°C to 45°C
Storage ambient temperature	-20°C to 65°C
Working ambient humidity	20%-90%RH, no condensation, continuous operation
Storage environment humidity	10%-95%RH, no condensation
Altitude	Above 2000 meters above sea level, the power is reduced by 2% per 100 meters, or the maximum working ambient temperature is reduced by 1°C per 100 meters;When not in operation, it can reach an altitude of 12,000 meters
Cooling condition	Forced air cooling, intelligent speed regulating fan, front/side air inlet, rear air outlet
Transport condition	Road transport

Control Panel

Display	7 inches, LCD LCD display, touch screen
Display item	Voltage (set value & measured value), current measurement value, frequency set value , working time, cumulative working time, current time and date
Control function	Output ON/OFF/Lock keyboard and touch lock /Reset Restart/reset/setting/status indicator
Mode of operation	Key input/LCD input/Multi-stage adjustment knob(outer ring coarse adjustment/inner ring fine adjustment)
Control mode	Local control/remote control
Programming function	Step/ladder/gradient

Three Phase Output

	Single In Three Out					Three In Three Out				
Product model	PLASU 1303L	PLASU 1306L	PLASU 1309L	PLASU 1315L	PLASU 13003	PLASU 3345L	PLASU 33006	PLASU 33010	PLASU 33015	PLASU 33030
Power	300VA	600VA	900VA	1.5kVA	3kVA	4.5kVA	6kVA	10kVA	15kVA	30kVA
Model size	4U	4U	10U	10U	18U	Non-standard cabinet	Non-standard cabinet	Non-standard cabinet	Non-standard cabinet	Non-standard cabinet
	*1) 4U, standard 19-inch rack mount, or desktop (fixed foot mat);2) 10U, standard 19-inch rack type, or floor type (with movable universal casters and brakes); 3) , 18U and above non-standard cabinets, floor type cabinets, with movable universal casters and brakes.									
Circuit mode	IGBT/PWM pulse width modulation mode									
Communication mode	Standard: RS-485 & RS-232 Options: LAN, CAN, GPIB, Analog quantity programming and monitoring (Isolation type)									

Input

Connection mode	Single-phase two-wire + Ground (LN+PE)	Three-phase three-phase + Ground wire & Three-phase four-wire + Ground wire (ABC+PE/ABCN+PE)
Input phase	Single phase 1Φ	Three-phase 3Φ
Input waveform	Sinusoidal wave	Sinusoidal wave
Input voltage	220Vrms±10%	380Vrms±10%
Input frequency	47Hz-63Hz	47Hz-63Hz

Output

Output phase	Three-phase 3Φ										
Rated set voltage	L-N 0-300Vrms Continuously adjustable (high grade), L-N 0-150Vrms continuously adjustable (low grade) Max1000Vrms continuously adjustable (optional model, output current will be reduced proportionally)										
Rated electric current	Top grade	0.34A	0.67A	1A	1.67A	3.34A	5A	6.67A	11.1A	16.67A	33.34A
	Low grade	0.67A	1.34A	2A	3.34A	6.67A	10A	13.34A	22.2A	33.34A	66.67A
	* Note	High grade maximum current calculated based on 300V voltage; The maximum low current is calculated based on the 150V voltage.									
Max electric current	Top grade	0.42A	0.84A	1.25A	2.1A	4.2A	6.25A	8.34A	13.88A	20.84A	41.68A
	Low grade	0.84A	1.68A	2.5A	4.2A	8.4A	12.5A	16.68A	27.76A	41.68A	83.34A
	* Note	High grade maximum current calculated based on 300V voltage; The maximum low current is calculated based on the 150V voltage.									
Frequency	45Hz-70Hz continuously adjustable										

Property

Input adjustment rate	≤0.5%F.S. (Resistance test)
Load adjustment rate	≤0.5%F.S. (Resistance test)
Waveform distortion (THD)	Sinusoidal wave, THD≤0.5% (resistance test)* Test when the output voltage is more than 50% of the rated voltage
Frequency stability	≤0.02%F.S.
Voltage stability	≤0.5%F.S.
Voltage crest coefficient	1.414±0.05
Voltage unbalance	Three-phase output ≤0.5Vrms (no load or balanced load)
Phase difference	Load three-phase balance or no-load ±2°
Three-phase voltage /phase difference	Three-phase voltage independent adjustable, phase difference 0-359.99° adjustable
Noise	≤65dB(A), use 1m to weigh the measurement

HY-PLASU Series Technical Parameter

Programming And Readback Accuracy & Resolution

Settings	Voltage output programming accuracy	±0.3%F.S.
	Frequency output programming accuracy	±0.01%F.S.
	Voltage setting resolution	0.01V
	Frequency setting resolution	0.01Hz
Read back	Voltage output read back accuracy	±0.3%F.S.
	Current output read back accuracy	±0.3%F.S.
	Frequency output read back accuracy	±0.01%F.S.
	Voltage read back resolution	0.01V
	Current read back resolution	0.01A
	Frequency read back resolution	0.01Hz

Protection Function

Protection function	Overvoltage, overcurrent, internal overheating, short circuit
Overload capacity	125% current 15s, 150% current 5s, 200% current 2s, 300% current Stop output immediately
Memory function	Parameters of the last run
Preset function	Adjust the output voltage and frequency online

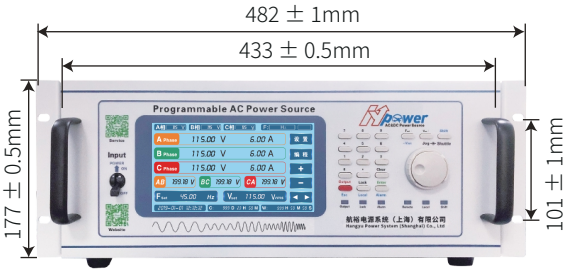
Environmental Condition

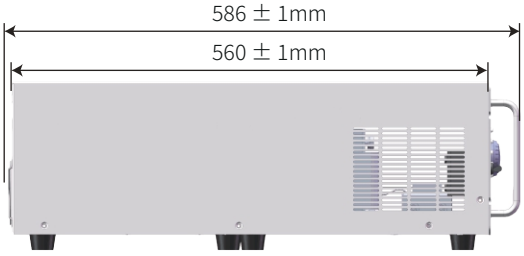
Environment	Indoor use; Installation overvoltage class: II; Pollution level: P2; Class II equipment
Operating ambient temperature	0°C to 45°C; Choose from -20°C to 45°C
Storage ambient temperature	-20°C to 65°C
Working ambient humidity	20%-90%RH, no condensation, continuous operation
Storage environment humidity	10%-95%RH, no condensation
Altitude	Above 2000 meters above sea level, the power is reduced by 2% per 100 meters, or the maximum working ambient temperature is reduced by 1°C per 100 meters;When not in operation, it can reach an altitude of 12,000 meters
Cooling condition	Forced air cooling, intelligent speed regulating fan, front/side air inlet, rear air outlet
Transport condition	Road transport

Control Panel

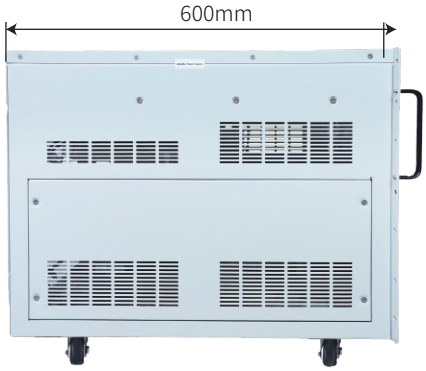
Display	7 inches, LCD LCD display, touch screen
Display item	Phase voltage/line voltage (set value & measured value), current measured value , frequency set value, working time, cumulative working time, current time and date
Control function	Output ON/OFF/Lock keyboard and touch lock /Reset Restart/reset/setting/status indicator
Mode of operation	Key input/LCD input/Multi-stage adjustment knob(outer ring coarse adjustment/inner ring fine adjustment)
Control mode	Local control/remote control
Programming function	Step/ladder/gradient

4U 433(W)*560(D)*177(H)mm





10U 440(W)*600(D)*445(H)mm



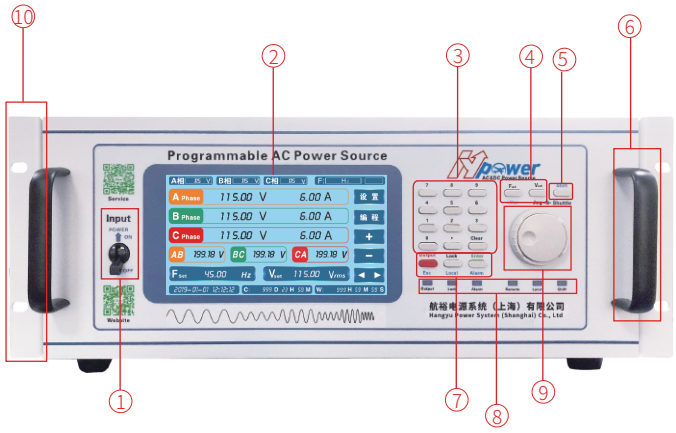
Appearance & Size

18U 600(W)*800(D)*920(H)mm

24U 600(W)*800(D)*1190(H)mm
30U 600(W)*800(D)*1453(H)mm
36U 600(W)*800(D)*1718(H)mm

Size
08

Control Panel

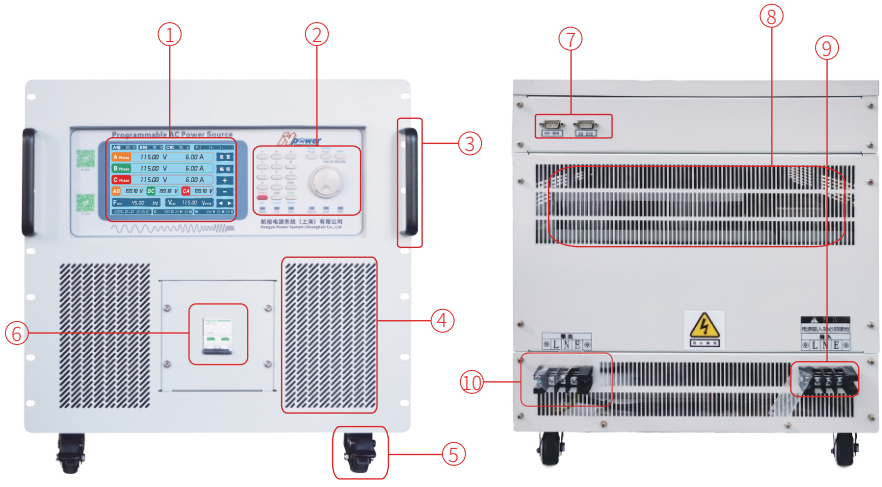


① Power input circuit breaker
② LCD display (7 inches, touch screen)
③ Numeric input keyboard
④ Frequency/voltage setting key
⑤ Shift function reuse key
⑥ Chassis handle
⑦ Lock、Enter、Esc、Local、Reset、Output ON/OFF
⑧ Status indicator light
⑨ Multi-stage adjustment knob (inner ring fine adjustment/outer ring coarse adjustment)
⑩ 19-inch standard rack mounting holes

Rear Panel

① AC output terminal
② RS-485 & RS-232 communication interface
③ AC input terminal
④ Heat dissipation air outlet

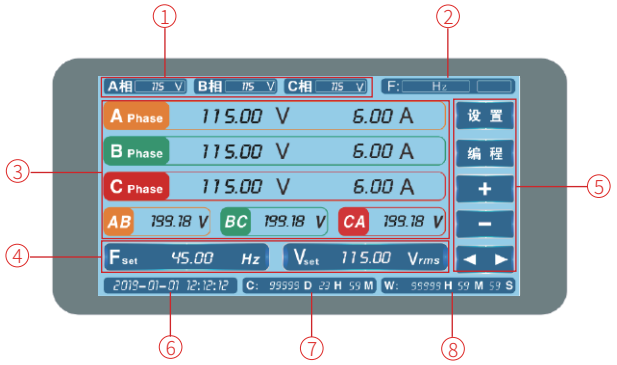
Front Panel & Rear Panel



① LCD display (7 inches, touch screen)
② Control area
③ 19-inch standard rack handle
④ Heat dissipation air inlet
⑤ Caster wheel
⑥ Power input circuit breaker
⑦ Communication interface
⑧ Heat dissipation air outlet
⑨ AC input terminals
⑩ AC output terminal

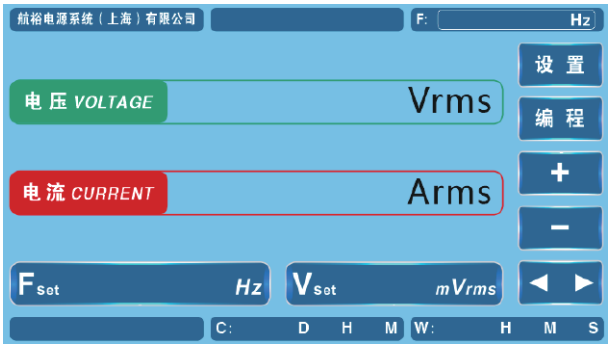
Display And Control Panel

Display Interface

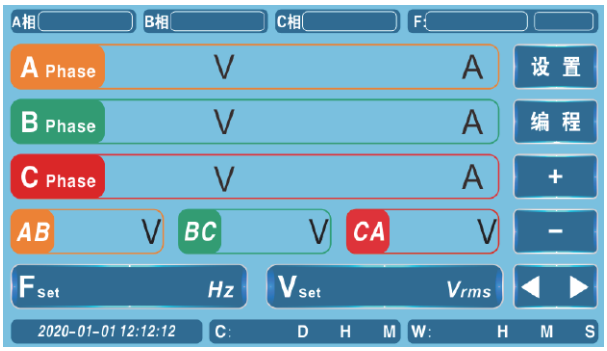


① Three-phase voltage set value
② Frequency display area
③ Phase voltage, line voltage, current display area
④ Frequency/voltage setting value
⑤ Function setting area
⑥ Current time
⑦ Cumulative running time
⑧ This run time

Display Interface

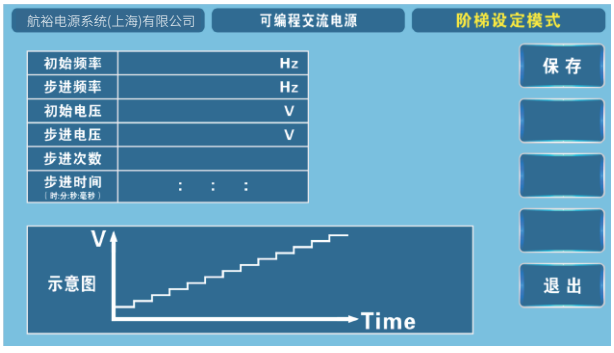


Main interface of single-phase power supply



Main interface of three-phase power supply

Step setting page can set the required frequency, voltage, Run time, initial step, end step, and number of cycles

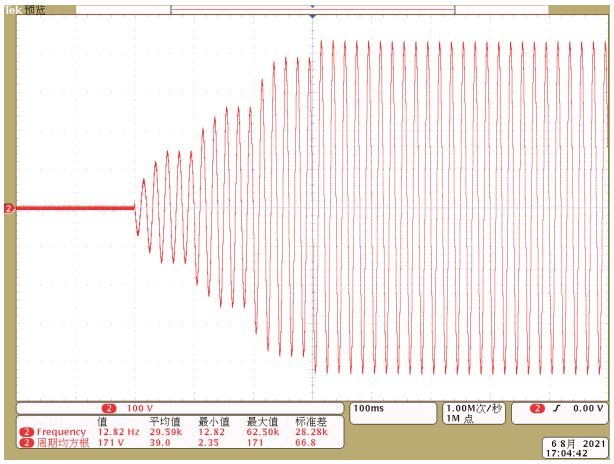


Ladder setting page can set the required initial frequency,Step frequency, initial voltage, step voltage, step number and step time

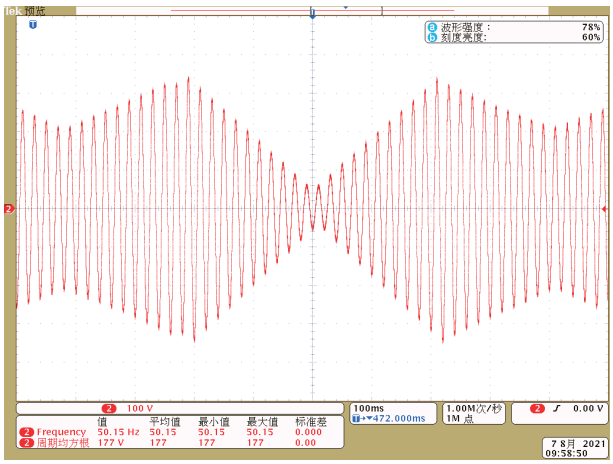
Gradient Setting page can set the required voltage and frequency, Run time, initial step, end step

Size
10

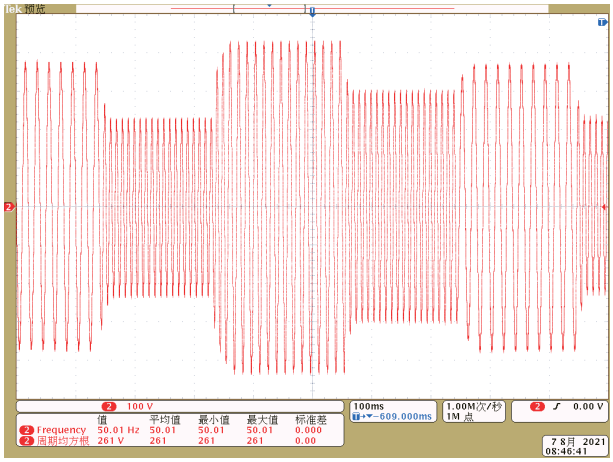
Output Voltage Waveform Of Single Phase Power Supply



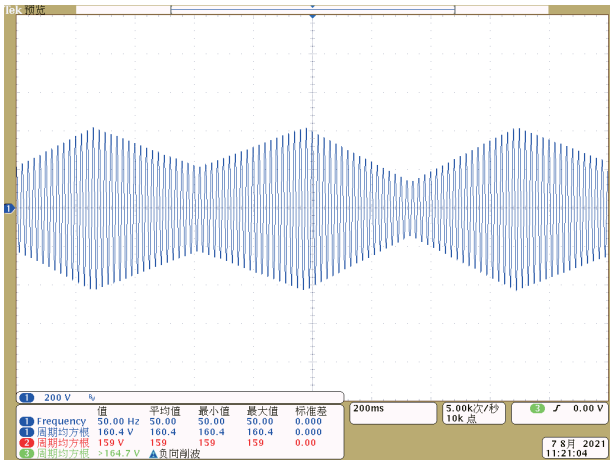
Step



Step

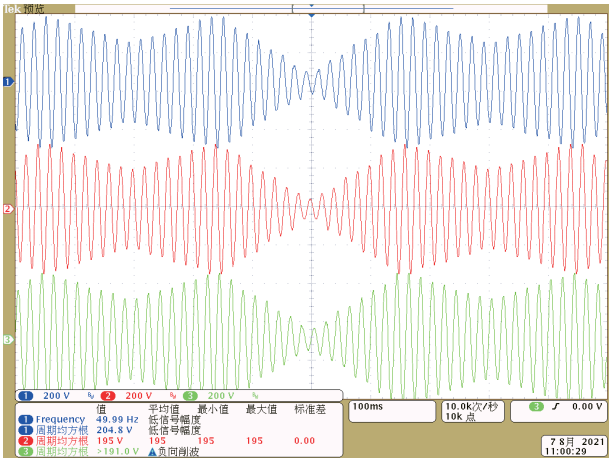


Ladder

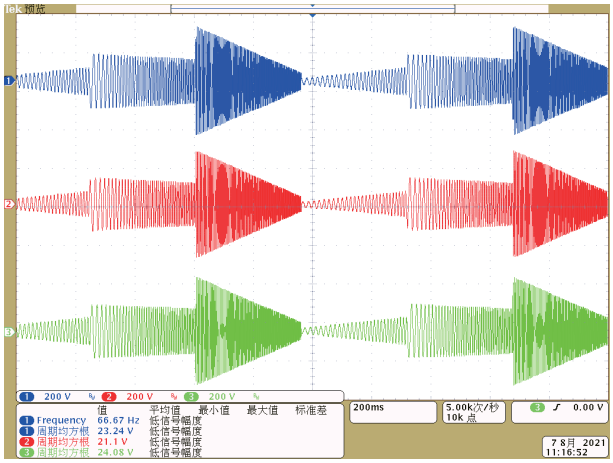


Gradation

Output Voltage Waveform Of Three Phase Power Supply



Three phase steps



Three-phase gradient

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Contact us

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Authorized distributor：