



Protection Relay Testing

Given the different functional requirements of grid protection systems, testing capabilities require a higher level of sophisticated testing hardware and software to analyze the operation of the entire protection system (or individual protection components) under "real life" situations. Similar improvements in simplifying the user interface and

software control of test instruments are further necessary to meet these expanding test capabilities. Rest assured, no matter how complex, every aspect of relay testing can be easily handled with Weshine®'s comprehensive line of Protection Relay Testing (VS-JB900 series). Plus, whether you're testing traditional electromechanical relays or modern IEC 61850 networked devices, our rugged products deliver the high power you need while still being portable for practical testing.





Weshine® Protection Relay Testing

Weshine developed the first software-driven protective Weshine® Protection Relay Testing in 2013, and we continue to offer models ranging from computer control (with a comprehensive and simple built-in touch screen user interface) to portable and laboratory-style hand-operated test fixtures to meet every requirement. A Protection Relay Testing requirement. Relay testing solutions can be an expensive proposition when software is charged separately, but with Weshine solutions, the software required to test most relays is included in the test set so you won't incur additional costs.



Our rich heritage in manufacturing relays and primary injection test solutions benefits from the company's extensive relay testing experience. This experience also drives the success of our global support system - we're here to help you wherever you are!

1. Meets all the requirement of field tests. **Protection Relay Testing** with standard 6 phase voltage, 6 phase current output, voltage 125V/phase, current 30A/phase, 6 phases in parallel can up to 180A. Digital Signal Processor Microcomputer. Not only test the traditional relays and protectors, but also test the modern micro computer relays, special for transformer differential protection and transfer equipment.

2. All technical indicators fully meet the standard DL/T624-1997: Technical condition of the relay computer test device.

3. Classic Windows XP operating interface, friendly man-machine interface, easy and fast to operate; High-performance embedded industrial control computer and 8.4 inch resolution of 800 × 600 TFT true color display which provides rich visual information, includes the current working condition and all kinds of help information.

4. The Windows XP system comes with the restore function; avoid system crashes caused due to illegal shutdown, or malfunction, etc.

5. Equipped with ultra-thin industrial keyboard and optical mouse, complete a variety of operations using keyboard or mouse the same as ordinary PC.

6. The main control board is DSP + FPGA architecture, 16 bit DAC output, generates high - density sine wave 2000 points each circle to fundamental wave, which greatly improves the wave quality and the accuracy of the test instrument.

7. Using high-fidelity linear amplifier. Both to ensure the accuracy of a low current, but also guarantee the stability of the high current.

8. USB directly connect with PC, without any adapter cable, easy to use.

9. Can be connected to a laptop computer (optional). Laptop computers and industrial machines use the same software, no need to re-learn the methods of operation.

10. With a separate DC auxiliary voltage source, output voltage 110V(1A), 220V(0.6A), provides relays or protective devices which require DC power.

11. The software with self calibrating function, which avoid to calibrate accuracy by adjusting relays after open the case, greatly improve the stability of the accuracy.

| PRODUCT INFORMATION | | | | |
|---------------------|---|---------------------|---|--|
| Product Name | SIX-PHASE PROTECTION Protection Relay Testing | | | |
| Channels of Voltage | 6 | Channels of Current | 6 | |
| | AC CURRENT SOUR | CE | | |
| | 0 ~ 30 A/phase, acc | | | |
| | DC CURRENT SOURCE 0 ~ ±20 A / phase, accuracy: 0.5% AC VOLTAGE SOURCE Phase voltage:0 ~ 125 V/phase; Line voltage: 0 ~ 250 V | | | |
| | | | | |
| | | | | |
| | | | | |
| | DC VOLTAGE SOUR | CE | | |

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| | Phase voltage: 0 \sim ±150 V; Lin | Phase voltage: 0 \sim ±150 V; Line voltage: 0 \sim ±300 V | | | |
|-----------------|---|---|-------------------------|--|--|
| | Maximum output power of ea | Maximum output power of each Phase: 300 VA | | | |
| Dower | Maximum output power of 6 parallel current: 900 VA | | | | |
| Power | Maximum permitted work time of 6 parallel current: 10 s | | | | |
| Input Terminals | 8 pairs | Output Terminals | 4 pairs | | |
| Standards | DL/T624-1997 | Certificates | CE; EMC; LVD; ISO; IEC; | | |
| Dimensions | 455mm*530mm*220mm | Model Number | VS-JB900C | | |

Weshine® Protection Relay Testing Parameter (Specification)

1. AC current source Current range: 6x (0~30A)/phase, accuracy 0.5%. 6 phase parallel current output: 180A Phase current working value for allowed long time: 10A Power: 300VA/phase Maximum output power of 6 phases in parallel: 900VA Maximum permitted work time of 6 phases in parallel: 10S Frequency range: 0~1000Hz; accuracy: 0.001Hz Harmonic time: 2~20; phase: 0--360°; accuracy: 0.1° 2. DC current source Current range: 20A / phase, power: 300VA/phase, accuracy:0.5% 3. AC voltage source Phase voltage output:6x(0~125V)/phase, accuracy: 0.5% Line voltage output: 0~250V Phase voltage / Line voltage output power: 70VA / 100VA Frequency range: 0~1000Hz accuracy: 0.001Hz Harmonic time: 2~20; phase: 0--360°; accuracy: 0.1° 4. DC voltage source Phase voltage output range: $0 \sim \pm 150V$ accuracy: 0.5% Line voltage output range: 0~±300V Phase voltage / Line voltage output power: 90VA / 180VA 5. Switch terminal Switch input terminals: 8 pairs Dead contact: 1-20mA, 24V active output inside the device. Potential flip: 0--6V DC low level 15-250V DC high level Switch output terminals: 4 pairs, dead contact, rupturing capacity: 110V/2A, 220V/1A 6. Time measurement range Range: 1ms-9999s; accuracy: 1ms 7. Dimension & weight Dimension: 455 (mm)×530 (mm)×220 (mm) Weight: 30Kg. Weshine Electric Manufacturing Co., Ltd. Address: Diangu Technology Center, No. 3088, Lekai North Street Tel:+86-312-3188565 Phone:+86-18731260588 E-mail:sale09@weshinelectric.com



8. Power AC220V±10% 50Hz 15A





Current range: 6×30A AC Voltage range: 0-250V





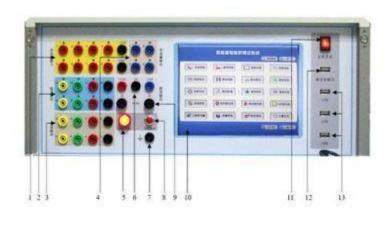




PRODUCT INTRODUCTION



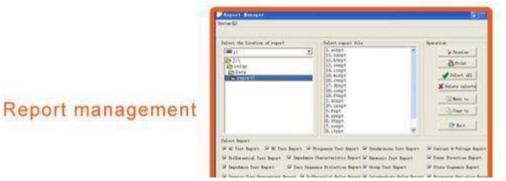




- 1. Switch input
- 2. Voltage output:
- 3. Current output
- 4. Switch output
- 5. Amplifier switch
- 6. Fixed output
- 7. Grounding terminal
- 8. Reset button
- 9. Fuse
- 10. LCD
- 11. Host switch
- 12. PC interface
- 13. USB

Interface display

| | | Ston Synchronous Test | Test Test | DC Test | AG Test |
|-----------|------|--------------------------|-----------------------------|-------------------------------|------------------------|
| | | Harmonia Test | Characterists | A Pres | Correct & Unitage |
| interface | Main | Z: Group Test | Zero Sequence Protection | (In Impediance) | Perer Direction |
| | | Contervadate Relay | Differential Relay | O Inverse Time Overcurrent | Date Bequince |
| | | O Measuring | System Vigration | Falure Association | Frequency Variation |







Product size



SUPPORTING ACCESSARIES







| 1 | host | 1 pc |
|----|----------------------|-------|
| 2 | Test line package | 1 pc |
| 3 | Current test line | 1 set |
| 4 | Power cord | 1 pc |
| 5 | USB connection cable | 1 pc |
| 6 | Program U-disk | 1 pc |
| 7 | Ground wire | 1 pc |
| 8 | Connector | 1 set |
| 9 | 15 A fuse | 2 pcs |
| 10 | 2 A fuse | 2 pcs |











Selections

Weshine has 8 years experience specifically for deal with complete range of Electrical Equipment. At present, Weshine has invented various **Protection Relay Testing** as shown as form:

| ORDERING INFORMATION FOR Protection Relay Testing | | | | |
|---|--------------------|--------------------|--------------------|--------------------|
| Cat No | AC Current (A) and | DC Current (A) and | AC Voltage (V) and | DC Voltage (V) and |
| Cat. No. | Accuracy | Accuracy | Accuracy | Accuracy |
| VS-JB-III 0 to 5,0 to 50, 0 to 100, 0.5% | | 0 to ±20, 0.5% | 0 to 250, 0.5% | 0 to ±250, 0.5% |
| | | 010 ±20, 0.5% | 0 t0 250, 0.5% | 0 t0 ±230, 0.5% |
| VS-JB900E | 30 to 40, 0.5% | 0 to ±30, 0.5% | 0 to 125, 0.5% | 0 to ±150, 0.5% |
| VS-JB9000 | 0 to 30, 0.5% | 0 to ±20, 0.5% | 0 to 125, 0.5% | 0 to ±150, 0.5% |
| VS-JB901 | 0 to 40, 0.2% | 0 to ±10, 0.2% | 0 to 125, 0.5% | 0 to ±150, 0.2% |
| VS-JB902 | 0 to 30, 0.2% | 0 to ±10, 0.5% | 0 to 125, 0.2% | 0 to ±150, 0.2% |
| VS-JB902S | 0 to 30, 0.2% | 0 to ±10, 0.5% | 0 to 125, 0.2% | 0 to ±150, 0.5% |
| VS-JB903 | 0 to 40, 0.2% | 0 to ±10, 0.5% | 0 to 125, 0.5% | 0 to ±150, 0.2% |
| VS-JB904 | 0 to 30, 0.2% | 0 to ±10, 0.5% | 0 to 125, 0.2% | 0 to ±150, 0.2% |

| Cat. No. Number of Voltage | Number of Current | Operating | Instrument | Dimension | Weight | |
|----------------------------|-------------------|-------------------|------------|-----------|-----------------|------|
| Cal. NO. | Number of voltage | Number of Current | System | Structure | (mm) | (kg) |
| VS-JB-III | 2 | 2 | | SCM | 450 x 280 x 275 | 18 |
| VS-JB900B | 4 | 3 | Win XP | IPC | 455 x 530 x 220 | 30 |
| VS-JB900C | 6 | 6 | Win XP | IPC | 455 x 530 x 220 | 49 |
| VS-JB901 | 4 | 3 | Win XP | IPC | 410 x 190 x 420 | 12.5 |
| VS-JB902 | 4 | 3 | Win XP | IPC | 328 x 168 x 250 | 11 |
| VS-JB902S | 6 | 6 | Win XP | IPC | 390 x 280 x 170 | 15 |
| VS-JB903 | 4 | 3 | Win XP | IPC | 410 x 190 x 420 | 18 |
| VS-JB904 | 6 | 6 | Win XP | IPC | 410 x 190 x 420 | 18 |

Based on Supply Chain issues: Please contact your preferred Authorized Weshine Distributor for current pricing and lead times.

Quality Certificates

We always believe that all the success of our company is directly related to the quality of the products we provide. **Protection Relay Testing** meet the highest quality requirements specified in ISO9001, ISO14000:14001 guidelines and our strict quality control system.



Shipment

For further information on Weshine's Service Solutions, contact our 24/7 online sales representative to get quotes from Weshine.

Contact us

| FEEL FREE TO MAKE A PHONE CALL:400 996 1868 | OR E-MAIL TO: info@weishengelectric.com |
|--|--|
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