YC9VA / YC9V
Digital Voltage and Current Display Relay

Description

YC9VA voltage and current display relay is a microprocessor-based voltage monitoring device for single-phase AC networks to protect electrical equipment from surge voltage. The device analyzes the main voltage and displays its current value on a digital indicator. Load is switched by electromagnetic relay. The user can set the current voltage value and delay time through the button. The value is stored in non-volatile memory. Aluminum wires and copper wires can be used for connection.

Application

YC9VA votage and current display relay used in administrative, industrial and residential buildings and has the function of protecting single-phase lines:

- Surge protection;
- Undervoltage protection;
- Overvoltage protection;
- Working under voltmeter mode.

Description

Parameter	Data
Rated power supply voltage	AC110V~300V
Rated frequency	50Hz/60Hz
Deviation	2%
Maximum action time	<275:0.1s,≥275V:0. 02s
Minimum action time	0.5s(≥160V);<0.1s(<160V)
Delay time adjustment range, overcurrent trip time	1-90s(Inom<Iism<Imax);0.1s(Iism≥Imax)
Voltmeter accuracy	≤1%
Rated insulation voltage	400V
Parameter	Data
Output contact	1NO
Protection	Ip20
Pollution	3
Electrical life	100000times
Mechanical life	1000000times
Altitude	≤2000m
Operating temperature	-5℃~40℃

Relative humidity	50%at40°C(non-condensing)
Storage temperature	-40°C~55°C
Installation	35mm DIN rail

Parameters

NO.	LED display YC9VA	LED display YC9V	Definition	Range	Minimum adjustment value	Default
1	>U+xxx	>U+xxx	Over-voltage value	230—300V	1V	230V
2	<U+xxx	<U+xxx	Under-voltage value	110—210V	1V	110V
3	0xx	0xx	Closing delay time, s	1—90s	1s	30s
4	>I+0XX	/	Overload current, A	1—63A	1A	25A
5	Uxx	Uxx	the difference between the operating voltage and the recovery Voltage,V	0—15V	1	0V
6	>U+txx	>U+txx	Open delay time when over-voltage, s	0—10s	1	0s
7	<U+txx	<U+txx	Open delay time when under-voltage, s	0—10s	1	0s
8	>I+tXX	/	Open delay time when overload, s	0—99s	1s	0s

Operation instruction

When the actual voltage of power grid meets the requirements of YC9VA, the digital meter will display the voltage and current values. There is no output voltage when the digital countdown. If the voltage is within the set range, the output voltage will be on the load after the set time (the default 30s), and display the actual voltage and current. If the voltage is out of the set range, there will be no power on the load until the voltage is restored to the normal value. When restarting, if the voltage is less than the lower limiting value, <U indicator will always be on; If the voltage is higher than the upper limiting value, the >U indicator will always be on.

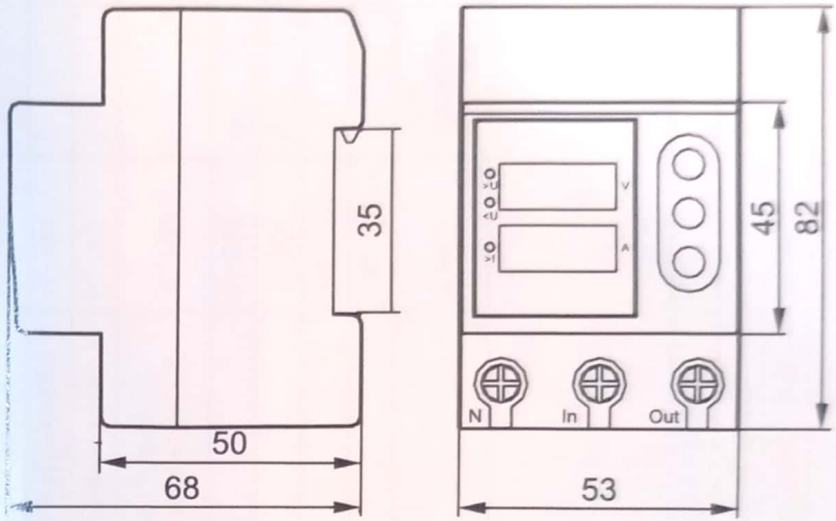
Description of function Settings:

Press and hold"≡"button for 3seconds to enter functional settings, When the >U indicator is on,set over-voltage value,"+" and"-"keys can modify the value (seting range is 230V-300V);Press"≡"key one time and when <U indicator is on,set under-

voltage value,"+"and"-"keys can modify the value(seting range is 110V~210V);Press"≡ "key one time and display delay closing time, "+"and"-" keys can modify the value (setting range is 1s~90s); Press"≡ "key one time and when >I indicator is on,set over-current value, "+"and "-"keys can modify the value (setting range is1A-63A).Default value:over-voltage value is 230V,under-voltage value is 110V,delay closing time is 30s,over-current value is 25A,the difference between the operating voltage and the recovery voltage U00 is 0V(setting range is 0V ~ 15V).For example, U00 is set 10V, when the over-voltage is 230V, there is no output voltage, when the voltage return to 220V(230-10),the output voltage will be on the load.

1. Install and secure the relay.
2. Connect the wires to the relay according to the schematic.
3. Set the desired voltage value.
4. Set the required response time.

Overall and installation dimensions (mm)



Connection diagram