


**YC6As-1** Current Protector  
**YC6Vs-1** Voltage Protector  
**YC6VAs-1** Voltage and Current  
protector(Single phase)  
**YC6VAs-3** Voltage and Current  
protector(Three phase)  
OPERATION INSTRUCTION  
Standard:EN60947-5-1-2004

**CNC** Deliver  
Power For Better Life

 Before installing and using this product,  
please read this manual carefully and  
pay more attention to safety.

# **YC6As/YC6Vs/YC6VAs**

## **Voltage And Current Protector**

### **1.General**

YC6VAs 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.

### **2.Application**

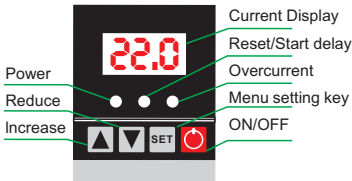
Voltage and current display relay used in administrative, industrial and residential buildings and has the function of protecting single-phase lines

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

### 3. Technical data

YC6As-1

Model	YC6As-1 40A	YC6As-1 63A
Rated supply voltage	AC 220V	
Operation Voltage Range	AC 80~350V	
Rated Frequency	50/60Hz	
Electric current setting range	1~40A	1~63A
Operating Temperature	-50 °C ~ +55 °C	
Storage Temperature	-30 °C ~ +70 °C	
Rated current	40A(subject to product label)	63A(subject to product label)
>U And <U Trip Delay	0.5S	
Reset/Start Delay	1~600S	
Voltage measurement accuracy	1%(Not exceeding 1% of the overall range)	
Rated Insulation Voltage	400V	
Protection Degree	IP20	

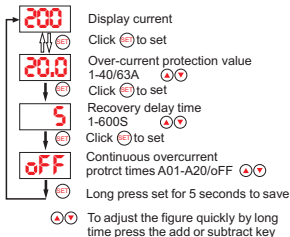


### 3.1 Default setting

Table 1

Technical parameter	Setting range	Step	Factory setting
Over-voltage protection value	1~40/63A	0.1A	40/63A
Recovery delay time	1~600S	1S	5S
Continuous overcurrent protect times	A01~A20/oFF	A01	oFF

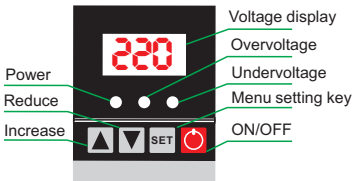
### 3.2 Parameters Settings



### 3.3 Technical data

YC6Vs-1

Model	YC6Vs-1 40A	YC6Vs-1 63A
Rated supply voltage	AC 220V	
Operation Voltage Range	AC 80~350V	
Rated Frequency	50/60Hz	
Operatlngtg Temperature	-50 °C ~ +55 °C	
Overtoltage(> U)setting Range	230~300V	
Undervoltage(> U)setting Range	210~140V	
Rated current	40A(subject to product label)	63A(subject to product label)
> UAnd < Utrip delay	0.5S	
Reset/start delay	1~600S	
Voltage measurement accuracy	2%(Not exceeding 2% of the overall range)	
Rated Insulation Voltage	400V	
Protection Degree	IP20	

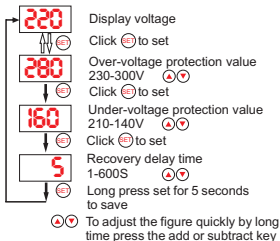


### 3.4 Default setting

Table 1

Technical parameter	Setting range	Step	Factory setting
Over-voltage protection value	230~300V	1V	280V
Under-voltage protection value	210~140V	1V	160V
Recovery delay time	1~600S	1S	5S

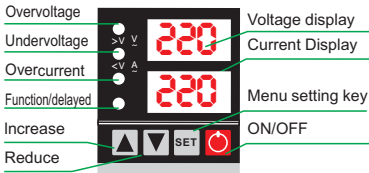
### 3.5 Parameters Settings



### 3.6 Technical data

### YC6VAs-1

Model	YC6VAs-1 40A	YC6VAs-1 63A
Rated supply voltage	AC 220V	
Operation voltage range	AC 80V–400V(single phase)	
Rated frequency	50/60Hz	
Electric current(>A)setting range	1–40/63A	
Overvoltage(>U)setting range	230–300V	
Undervoltage(<U)setting range	210–140V	
Rated current	40/63A(subject to product label)	
>U and <U trip delay	0.1–30S	
Reset/start delay	1–500S	
Voltage measurement accuracy	2%(Not exceeding 2% of the overall range)	
Rated insulation voltage	400V	
Output contact	1NO	
Electrical life	10 <sup>4</sup>	
Mechanical life	10 <sup>4</sup>	
Protection degree	IP20	
Pollution degree	3	
Altitude	2000m	
Operatintg temperature	-50°C–+55°C	
Humidity	≤ 50%at+40°C(without condensation)	
Storaee temp.erature	-30°C–+70°C	



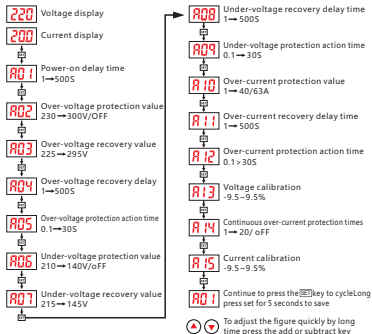
### 3.7 Default setting

Table 1

Technical parameter	Setting range	Step	Factory setting
Power-on delay time	1~500S	1S	10S
Over-voltage protection value	230~300V	1V	270V
Over-voltage recovery value	225~295	1V	265V
Over-voltage recovery delay time	1~500S	1S	30S
Over-voltage protection action time	0.1~30S	0.1S	1S
Under-voltage protection value	210~140V	1V	170V
Under-voltage recovery value	215~145V	1V	175V
Under-voltage recovery delay time	1~500S	1S	30S
Under-voltage protection action time	0.1~30S	0.1S	1S
Over-current protection value	1~40/63A	0.1A	40/63A
Over-current recovery delay time	1~500S	1S	30S
Voltage calibration	-9.5~9.5%	0.5%	0%
Continuous over-current protect times	1~20/OFF	1	oFF
Current calibration	-9.5~9.5%	0.5%	0%



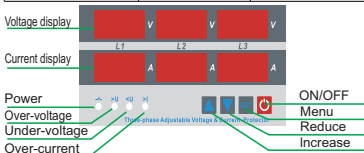
## 3.8 Function setting



### 3.9 Technical data

### YC6VAs-3

Model	YC6VAs-3(L-N)	YC6VAs-3(L-L)
Rated supply voltage	AC 220V	AC 380V
Operation voltage range	AC 80–400V(three phase)	AC 140–700V(three phase)
Rated frequency	50/60Hz	50/60Hz
Electric current(>A)setting range	1–40A/63A/80A/100A	1–40A/63A/80A/100A
Overvoltage(>U)setting range	230–300v	390–500V
Undervoltage(<U)setting range	210–140V	370–260V
Rated current	40A/63A/80A/100A	40A/63A/80A/100A
>U and <U trip delay	0.1–30S	0.1–30S
Reset/start delay	1–500S	1–500S
Voltage measurement accuracy	2%	2%
Rated insulation voltage	400V	700V
Output contact	3NO	3NO
Electrical life	10 <sup>4</sup>	10 <sup>4</sup>
Mechanical life	10 <sup>4</sup>	10 <sup>4</sup>
Protection degree	IP20	IP203
Pollution degree	3	3
Altitude	≤ 2000m	≤ 2000m
Operatintg temperature	-50°C–+55°C	-50°C–+55°C
Humidity	≤ 50%at+4 °C (without tcondensation)	≤ 50%at+4 °C without tcondensation)
Storage temperature	-30°C–+70°C	-30°C–+70°C



### 3.10 Default setting

Table 1

Technical parameter	Setting range	Step	Factory setting
Power-on delay time	1~500S	1S	10S
Over-voltage protection value	230~300V/390~500V	1V	270V/430V
Over-voltage recovery value	225~295V/385~495V	1V	265V/425V
Over-voltage recovery delay time	1~500S	1S	30S
Over-voltage protection action time	0.1~30S	0.1S	1S
Under-voltage protection value	210~140V/370~260V	1V	170V/330V
Under-voltage recovery value	215~145V/375~265V	1V	175V/335V
Under-voltage recovery delay time	1~500S	1S	30S
Under-voltage protection action time	0.1~30S	0.1S	1S
Three phase voltag eerror value	-9.5~9.5%	0.5%	0%
Three phase voltage unbalance value	20~99V	1V	20V
Three phase voltageun balance recovery value	5~94V	1V	15V
Three phase voltageun balance protection switch	oFF/on		on
Phase sequence protection switch	oFF/on		on
Over-current protection value	1~A/63A/80A/100A	0.1A	30A
Over-current recovery delay time	1~500S	1A	30S
Over-current protection action time	0.1~30S	0.1S	1S
Three phase curent error value	-9.5~9.5%	0.5%	0%
Continuous over-current protect times	1~20/oFF	1	oFF

## 3.11 Function setting

Voltage display  
 Current display

**P-1** Power-on delay time

**10** 1 → 500S

**U-1** Over-voltage protection value

**270** 230 → 300V(220V)  
390 → 500V(380V)

**U-2** Over-voltage recovery value

**265** 225 → 295V(220V)  
385 → 495V(380V)

**U-3** Over-voltage recovery delay time

**30** 1 → 500S

**U-4** Over-voltage protection action time

**10** 0.1 → 30S

**U-5** Under-voltage protection value

**170** 210 → 140V(220V)  
370 → 260V(380V)

**U-6** Under-voltage recovery value

**175** 215 → 145V(220V)  
375 → 265V(380V)

**U-7** Under-voltage recovery delay time

**30** 1 → 500S

**U-8** Under-voltage protection action time

**10** 0.1 → 30S

**U-9** Three phase voltage error value

**0** -9.5 → 9.5%

**U10**

**20** 20 → 99V

**U11**

Three phase voltage unbalance recovery value

**15**

5 → 94V

**U12**

Three phase voltage unbalance protection switch

**on**

oFF/on

**U13**

Phase sequence protection switch

**on**

oFF/on

**C-1**

Over-current protection value

**300**

1 → 40A/63A/80A/100A

**C-2**

Over-current recovery delay time

**30**

1 → 500S

**C-3**

Over-current protection action time

**10**

0.1 → 30S

**C-4**

Three phase current error value

**0**

-9.5 → 9.5%

**C-5**

Continuous over-current protect times

**5**

1 → 20/oFF

**P-1**

Continue to press the key to cycle

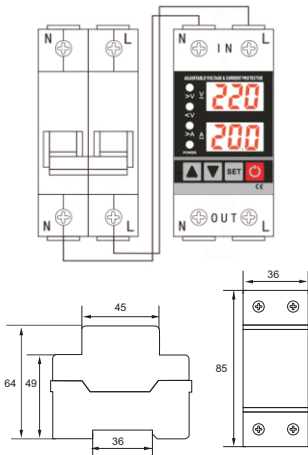
**10**

Long press set for 5 seconds to save

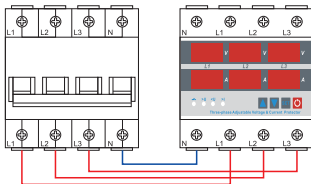
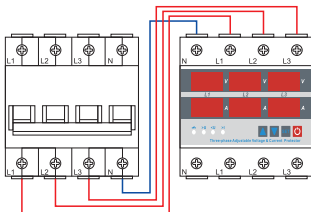
To adjust the figure quickly by long time press the add or subtract key

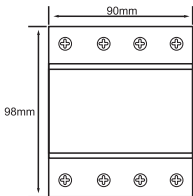
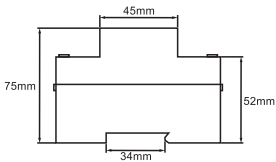
## 4.Wiring and shape dimensions

### Single-phase



## Three-phase







# CERTIFICATE

Product Model: YC6As/YC6Vs/YC6VAs series

Standard : EN60947-5-1-2004

Inspector : CNC 001

Production date: Printed on the product  
or package.

This product is qualified according  
to the delivery inspection

**CNC**

YC6As/YC6Vs/YC6VAs series

## CNC ELECTRIC

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