

## 3-Phase Relay testing

# AK-68




# AK-68

- AC and DC Voltage Source
- High Power Burden
- Auxiliary AC/DC Power Supplies
- Light weight

# amperis

[www.amperis.com](http://www.amperis.com)

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## Features:

- Auto/Manual test on all its five test modules: DC Test, AC Test, Distance Test, Harmonic Test, Frequency protection.
- Phase, frequency and amplitude are independently and continuously adjustable
- All-in-One Design: with built.in Windows CE System & rotary encoder & panel keyboard & 6.4" TFT LCD (RJ45/USB for update & upload)
- High power: 3x450VA at 0...35A for Medium-Voltage level test
- High accuracy: 0.05% reading + 0.02% range typical at 0-35A & 0.07% reading + 0.03% range guaranteed at 0-130V
- Reliability: Complete self-protection & alarm indication against wrong-wiring, open/short circuit, overheat/overload, unexpected import of external input source, etc.
- Field Testing Convenience: the equipment can be put Vertically or Horizontally for field testing

## AK6 Series Protection Relay Test Set:

AK68: 3x35A / 4x130V

AK68i: 3x35A/ 4x300V



## Technical Data:

### Voltage generators

Setting Range	4-phase AC (L-N)	4x0...300V
	2-phase AC (L-L)	2x0...600V
Power	4-phase AC (L-N)	4x110VA, at 0...300V
	2-phase AC (L-L)	2x220VA, at 0...600V
Accuracy	<0.14% reading + 0.06% range guaranteed at 0...300V <0.04% reading + 0.01% range typical at 0...300V	
Resolution	1 mV	

### Current generators

Setting Range	3-phase AC (L-N)	3x0...35A
	1-phase AC (L-N)	1x0...105A
Power	3-phase AC (L-N)	1x450 VA, at 0...35A
	1-phase AC (L-N)	1x900 VA, at 0...105A
Accuracy	<0.14% reading + 0.06% range guaranteed at 0...35A <0.05% reading + 0.02% range typical at 0...35A	
Resolution	1 mA	

### Binary inputs

Number	8 Pairs
Compatible voltage	10V...250V/2A

### Binary outputs

Number	4 Pairs
Capacity	250V/3A (DC, AC)

### Harmonic

Orders	2... 9
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### Voltage and Current Synchronism

Orders	≤10µs
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## Generators, general

Frequency	Range	0...1000 Hz
	Accuracy / drift	<0.001 Hz at 10...450 Hz <0.01 Hz at 450...1000 Hz
	Resolution	0.001 Hz
Phase	Range	-360° ... +360°
	Accuracy	< 0.2°
	Resolution	0.1°
Time	Range	0...9999.999s
	Accuracy	1 ms

## DC generators

Voltage ranges	0...300V / 180 W
Current ranges	0...20A / 300 W (60A/3L-N)
Accuracy	<0.14%rd + 0.06%rg (0-35A)
	<0.05%rd + 0.02%rt (0-35A)
Resolution	1mA; 1mV

## Aux DC Supply

Range	0...300V / 0.6 A (<0.5%)
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## Power supply

Nominal input voltage	220 V±20% Vac
Power	1000 VA
Nominal frequency	50/60 Hz±10%


## Environmental conditions

Operation temperature	-5°C...55°C
Storage temperature	-20°C...75°C
Humidity range	≤90%, non-condensing

## Other

Weight	24 kg
Dimensions	360x460x140 (mm)
PC connection	RJ45

NOTE: the above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice

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### DC Relays Testing



### AC Relays Testing



### Distance / Zero sequence test



### Harmonic Testing



### Frequency protection



Advanced Software enables you to generate reports and save it in to USB memory or communication through Ethernet to your PC computer by included software.

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