

## KINGSINE K3030 Secondary Injection Test Sets / Relay Test Sets



1. Unique self-protection system assure the powerful protection when instrument is operating, automatic stop the output when the network is abnormal ;
2. Unique power switch and amplifier technology, so the output precision and power efficiency and factor are increased, which conforms to international tendency of energy save and environmental protection;
3. With alarm function of housing grounding testing and external voltage input, to guaranty personal security;
4. Two in one of meter and source, with function of both internal and external testing, self-calibration, oscillograph, and the duration of each oscillograph reaches 50S (optional function);
5. Offer independent Aux. DC to tested devices,  $0 \sim 300V/0.6A$  (Poleless and adjustable);
6. Function of transducer and energy meter testing (optional function);
7. Testing interface offer unique output monitoring function and Pre-curve-tracing function, helps more on the spot analysis

## Technical Data of K3030

Voltage generators		
Setting Range	4-phase AC (L-N)	4 x 0 ... 130 V
	2-phase AC (L-L)	2 x 0 ... 260 V
Power	4-phase AC (L-N)	4 x 70VA, at 0 ... 130 V
	2-phase AC (L-L)	2 x 140VA, at 0 ... 260 V
Accuracy		<0.07% reading + 0.03% range guaranteed at 0 ... 130 V <0.02% reading + 0.01% range typical at 0-130V
Resolution		1mV
Current generators		
Setting Range	3-phase AC (L-N)	3 x 0 ... 30 A
	1-phase AC (2L-N)	1 x 0 ... 60 A
	1-phase AC (3L-N)	1 x 0 ... 90 A
Power	3-phase AC (L-N)	3x 450VA , at 0 ... 30A
	1-phase AC (2L-N)	1x 520VA, at 0 ... 60A
	1-phase AC (3L-N)	1 x 1200 VA, at 0 ... 90A (Max.)
Accuracy		<0.07% reading + 0.06% range guaranteed at 0-30A <0.02% reading + 0.02% range typical at 0-30A
Resolution		1mA
Generators, general		
Frequency	Range	0 ... 1000 Hz
	Accuracy / drift	Error < 0.001Hz at 10 ... 65Hz, Error < 0.01Hz at 65Hz...450Hz Error < 0.02Hz at 450Hz...1000Hz
	Resolution	0.001Hz
Phase	Range	- 360° ... +360°
	Accuracy / drift	Error < 0.2 °
	Resolution	0.1°
Timer	Range	Infinite
	Accuracy / drift	Error<0.1ms
DC generators		
Voltage ranges		0 ... 300V/180W
Current ranges		0 ... 20A/300W

Accuracy	<0.07% reading + 0.03% range guaranteed at 0-300V <0.04% reading + 0.02% range typical at 0-300V
	<0.14% reading + 0.06% range guaranteed at 0-20A <0.05% reading + 0.02% range typical at 0-20A
Resolution	1mA; 1 mV
Aux DC Supply	
Range	0...300V/0.6A
Binary inputs	
Number	8 pairs
Compatible Voltage	10V ... 250V DC
Binary outputs	
Number	4 Pairs
Capacity	250V/3A AC/DC
Synchronization	
Synchronization mode	GPS
Harmonic	
Harmonic overlap times	2 ... 20 times
Power supply	
Nominal input voltage	220VAC±20%
Power	1000VA
Nominal frequency	47Hz...65Hz
Environmental conditions	
Operation temperature	-5°C ... 55 °C
Storage temperature	-20°C ... 75 °C
Humidity range	5% ... 90 %, non-condensing
Weight	20 KG
Dimensions	460(D)×140 (W)×360 (H) mm
PC connection	RJ45,

### **K30 Series Protection Relay Test Set:**

Model	Channels	AC Outputs
K3063i / K3063Li	10 output channels	6*30A/3*40A/4*300V
K3030i / K3030Li	7 output channels	3*30A/4*300V
K3066	13 output channels	6*20A/3*40A/7*130V
K3063	10 output channels	6*20A/3*40A/4*130V
K3040	7 output channels	3*40A/4*130V
K3030	7 output channels	3*30A/4*130V

## Major functions:

Items	IEEE(R) No.
Synchronization relay	
Fault transplay	
GPS Synchronization	
Overcurrent relays	50/76
Inverse time overcurrent relays	51
Undercurrent relays	37
Ground fault relays	50
Directional overcurrent relays	67
Directional ground fault relays	67N
Overvoltage relays	59
Undervoltage relays	27
Directional voltage relays	91
Directional power relays	32
Power factor relays	55
Differential protection (differential circuits)	87
Distance protection equipment (phase by phase)	21
Negative sequence overcurrent relays	46N
Motor overload protection	51/86
Automatic reclosing devices	79
Tripping relays	94
Voltage regulating relays	
Overimpedance relays, $Z >$	
Underimpedance relays, $Z$	
Time-delay relays	