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

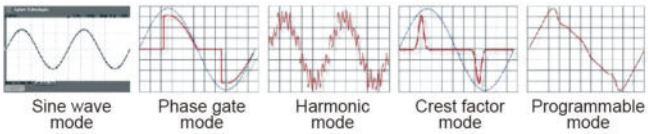
- CE
- Power Capacity: 1400W~ 8400W
- Working voltage is low to 2V, and up to 350Vrms
- Current range: 10Arms~60Arms, peak current: 45A~ 270A
- Frequency range: 44~ 1000Hz, DC
- Peak factor: 1.4 ~ 5.0000
- Adjustable power factor, setting range 0-1.0
- 3 units in parallel to realize 3 phase load
- Work 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

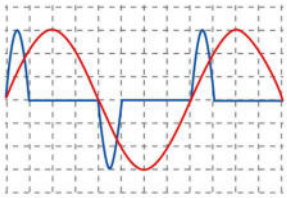
Waveform simulation



Test Function

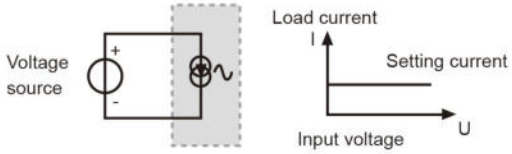
Power factor test

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.



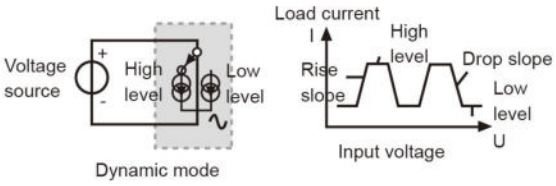
Regulation test

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



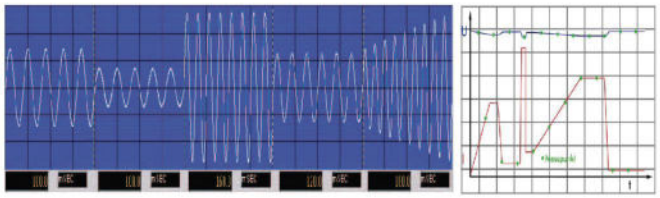
Dynamic performance test

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)	AN29204(F)	AN29205(F)	AN29206(F)
Power		1400W	2800W	4200W	5600W	7000W	8400W
Current		0-10Arms(45Apeak)	0-20Arms(90Apeak)	0-30Arms(135Apeak)	0-40Arms(180Apeak)	0-50Arms(225Apeak)	0-60Arms(270Apeak)
Voltage		2V- 260Vrms (360 Vpeak), customizable 2V-350Vrms (500Vpeak)					
Frequescy		44 - 1000Hz, DC					
AC part: Constant Current Mode	Setting Range	0.2~10Arms, programmable	0.2~20Arms, programmable	0.2~30Arms, programmable	0.4~40Arms, programmable	0.4~50Arms, programmable	0.4~60Arms, programmable
	Accuracy	DC/50/60/400Hz: 0.1% + 0.2% range					
	Resolution	2mA	5mA	5mA	7mA	9mA	10mA
Constant Resistance Mode	Setting Range	1Ω~1200Ω, programmable	1Ω~600Ω, programmable	1Ω~400Ω, programmable	1Ω~300Ω, programmable	1Ω~240Ω, programmable	1Ω~200Ω, programmable
	Accuracy	DC/50/60/400Hz: Min. resistance ~ 1/2 Max. resistance: ± (1.5% setting value + 0.5% range); greater than 1/2 Max. resistance - Max. resistance: + (3.5% setting value+0.5% range)					
	Resolution	0.2Ω	0.1Ω	0.067Ω	0.05Ω	0.04Ω	0.04Ω
Constant Power Mode	Setting Range	10W~1400W, programmable	10W~2800W, programmable	10W~4200WΩ, programmable	10W~5600W, programmable	10W~7000W, programmable	10W~8400W, programmable
	Accuracy	DC/50/60/400Hz: 0.2% + 0.3% range					
	Resolution	0.25W	0.5W	0.75W	1W	1.25W	1.5W
Peak Factor Mode	Peak Factor Setting Range	1.4~5.0, programmable					
	Phase Shift Angle Setting Range	-90°~+90°, programmable					
Gate Trigge Mode	Turn On Angle	0-359°					
	Turn off Angle	0-360°					
Harmonic Mode	Frequency	1-15					
	Setting Range	0-1					
	Resolution	0.1%					
Power Factor	Measurement Range	0~1 lead or lag	0~1 lead or lag	0~1 lead or lag	0~1 lead or lag	0~1 lead or lag	0~1 lead or lag
	Measurement Accuracy	1% range	1% range	1% range	1% range	1% range	1% range
	Resolution	0.01					
DC part	Voltage Working Range	2V- 260V , customizable 2V-350V					
	Current Setting Range	0.2A~10A	0.2A~20A	0.2A~30A	0.4A~40A	0.4A~50A	0.4A~60A
	Minimum Operating Voltage	2V					
	Rise Time	1ms					
	Operating Mode	Constant current, constant resistance, constant power, dynamic					
	Short Circuit Current Simulation	Use constant resistance mode					
Measurement part	Voltage Measurement Range	2V~260V, customizable 2V~350V					
	Voltage Measurement Accuracy	DC/50/60/400Hz: 0.1% + 0.1% range					
	Voltage Resolution	100mV					
	Current Measurement Range	0~10.00A	0~20.00A	0~30.00A	0~40.00A	0~50.00A	0~60.00A
	Current Measurement Accuracy	DC/50/60/400Hz: 0.1%+0.2% range					
	Current Resolution	2.0mA	4.0mA	6.0mA	8.0mA	10.0mA	12.0mA
	Other Parameters	Active power (W), apparent power (VA), reactive power (VAR), power factor, frequency					
Others	Protection	"Overcurrent: 10.5Arms; Overvoltage: 273Vrms; Over power: 1470W; Over temperature"	"Overcurrent: 21Arms; Overvoltage: 273Vrms; Over power: 2940W; Over temperature"	"Overcurrent: 31.5Arms; Overvoltage: 367Vrms; Over power: 4410W; Over temperature"	"Overcurrent: 42Arms; Overvoltage: 273Vrms; Over power: 2880W; Over temperature"	"Overcurrent: 52.5Arms; Overvoltage: 273Vrms; Over power: 7350W; Over temperature"	"Overcurrent: 63Arms; Overvoltage: 273Vrms; Over power: 8820W; Over temperature"
	Control Interface	Standard: RS-232, USB; Optional: Ethernet port					
	Operating Voltage	115/230 Vac ± 10%					
	Dimension WxHxD (mm)	440×222×465			440×354×465		
	Foot Height (mm)	15					

Any changes to the above parameter specifications will not be notified separately.