Usage Manual

ETEK®

ETEK ELECTRIC

intelligent overvoltage & undervoltage & overvurrent protection device

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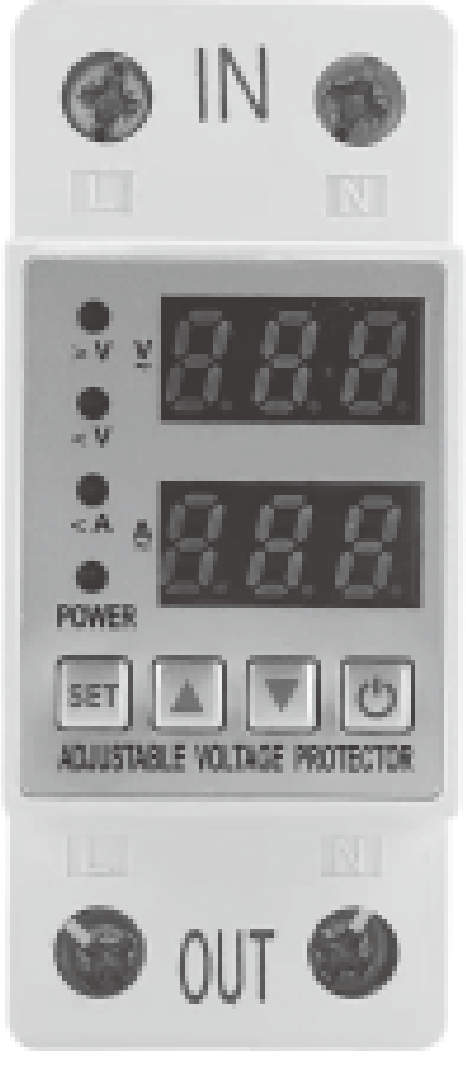
Instructions for intelligent overvoltage& undervoltage&overcurrent protection device



1.Usage

Intelligent overvoltage & undervoltage & overcurrent reclosing protection device is a comprehensive intelligent protection device integrated with overvoltage protection, undervoltage proteciton and ovedrcurrent protection. This product is able to cut off the power supply instantaneously and protect the equipment from being burned for the overvoltage fault, undervotage fault and overcurrent fault. The protection device can automatically restore power supply when the circuit restore to the normal condition. Overvoltage value, undervoltge value, overcurrent value and delay value of this product can be set by users. Users can adjust the corresponding parameters according to actual situation.

2. Product characteristics

2.1 A new generation of self-recovery overvoltage and undervoltrage protection device according to national standard JB/T12762-2015

2.2 Circuit will be cut off for overvoltage and undervoltage of the single phase circuit. It will automatic reset the connecting circuit after the voltage recovery of single-phase circuit and delay of time with out manual operation.

2.3 Circuit protection will produce no malfunction for transient of temporary overvoltage, which can avoid voltage instability.

2.4 Protection device will not be damaged for circuit disconnection of protection device or sudden power recovery after sudden power failure carused by weak jonits.

2.5 Protection deveice will not be damaged for the maximum overvoltage of circuit fault

3.Regular service conditions and installation condition

3.1.1 The ambient air tmeperature shall not exceed +40℃ or lower then-5℃ with average value of 24 hours maximum +35℃

3.1.2 The altitude of the installation site shall not exceed 2000m.

3.1.3 Atmospheric condition

3.1.3.1 Humidity

The relative air humidity of the installation site does not exceed 50% in the ambient air temperature +40 ℃ and has a higher relative humidity at a lower temperature. For example, when the average minimum temperatrue of the wettest month is +20℃, the average maximum relative humidity of this month is greater than 90%. Appropriate measures should be taken to prevent condensation due to temperature changes.

3.1.3.2 Pollution grade3

3.2.1 Installation condition

3.3.1 Protection device can be vertically or horizontally installed in the cabinet unless otherwise specified for a particular order.

3.3.2 It should be installed in a medium without explosion risk where there is no gas or conductive dust for metal corrosion or insulation damage.

3.3.3 It should be installed in the place with no rain or snow.

4. Main technical parameter

4.1 Rated voltage 230 frequency 50Hz
4.2 Rate current 1 A-80A adjustable (default 63A)
4.3 Under-voltge action cut-off value: 210V-140V adjustable(defait 160V)
4.4 Over-voltage action cut-off value: 230V-300V adjustable (default 280V)
4.5 Power recovery delay after power failure:5s
4.6 Range of time delay: 1s-600s adjustable (default 30s)
4.7 Electrical machinery life-span:minimum 50000 times
4.8 Exterior dimension: 85x36x66mm
4.9 Overvoltge and undervoltage restore value is 5V of the set value and overcurrent restore value is 1A less than set value
4.10 Please note the mode of up in and down out or down in and up out in ordering.
4.11 Rated operation characteristics and operation time 10A,20A ,32A, 40A ,50A ,63A.
4.12 Rated turn on capacity protection device can be reliably connected and disconnected from the current value after continuous operation for long time.
Rated current priority value: 10A,20A ,32A, 40A , 50A ,63A,80A.
4.2.3 Rated limit overcurrent 63A,80A

5. Product setting

5.1 Click the SET key to enter the setting status.
5.2 Please press ▲▼ key for modi fication if the overv oltage setting digital display overvoltage value indicator flashes. The default is 280V. It will progres sively increase or decrease progressively by 1V for each press. ite will progressively inscrease of decrease progressively by 10V after long pressing ▲▼ key.

5.3 Under-voltge setting

Please press ▲▼ key for modification within the range of 210V~ 300V if the undervoltage setting digital display undervoltage value indicator flashes. The default is 280V. It will pregressively increase or decrease progressively by 1V for each press. It will progressively increase or decrease pregressively by 10V after long pressing ▲▼ key

5.4 Overcurrent setting

Please press ▲▼ key for modification within the range of 1A ~ 80A if the overcurrent setting digital display overcurrent value indicator flashes. The default is 20A. It will pregressively increase or decrease progressively by 1A for each press. It will progressively increase or decrease progressively by 10A after long pressing ▲▼ key

5.5 Delay setting

Please press ▲▼ key for modification with intherange of 1S-600S if the digital dispaly delay value indicator flashes. The defaultis 30s. it will progressively increase or decrenste progressively by 1s for each press.It will pregressively increase or decrease progressively by 10s after long pressing ▲▼ key

5.6 Setting confirm

Long press SET key for 5 seconds to return to display. input voltage value after the setting of all parameters. The setting is complet ed and saved.

5.7 Function of ON/OFF key

The product will forcibley cut off the output of the relay and disconnect the load to facilitate the maintenance of the circuit after pressing ⏻ key. The product will restore output after dealy of 5 seconds and work normally after pressing the key again.

6. Notes

6.1 Users shall abide by the relevant regualtions and notes in operations and notes in operation or experiment so as to ensure the secure use of the products.

6.2 Connect the wire according to product inle tend and outl et end. Load current should be less than product protection current value.

6.3 The neutral line N can't be connected incorrectly and must be connected reliably, other wise the product can't work properly.

6.4 Please carefully check whether the wiring is correct, whether the load size matches the current protection value of the product, and whether the wiring screw has been tightened before power connection, otherwise , it may cause damage to products.

6.5 Do not touch the points position after power connection, so as to avoid the electric shock.

6.6 This product has the function of short-circuit protection in cooperation with mini circuit breaker,it will not be able to play the function of limit-load protection if there is short circuit phenomenon in the inlet end or load end.

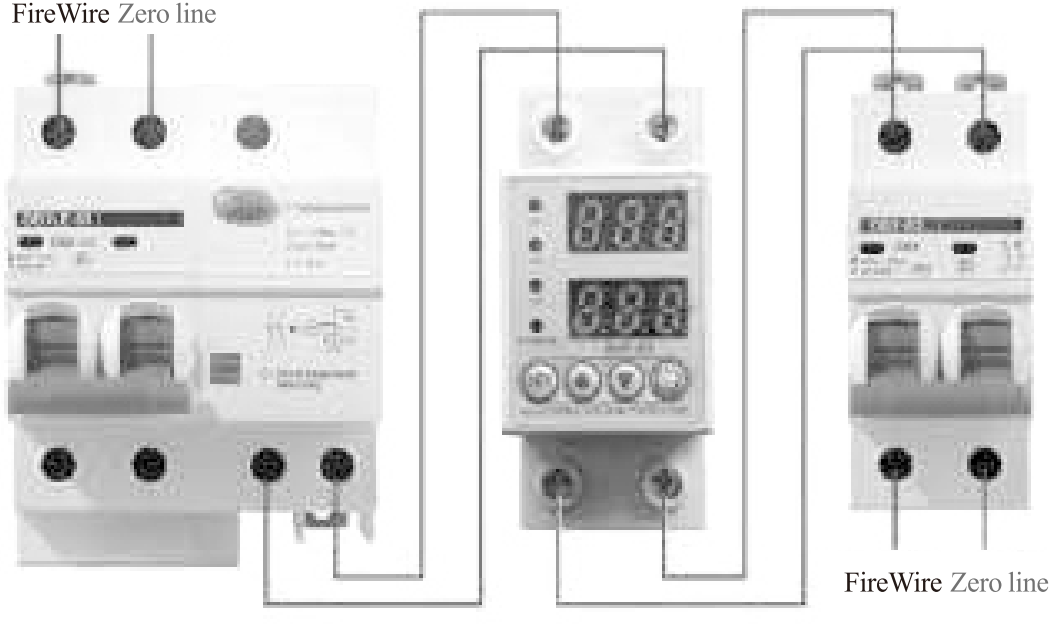
6.7 I mmediately remove the load (electric appliance) and check the circuit due to the auto reset of the product. Please check the circuit, otherwise continuous protection will destroy the products and will not protect the equipment security.

6.8 The product shall be moistureproof and dustproof if it is not used for long and shall be debugged according to the contents mentioned above before use.

7. Precautions for use

1. Please disconnect the front stage circuit breaker switch for maintenance because it has no isolation function.
2. The product has direct connection to zero line N with no disconnection function.
3. Please install DZ47, C65 mini circuit breaker in the front stage of the circuit for overcurrent protection because this product has no over-current short circuit breaking ability

8. Dlagram of product wiring



Power Switch **Voltage & Current Protector** **Air Circuit Breaker**