

ZCAR-1600 Microcomputer Protective Relay Tester

ZCAR-1600 Protective Relay Tester Except detecting various relay protection testers (such as current, voltage, IDMT, power direction, impedance, differential, low-cycle, simultaneous, frequency, DC and time etc) and microcomputer protection, it can also simulate instantaneous, permanent and transformational faults to test from single-phase to three-phase. Moreover, it can finish all kinds of large-scale and complicated checkout work with high automatic level. This will also be convenient to test and scan various protective definite value, to carry out bug playback, to store testing data in the real time, to display vector diagram, to print report online and to test ATS, fast cutting and system shock etc. 6-phase current can conveniently proceed with 3-phase differential motion protective testing, while 12-phase output can be used in ATS testing.



Product Features

- ◆ Meet all requirements of the field test. With standard six phase current, six phase voltage output at the same time, current 30A/ phase, voltage 125V/ phase. Six phases current is up to 180A. Can test the traditional relays and protection equipments, various tests were carried out on all modern microcomputer protection, especially on transformer differential protection and the equipment and automatic switching device. The test is more convenient and perfect.
- ◆ A variety of technical indicators fully meet the power of the Ministry of electric power DL/T624-1997 "relay protection microcomputer test device technical conditions" standard.
- ◆ It has classic Windows XP operation interface, friendly man-machine interface, easy and fast to operate. High performance embedded industrial control computer and 8.4 inch resolution 800×600 imported TFT color display can provide rich visual information, including equipment current status and all kinds of help information.
- ◆ Xp Windows's system comes with the recovery function, to avoid the illegal shutdown or false operation caused by the system crash.
- ◆ It use the high-grade stainless steel panel, panel with anti explosion buttons and touch panel mouse, key life of more than thirty years.
- ◆ Master control board adopts the structure of DSP + FPGA, 16 bit DAC output, the Jiboke produced weekly 2000 points of high density sine wave, greatly improve the waveform quality and to improve the accuracy of the test instrument.
- ◆ The using of the amplifier using high fidelity linear power amplifier, both to ensure the accuracy of the small current, but also to ensure the stability of the large current.
- ◆ It use of USB interface and PC direct communication, without any transfer line, easy to use.
- ◆ It connects the notebook computer (optional) operation. Notebook computer and industrial control computer using the same set of software, no need to re-learn the operation method.
- ◆ It has the GPS synchronous test function. Device with built-in GPS synchronous card (optional) is connected with PC through RS232 port, achieve different synchronous swap test of two test instruments.
- ◆ The output voltage is 110V (1A), 220V (0.6A), respectively. The output voltage is independent of the special DC auxiliary voltage source. To provide a relay or protection device that requires a DC working power supply.
- ◆ The software has the function of self calibration, which avoids the need to open the chassis to calibrate the accuracy by adjusting the potentiometer, thus greatly improving the stability of the accuracy.

Technical Parameter

Category	Sub-category	Setting range		Voltage Generators	General	Accuracy			
		6-phase AC(L-N)	6*0~30A			<0.2% typical	<0.5% typical		
Current generators	Setting range	3-phase AC(L-N)	3*0~60A	Generator, general	Frequency range	Resolution	4.0mV		
		1-phase AC(L-N)	1*0~180A			Inc signal	DC~1000Hz		
		6-phase DC(L-N)	6*0~10A			T signal	DC~3000Hz		
		3-phase DC(L-N)	3*0~20A			Frequency accuracy	0.01%		
		1-phase DC(L-N)	1*0~60A			Frequency resolution	0.01Hz		
		6-phase AC	6*260VA/W			Phase angle range	-360~+360		
	Power	3-phase AC	3*400VA/W		Phase angle accuracy	0.1	Digital input	Number	10
		1-phase AC	1*1080VA/W		Input characteristic	10-250VDC or free contact		Input characteristic	10-250VDC or free contact
		6-phase DC	6*180VA/W		Time resolution	1ms		Time resolution	1ms
		3-phase DC	3*320VA/W		Max.measuring time	9999s		Max.measuring time	9999s
		1-phase DC	1*780VA/W		Type	Free relay contact		Type	Free relay contact
		General	Accuracy		<0.2% typical	Number		8	Digital output
Voltage Generators	Setting rang	6-phase AC(L-N)	6*0~120V	Break capacity DC	0.5A, 60Vdc	Break capacity DC	0.5A, 60Vdc		
		6-phase AC(L-L)	0~240V	Nominal supply voltage	240Vac	Nominal supply voltage	240Vac		
		6-phase DC(L-N)	6*0~160V	Permissible supply voltage	220~264Vac	Permissible supply voltage	220~264Vac		
	Power	6-phase DC(L-L)	0~320V	Nominal frequency	50/60Hz	General	Nominal frequency	50/60Hz	
		6-phase AC(L-N)	6*70VA	Permissible frequency	45~65Hz		Permissible frequency	45~65Hz	
		6-phase AC(L-L)	3*140VA	Operating temperature	-5~+50°C		Operating temperature	-5~+50°C	
Miscellaneous	6-phase DC(L-N)	6*80W	PC-Connection	USB	Miscellaneous	PC-Connection	USB		
	6-phase DC(L-L)	3*160W	Ground Socket	4mm banana socket		Ground Socket	4mm banana socket		

ZCAR-702 Protection Relay Tester

ZCAR-702 Protection Relay Tester is operated by the convenient and flexible rotation mouse through the large LCD screen and all English display. It can complete the most testing work, including all sorts of relay and microcomputer protection test, and can simulate all kinds of complicated instantaneity, permanent, transform failure for the test. It can be used right after the starting up and operated conveniently. By using the English setting operation software on the Windows platform, it can work for all kinds of large, complex and higher degree automation check work and it is convenient to test and scanning all kinds of protection fixed value, as well as storage real-time test data, display vector chart, draw fault waveform, online print statements, and so on.



Product Features

- ◆ The standard output of 4 phases of voltage and 3 phases of current
It could combine various type of current or voltage conveniently and has diversity type of protective experiment. Every phase of voltage output is 120V, and the total of the parallel current is 120A. The fourth phase voltage Ux has many functions and it can be set to be 4 type of every three voltages or synchronism checking voltage, or output any value of voltage.
- ◆ Strong function of software
It can complete all kinds of large complex check work requiring for high degree automation,such as three phase differential test, auxiliary power supply for fast cutting and automatic input test, line protection by synchronism checking voltage reclosing and so on. and it can easily test and scanning all kinds of protection setting for fault playback, storage real-time test data, display vector chart, online print reports, etc.
- ◆ The amount of switch quantity contacts is rich
7 road contact input and 2 couples of empty output contact. The input contact is compatible for both empty contact and 0~250 v contact, and it has intelligent automatic recognition. Input and output contact can be expanded based on the user's need.
- ◆ Large LCD screen
The device adopts large and high resolution radio graphics LCD screen with 320 x 240 lattices, and the whole operation process are set on the screen, whose operation interface and test results are both show in English, intuitional and clear.
- ◆ Self-protection
Use reasonable design of the heat dissipation structure, has various reliable and perfect protection and power soft start, along with fault self-diagnosis and locking function.
- ◆ Independent DC power output
The device is equipped with a way of 110v DC and 220v DC special adjustable power output.
- ◆ Cost-effective
It is an interdisciplinary design production, integrating many advanced scientific and technological achievements of many areas. More important, its large tester performance, and small tester price, distinguishes it as a very cost-effective machine.

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