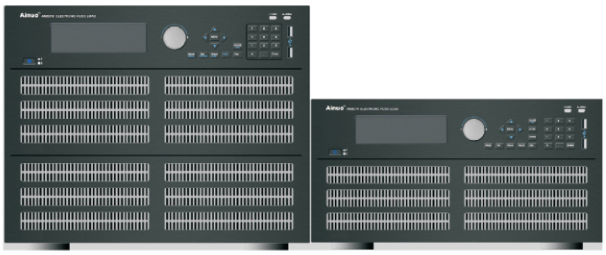
AC/DC Electronic Load
AN29(F) Series



Product Introduction

AN29(F) series AC/DC electronic load has flexible parallel and online functions. When multiple units are connected in parallel, they can expand the current and power, meeting testing requirements of high-power single-phase power supplies. When three-phase online, a three-phase load is formed to meet the three-phase power testing requirements. Multiple units can also be connected in parallel to form a high-power three-phase electronic load.

Features

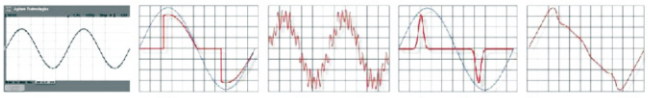
- CE
- Power Capacity: 1400W~ 8400W
- Working voltage is low to 2V, and up to 350Vrms
- Current range: 10Arms~60Arms, peak current: 45A~ 270A
- Frequency range: 44~ 1000Hz, DC
- Peak factor: 1.4 ~ 5.0000
- Adjustable power factor, setting range 0-1.0
- 3 units in parallel to realize 3 phase load
- Work mode: Constant current CC, constant resistance CR, constant power CP
- Current shift: current shift can be adjusted under testing
- DC: Static loading, dynamic loading, 40 programming steps
- AC: Waveform simulation, sine, 3-15 harmonic, phase gate, crest factor
- Upper/lower limits adjustment, over limit alarming(GO/NG)
- Remote voltage detect sense port, used for precise measurement, eliminate wires voltage drop
- Protection function: Over voltage, over current, over power, over heat, DC reversed polarity
- Measurement parameter: U, I, P, F and PF

Order information and extended functions

- AN29201(F): AC/DC Electronic Load 260V/10A/1400W
- AN29202(F): AC/DC Electronic Load 260V/20A/2800W
- AN29203(F): AC/DC Electronic Load 260V/30A/4200W
- AN29204(F): AC/DC Electronic Load 260V/40A/5600W
- AN29205(F): AC/DC Electronic Load 260V/50A/7000W
- AN29206(F): AC/DC Electronic Load 260V/60A/8400W
- RS485, GPIB optional

Production Function

Waveform simulation

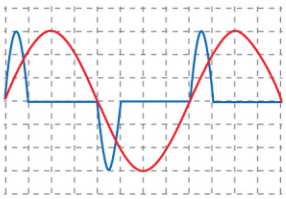


Sine wave mode | Phase gate mode | Harmonic mode | Crest factor mode | Programmable mode

Test Function

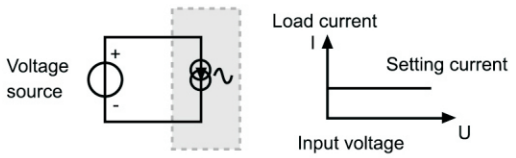
Power factor test

Simulate inductive and capacitive load, PF is from 0 to 1. If load current phase shift and PF are both need to set, PF can be set on front panel easily, do not need wire connection.



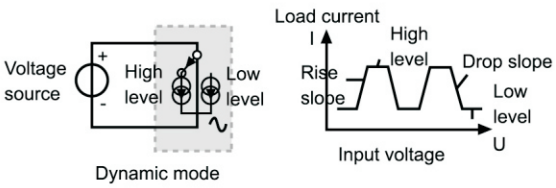
Regulation test

Under CC mode, load current is just changing setting value, not with DUT output voltage. Please refer to the characteristic curve.



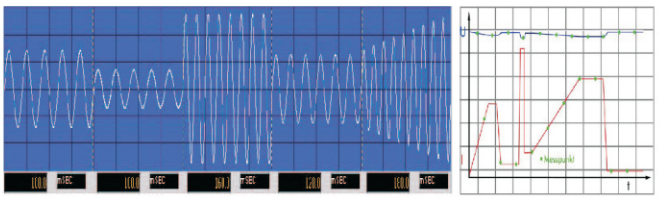
Dynamic performance test

Dynamic mode is switching between 2 levels in cycle, please refer to the characteristic curve. Dynamic current rising/dropping slope can be adjusted separately.



Programmable steps

4 groups, 10 steps/group. 4 groups can be parallel into 40 steps, and also can be divided into separated steps.



Programmable steps loading waveform | Programmable DC loading waveform

Connect in parallel and series

3 units in parallel to realize 3 phase load.

Specifications

Model		AN29201(F)	AN29202(F)	AN29203(F)
Power capacity		1400W	2800W	4200W
Current		0 ~ 10Arms (45Apeak)	0 ~ 20Arms (90 Apeak)	0 ~ 30Arms (135 Apeak)
Voltage		2~ 260Vrms (360 Vpeak)，can customize 350Vrms (500Vpeak)		
Frequency		44 ~ 1000Hz, DC		
AC mode CC mode	Setting range	0 ~ 10Arms, programmable	0 ~ 20Arms, programmable	0 ~ 30Arms, programmable
	Accuracy	50/60/400Hz:0.1% + 0.2%×range		
	Resolution	2mA	5mA	5mA
CR mode	Setting range	1~1200Ω, programmable	1Ω~600Ω, programmable	1Ω~400Ω, programmable
	Accuracy	50/60Hz：±（1.5% +0.5%×range） 400Hz：±（1.5% +1.0%×range）		
	Resolution	0.2Ω	0.1Ω	0.067Ω
CP mode	Setting range	1400W, programmable	2800W, programmable	4200W, programmable
	Accuracy	DC/50/60/400Hz: 0.2% + 0.3%×range		
	Resolution	0.25W	0.5W	0.75W
Crest setting range	Setting range	1.4 ~ 5.0, programmable		
Gate trigger mode	Turn on angle	0-359°		
	Turn off angle	1-360°		
Harmonic mode	Order	1-15		
	Setting range	0-1		
	Resolution	0.1%		
Power factor mode	Setting range	0 ~ 1 lead or lag, programmable	0 ~ 1 lead or lag, programmable	0 ~ 1 lead or lag, programmable
	Accuracy	1%×range	1%×range	1%×range
	Resolution	0.01		
Rectifying load mode	Frequency	45Hz ~ 70Hz		
	R, L, I mode	Rs, Ls, C, RL		
	Inductor parasitic resistance setting range	0 ~ 9.999Ω	0 ~ 9.999Ω	0 ~ 9.999Ω
	L setting range	0 ~ 9999μH	0 ~ 9999μH	0 ~ 9999μH
	C setting range	100 ~ 9999μF	100 ~ 9999μF	100 ~ 9999μF
	R setting range	2.77 ~ 9999.99Ω	1.39 ~ 9999.99Ω	1.11 ~ 9999.99Ω
DC mode	Voltage range	2V ~ 260V	2V ~ 260V	2V ~ 260V
	Current range	0A ~ 10A	0A ~ 20A	0A ~ 30A
	Min working voltage	2V	2V	2V
	Rising time	1ms		
	Work mode	CC, CR, CP, Dynamic		
	Short circuit simulation	CR		
Meas.	Voltage Meas. range	260V	260V	260V
	Voltage accuracy	0.1% + 0.1%×range	0.1% + 0.1%×range	0.1% + 0.1%×range
	Voltage resolution	100mV	100mV	100mV
	Current Meas. range	10.00A	20.00A	30.00A
	Current accuracy (50/60/400Hz)	0.1% + 0.2%×range	0.1% + 0.2%×range	0.1% + 0.2%×range
	Current resolution	2.0mA	4.0mA	6.0mA
	Other parameters	W, VA, VAR, PF, Freq, distortion		
Other	Protection	OCP：10.5Arms； OVP：273Vrms； OPP：1470W；Over heat	OCP：21Arms； OVP：273Vrms； OPP：2940W；Over heat	OCP：31.5Arms； OVP：367Vrms； OPP：4410W；Over heat
	Interface	Standard RS232, optional USB, remote		
	Input	115/230 Vac ±15%		
	Dimension (W×H×D)	440×222×465		
	Bracket height (mm)	15		

Specifications

Model		AN29204(F)	AN29205(F)	AN29206(F)
Power capacity		5600W	7000W	8400W
Current		0 ~ 40Arms (180Apeak)	0 ~ 50Arms (225 Apeak)	0 ~ 60Arms (270 Apeak)
Voltage		2~ 260Vrms (360 Vpeak)，can customize 350Vrms (500Vpeak)		
Frequency		44 ~ 1000Hz, DC		
AC mode CC mode	Setting range	0 ~ 40Arms, programmable	0 ~ 50Arms, programmable	0 ~ 60Arms, programmable
	Accuracy	DC/50/60/400Hz:0.1% + 0.2%×range		
	Resolution	7mA	9mA	10mA
CR mode	Setting range	1Ω~300Ω, programmable	1Ω~240Ω, programmable	1Ω~200Ω, programmable
	Accuracy	DC/50/60Hz：±（1.5% +0.5%×range） 400Hz：±（1.5% +1.0%×range）		
	Resolution	0.05Ω	0.04Ω	0.04Ω
CP mode	Setting range	5600W, programmable	7000W, programmable	8400W, programmable
	Accuracy	DC/50/60/400Hz: 0.2% + 0.3%×range		
	Resolution	1W	1.25W	1.5W
Crest setting range	Setting range	1.4 ~ 5.0, programmable		
Gate trigger mode	Turn on angle	0-359°		
	Turn off angle	1-360°		
Harmonic mode	Order	1-15		
	Setting range	0-1		
	Resolution	0.1%		
Power factor mode	Setting range	0 ~ 1 lead or lag, programmable	0 ~ 1 lead or lag, programmable	0 ~ 1 lead or lag, programmable
	Accuracy	1%×range	1%×range	1%×range
	Resolution	0.01		
Rectifying load mode	Frequency	45Hz ~ 70Hz		
	R, L, I mode	Rs, Ls, C, RL		
	Inductor parasitic resistance setting range	0 ~ 9.999Ω	0 ~ 9.999Ω	0 ~ 9.999Ω
	L setting range	0 ~ 9999μH	0 ~ 9999μH	0 ~ 9999μH
	C setting range	100 ~ 9999μF	100 ~ 9999μF	100 ~ 9999μF
	R setting range	1 ~ 9999.99Ω	1 ~ 9999.99Ω	1 ~ 9999.99Ω
DC mode	Voltage range	2V ~ 260V	2V ~ 260V	2V ~ 260V
	Current range	0A ~ 40A	0A ~ 50A	0A ~ 60A
	Min working voltage	2V	2V	2V
	Rising time	1ms		
	Work mode	CC, CR, CP, Dynamic		
	Short circuit simulation	CR		
Meas.	Voltage Meas. range	260V	260V	260V
	Voltage accuracy	0.1% + 0.1%×range	0.1% + 0.1%×range	0.1% + 0.1%×range
	Voltage resolution	100mV	100mV	100mV
	Current Meas. range	40.00A	50.00A	60.00A
	Current accuracy (50/60/400Hz)	0.1% + 0.2%×range	0.1% + 0.2%×range	0.1% + 0.2%×range
	Current resolution	8.0mA	10.0mA	12.0mA
	Other parameters	W, VA, VAR, RF, Freq, distortion		
Other	Protection	OCP：42Arms； OVP：273Vrms； OPP：2880W；Over heat	OCP：52.5Arms； OVP：273Vrms； OPP：7350W；Over heat	OCP：63Arms； OVP：273Vrms； OPP：8820W；Over heat
	Interface	Standard RS232, optional USB, remote		
	Input	115/230 Vac ±15%		
	Dimension (W×H×D)	440×354×465		