# 3-Phase Relay testing

# **AK-68**



# **AK-68**

- AC and DC Voltage Source

- High Power Burden

- Auxiliary AC/DC Power Supplies

- Light weight



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## **⊠** Contact

#### 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)	4x0300V
	2-phase AC (L-L)	2x0600V
Power	4-phase AC (L-N)	4x110VA, at 0300V
	2-phase AC (L-L)	2x220VA, at 0600V
Accuracy	<0.14% reading + 0.06% range guaranteed at 0300V < 0.049 reading + 0.01% range typical at 0300V	
Resolution	1 mV	

# Generators, general

Frequency	Rango	01000 Hz
	Accuracy / drift	<0.001 Hz at 10450 Hz <0.01 Hz at 4501000 Hz
	Resolution	0.001 Hz
Phase	Range	-360° +360°
	Accuracy	< 0.2°
	Resolution	0.1°
Time	Range	09999.999s
	Accuracy	1 ms

#### **Current generators**

Setting Range	3-phase AC (L-N)	3x035A
	1-phase AC (L-N)	1x0105A
Power	3-phase AC (L-N)	1x450 VA, at 035A
	1-phase AC (L-N)	1x900 VA, at 0105A
Accuracy	<0.14% reading + 0.06% range guaranteed at 035A < 0.05% reading + 0.02% range typical at 035A	
Resolution	1 mA	

#### DC generators

Voltage ranges	0300V / 180 W
Current ranges	020A / 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		0300V / 0.6 A (<0.5%)

#### Binary inputs

Number	8 Pairs
Compatible voltage	10V250V/2A

#### Power supply

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

#### Binary outputs

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

#### **Environmental conditions**

Operation temperature	-5°C55°C
Storage temperature	-20°C75°C
Humidity range	≤90%, non-condensing

#### Harmonic

Orders	29

# Valtage and Comment Complement

Orders ≤10μs	

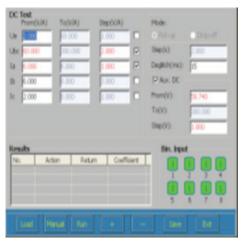
# Other

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

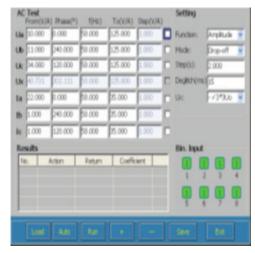
NOTE: the above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice



## **DC** Relays Testing



**AC Relays Testing** 



### Distance / Zero squence test



## Harmonic Testing



Frequency protection



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

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