

Power Supply Test Equipment

AC/DC Electronic Load
AN29 series



Consumption unit of AC load
Quick tracking waveform generator of AC load
Trapezoidal waveform generator based on integrating circuit



Main features

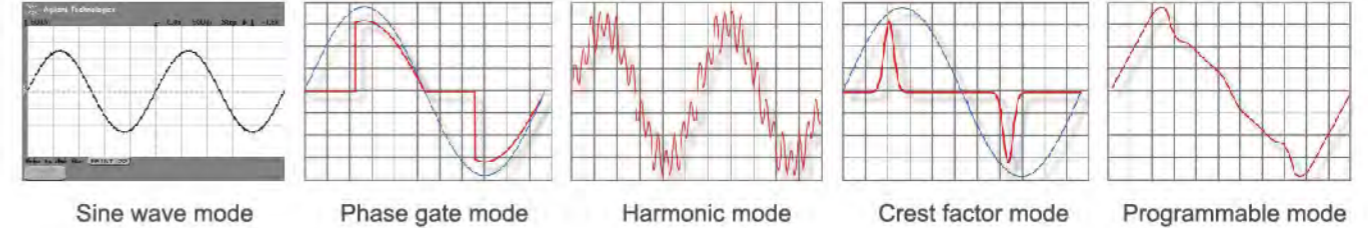
- ★ CE
- ★ Power Capacity:1400W~8400W
- ★ Working voltage is low to 2V, and up to 350Vrms
- ★ Current range: 10Arms~60Arms, peak current: 45A~270A
- ★ Frequency range: 44~1000Hz, DC
- ★ Peak factor:1.4~5.0000
- ★ Adjustable power factor, setting range 0-1.0
- ★ 3 units in parallel to realize 3 phase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

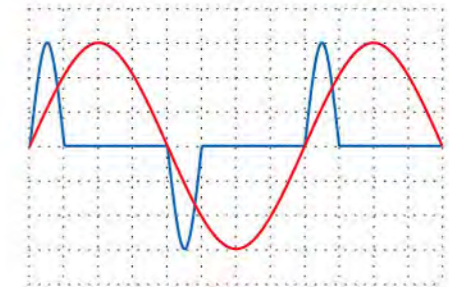
★ Waveform simulation



Test function

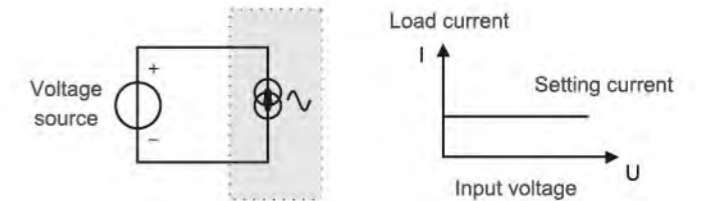
★ Power factor test

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.



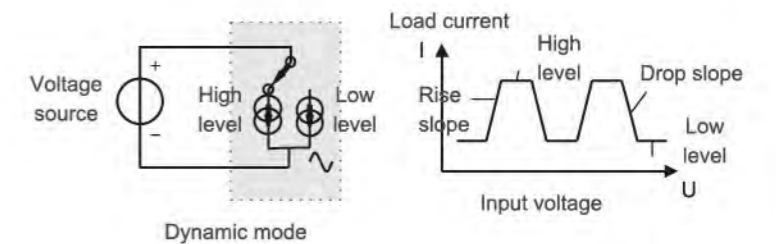
★ Regulation test

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



★ Dynamic performance test

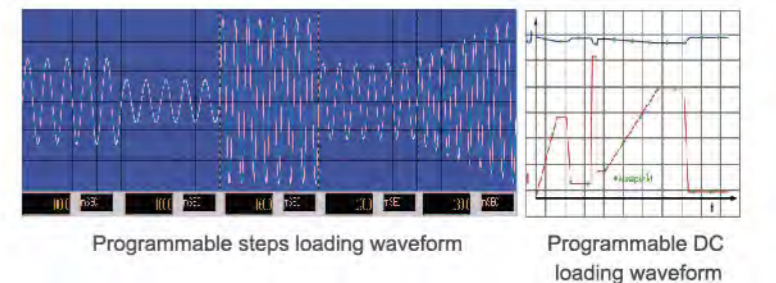
Dynamic mode is switching between 2 levels in cycle, please refer to the characteristic curve. Dynamic current rising/dropping slope can be adjusted separately



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

★ Connect in parallel and series

3 units in parallel to realize 3 phase load



Spec.-1

Model	AN29201(F)	AN29202(F)	AN29203(F)		
Power capacity	1400W	2800W	4200W		
Current	0~10Arms (45Apeak)	0~20Arms (90Apeak)	0~30Arms (135Apeak)		
Voltage	2~260Vrms(360Vpeak) Up to 350V(500Vpeak), need to modify(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	CR mode	Setting range	1~1200Ω programmable	1~600Ω programmable	1~400Ω programmable
		Accuracy	50/60Hz:1.5%+0.5%×range 400Hz:1.5%+1.0%×range		
		Resolution	0.2Ω	0.1Ω	0.067Ω
CP mode	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	1.4~5.0, programmable				
Gate trigger mode	Gate trigger mode	Turn on angle	0~359°		
		Turn off angle	1~360°		
Harmonic mode	Harmonic mode	Order	1~15		
		Accuracy	0~1		
		Resolution	0.1%		
Power factor mode	Power factor mode	Setting range	0~1 lead or lag, programmable		
		Accuracy	1% ×range		
		Resolution	0.01		
Rectifying load mode	Rectifying load mode	Frequency	45~70Hz		
		R, L, I mode	Rs, Ls, C, RI		
		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	DC mode	Voltage range	2~260V	2~260V	2~260V
		Current range	0~10A	0~20A	0~30A
		Min working voltage	2V	2V	2V
		Rising time	1ms		
		Work mode	CC, CR, CP, Dynamic		
Meas.	Meas.	Short circuit simulation	CR		
		Voltage Meas. range	260.0V	260.0V	260.0V
		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	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, AW, VAR, PF, Freq, distortion		
		Protection	OCP:10.5Arms OVP:273Vrms OPP:1470W Over heat	OCP:21Arms OVP:273Vrms OPP:2940W Over heat	OCP:31.5Arms OVP:273Vrms OPP:4410W Over heat
		Interface	Standard RS232, optional USB, remote		
Dimension(W×H×D)	440×222×465mm				
Bracket height	15mm				
Input	115/230 Vac±15%				

Spec.-2

Model	AN29204(F)	AN29205(F)	AN29206(F)		
Power capacity	5600W	7000W	8400W		
Current	0~40Arms (180Apeak)	0~50Arms (225Apeak)	0~60Arms (270Apeak)		
Voltage	2~260Vrms(360Vpeak) Up to 350V(500Vpeak), need to modify(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	CR mode	Setting range	1~300Ω programmable	1~240Ω programmable	1~200Ω programmable
		Accuracy	50/60Hz:±1.5%+0.5%×range 400Hz:±1.5%+1.0%×range		
		Resolution	0.05Ω	0.04Ω	0.04Ω
CP mode	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	1.4~5.0, programmable				
Gate trigger mode	Gate trigger mode	Turn on angle	0~359°		
		Turn off angle	0~360°		
Harmonic mode	Harmonic mode	Order	1~15		
		Accuracy	0~1		
		Resolution	0.1%		
Power factor mode	Power factor mode	Setting range	0~1 lead or lag, programmable		
		Accuracy	1% ×range		
		Resolution	0.01		
Rectifying load mode	Rectifying load mode	Frequency	45~70Hz		
		R, L, I mode	Rs, Ls, C, RI		
		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	DC mode	Voltage range	2~260V	2~260V	2~260V
		Current range	0~40A	0~50A	0~60A
		Min working voltage	2V	2V	2V
		Rising time	1ms		
		Work mode	CC, CR, CP, Dynamic		
Meas.	Meas.	Short circuit simulation	CR		
		Voltage Meas. range	260.0V	260.0V	260.0V
		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	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, AW, VAR, PF, Freq, distortion		
		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		
Dimension(W×H×D)	440×354×465mm				
Bracket height	15mm				
Input	115/230 Vac±15%				