

Rizner 500E-A D5 Series Comprehensive Protection And Monitoring Device

Product Description

RIZNER 500E-A D5 series comprehensive protection and control device uses 0.4KV~66KV low-voltage primary equipment as the main measurement and control protection object, and integrates protection, measurement, control and communication into one intelligent device, which is mainly suitable for the protection and monitoring of power systems in power plants, substations and industrial and mining enterprises. This series of products adopts advanced digital signal processing technology (DSP) and high-speed and reliable Ethernet and fieldbus technology. The device has complete functions, and the operation is simple and convenient. It can be used for centralized group screen cabinets or local installation in switch cabinets. It is an ideal protection and measurement equipment for plant station automation, factory process automation and building automation.

Main Products Include

- ✦ Digital motor protection and monitoring device
- ✦ Digital transformer protection and monitoring device
- ✦ Digital line protection and monitoring device
- ✦ Digital capacitor protection and monitoring device
- ✦ Digital backup power self-injection device
- ✦ Digital integrated measurement and control device
- ✦ Digital bus voltage protection monitoring and control device
- ✦ Digital switch protection monitoring and control device



Features

- ✦ Advanced digital signal processing technology.
- ✦ The high-reliability hardware and software redundancy design makes the device extremely resistant to interference.
- ✦ The LCD display can be switched between Chinese and English, full menu operation, and decimal continuous setting.
- ✦ The drive test function allows a linkage check of the outlet circuit.
- ✦ Complete software and hardware self-test function. An abnormality is found, that is, the blocking exit concurrent alarm signal displays the fault content.
- ✦ The online monitoring and recording function can display various protection and measurement parameters such as current, voltage, active, reactive, power factor, switching state, 2 to 23 harmonic measurement and THD.
- ✦ The high-reliability and large-capacity FLASH memory is used to permanently store a large number of device events and operation records, and can also save 10 recent fault recording data, which can be exported.
- ✦ Flexible communication port configuration, communication port can be configured as Ethernet, RS485 interface.
- ✦ All protection functions (including non-electrical protection) can be selected by the export mode and soft platen can be retired.
- ✦ All names that are entered and opened 1 to 9 can be redefined by themselves.
- ✦ Four sets of settings can be set to suit various operating conditions.
- ✦ The device is equipped with a USB interface, which can either upgrade the program by itself or export the device parameters, protection settings, SOE events, operation records, device information tables, fault recording data, etc. The

device parameters and the protection settings can also be modified according to the exported format. After the protection value is set, the U disk is introduced into the device, so that it is not necessary to enter the menu setting every time, and the workload is greatly reduced.

- The device has a variety of functional modules for optional, including opening and closing expansion, operating circuit, DC analog input, 4 ~ 20mA DC analog output, temperature resistance measurement, etc. It can be configured as a protection and monitoring device for various functions to meet a variety of industrial needs.

Technical Parameters

Rated Parameter	Voltage	DC220V±15% or DC110V±15% (ordering must be stated) AC220V±15%
	AC rated current	5A (1A)
	AC rated voltage	380V (220V), 100V (57V)
	Rated frequency	50Hz
Parameter Setting Range	Current : 0.1le~20le voltage : 1~576V Io : 5 mA~12000mA time : 0~9999s	
Measuring Component Accuracy	Setting error	The current and voltage setting error does not exceed ±2.5%; the time setting error does not exceed ±50ms; The entire set of action time does not exceed ± 35ms
	Temperature detection error	≤ ±5% with respect to 20 °C ± 2 °C in the working environment temperature range
	Measurement accuracy	Current, voltage, frequency ≤ ± 0.2%; other ≤ ± 2%
Overload Capability	AC current loop	2le continuous operation 10le continuous operation 10s 40le continuous operation 1s
	AC voltage loop	1.2Ue continuous operation 1.4Ue continuous operation 10s 2Ue continuous operation 2s
Output Contact Capacity	Signal contact	Long-term current through 1A, cut off current 0.3A (DC220V, V/R 1ms)
	Jump and close contact	Long-term current through 5A, cut off current 0.3A (DC220V, V/R 1ms)
Power Consumption		AC current loop <0.25VA/phase AC voltage loop <0.5VA/phase power circuit <10W
Atmospheric Conditions		Ambient temperature: -25 ° C ~ +55 ° C, relative humidity: 5% ~ 95%, Atmospheric pressure: 86KPa~106Kpa
Electromagnetic Compatibility		GB/T14598.13-1998 1 MHz and 100 KHz pulse group interference test level III. GB/T14598.14-1998 Electrostatic discharge interference test class IV. GB/T14598.9-1995 Radiation electromagnetic field interference test class IV. GB/T14598.10-1996 Fast transient interference test class IV.
Insulation Performance		Insulation resistance level: the insulation resistance value is measured by a 500V megohmmeter between the live part and the non-charged part of the device and the outer casing and between the circuits that are not electrically connected. Normally, the insulation resistance of each class under different atmospheric conditions is not less than 20 MΩ. Power frequency withstand voltage: AC loop to ground pressure

	2000V, DC loop to ground pressure 1500V, AC and DC loop withstand voltage 1000V, test time 1 minute, rated insulation voltage >60V. Impact voltage: short-time surge voltage of standard lightning wave of 1.2/50 μ s, test voltage 5KV.
Mechanical Behavior	GB/T11287-1989 Vibration response test class I. GB/T11287-1989 Vibration endurance test class I. GB/T14537-1993 Impact response test class I. GB/T14537-1993 Impact durability test class I. GB/T14537-1993 Crash test class I.

January 2019 product description is the second edition, may be modified in the future, please pay attention to the latest version of the information.

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