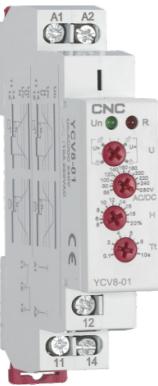


Motor Control & Protection

YCV8 Voltage Relay

Applications

- Protect electrical equipment and motors from over-voltage and under-voltage.
- Normal/emergency power supply switching.



Function Features

- Controls its own supply voltage(True RMS measurement)
- User may select operation mode through knob.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 1-MODULE.DIN rail mounting.



Type Designation

YCV8 - □ / □

Rated control supply voltage:

Rated supply voltage code	Rated supply voltage	Supply voltage limits	Range of adjustment
D12	DC 12V	DC 7...20V	DC 9...15V
AD48	AC/DC 24...48V	AC/DC 15...100V	AC/DC 20...80V
AD240	AC/DC 110...240V	AC/DC 50...270V	AC/DC 65...260V
A220	AC 220V	AC 160...270V	AC 180...260V

Function mode:

- 01 - Over/under voltage in windows mode
- 02 • Overvoltage Undervoltage

YCV8 Series

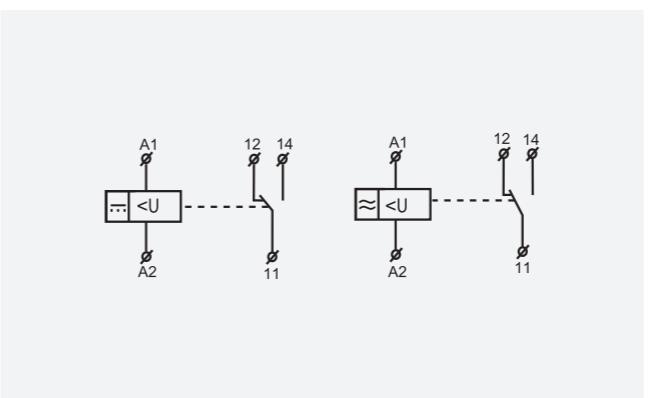
Motor Control & Protection

YCV8 Voltage Relay

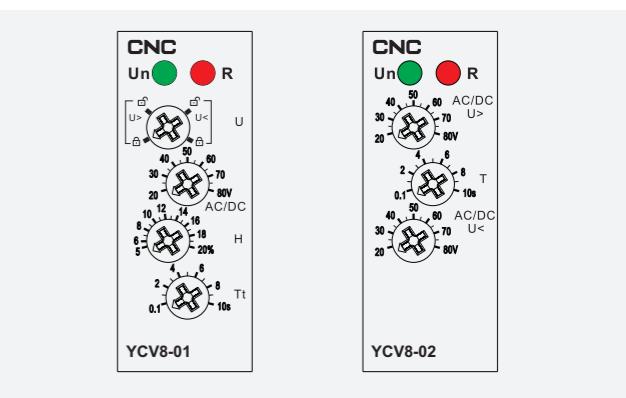
Technical parameters

Technical parameters	YCV8-01	YCV8-02
Function		Monitoring voltage
Supply terminals		A1-A2
Rated supply voltage		DC12V,AC/DC24V-48V,AC/DC110V-240V.AC220V
Rated supply frequency		45Hz-65Hz,0
Hysteresis		5%-20%3%fixed
Supply indication		green LED
Time delay		Adjustable 0.1s-10s,10%
Measurement error		W1%
Run up delay at power up		0.5s time delay
Knob setting accuracy		10% of scale value
Reset time		1000ms
Temperature coefficient		0.05%/°C,at=20°C(0.05%°F, at=68°F)
Output		1XSPDT
Current rating		10A/AC1
Switching voltage		250VAC/24VDC
Min.breaking capacity DC		500mW
Output indication		red LED
Mechanical life		1X107
Electrical life(AC1)		1X105
Operating temperature		-20°C to +55°C (-4°F to 131°F)
Storage temperature		-35°C to +75°C (-22°F to 158°F)
Mounting/DIN rail		Din rail EN/IEC 60715
Protection degree		IP40 for front panel/IP20 terminals
Operating position		any
Overtoltage cathegory		III.
Pollution degree		2
Max.cable size(mn?)		solid wiremax.1X2. 5or2X1. 5/with sleeve max.1X2. 5(AWG 12)
Dimensions		90X18X64mm
Weight		59g
Standards		EN 60255-1,IEC60947-5-1

Wiring Diagram



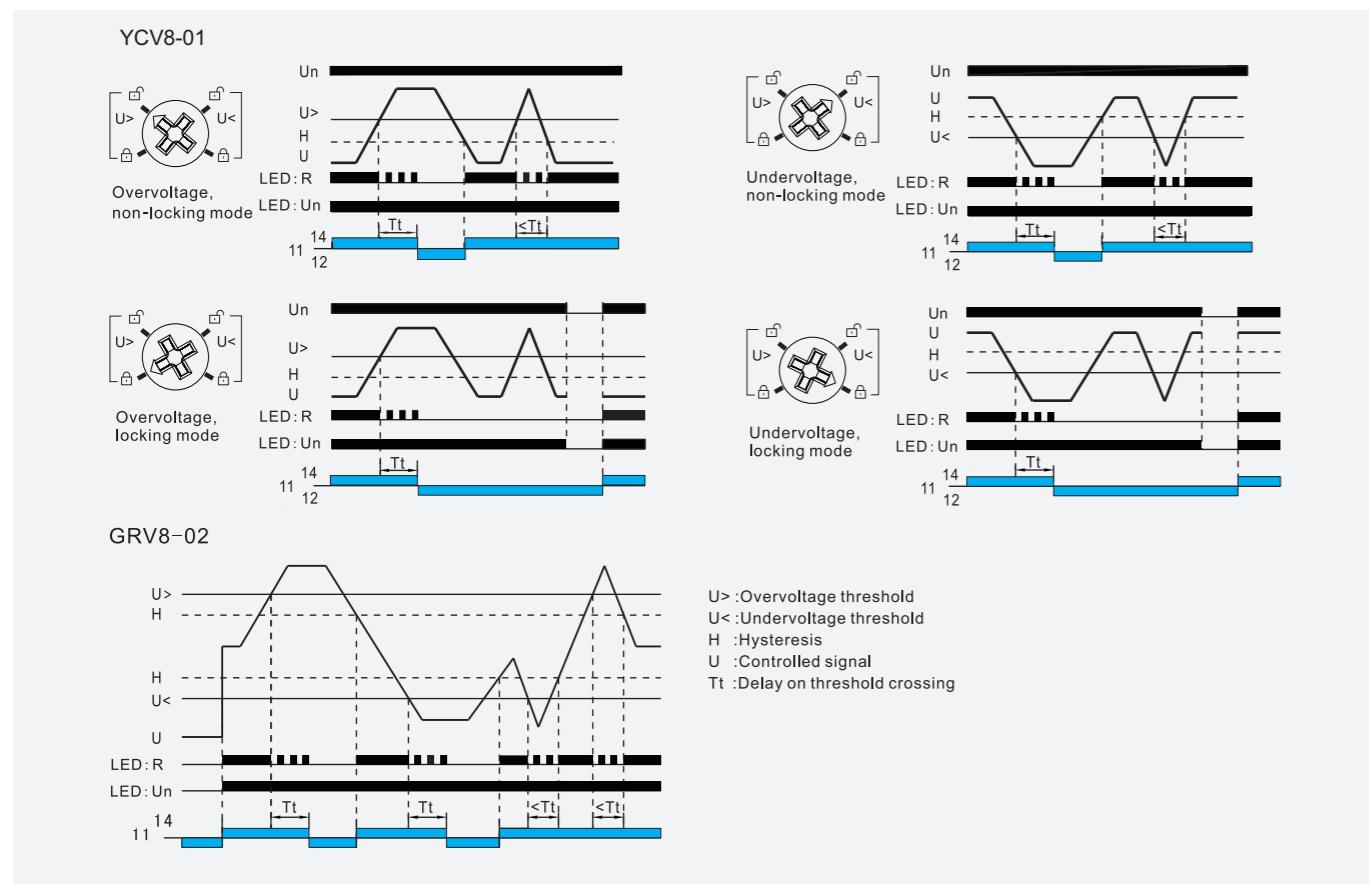
Panel Diagram



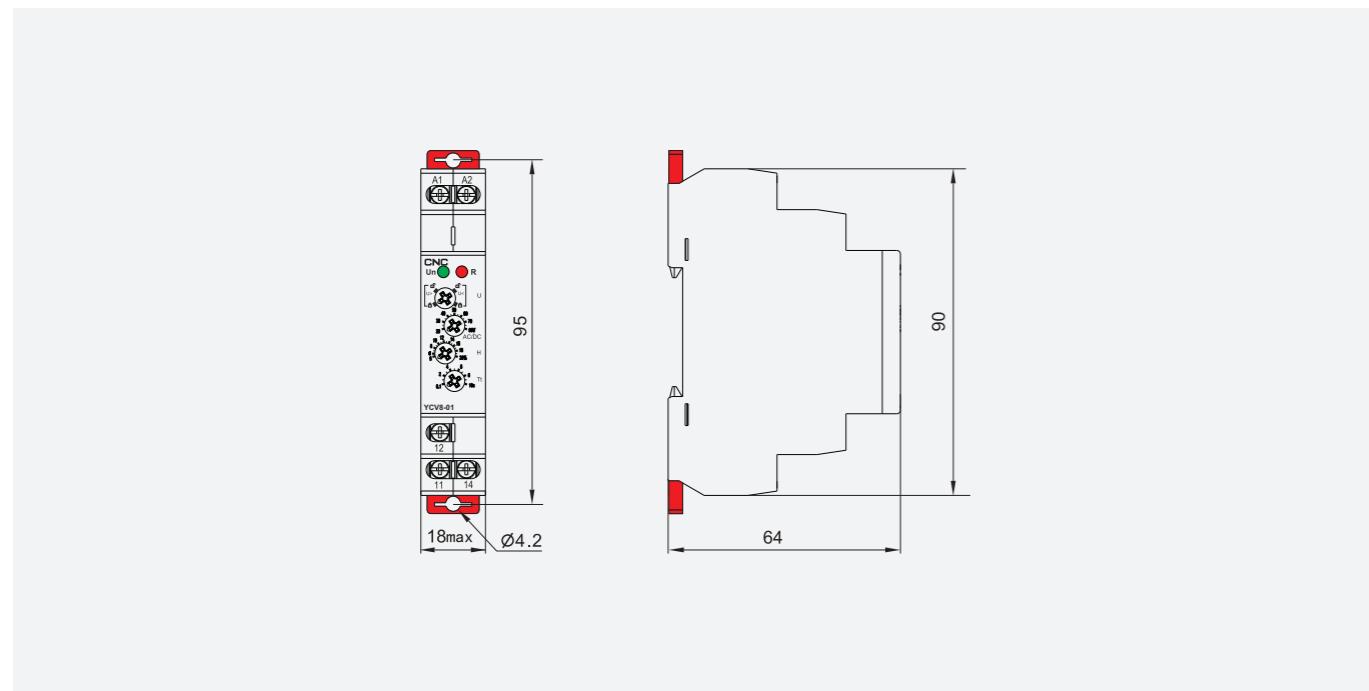
Motor Control & Protection

YCV8 Voltage Relay

Functions Diagram



Dimensions(mm)



Motor Control & Protection

YCV8 Voltage Relay



Applications

- Control for connection of moving equipment(site equipment,agricultural equipment,refrigerated trucks).
- Control for protection of persons and equipment against the consequences of reverse running.
- Normal/emergency power supply switching.
- Protection against the risk of a driving load(phase failure).

Function Features

- Controls its own supply voltage(True RMS measurement).
- Set 8-level rated operating voltage through knob.
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 1-MODULE.DIN rail mounting.

Type Designation

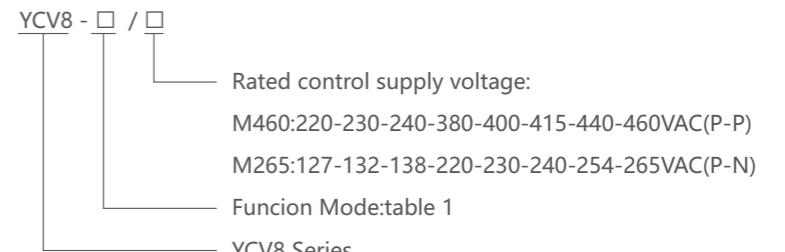


Table 1

Function code	Over-voltage	Under-voltage	Asymmetry	Delay time	Phase sequence	Phase failure
03					●	●
04	2%...20%	-20%...2%		0.1s...10s	●	●
05	2%...20%	-20%...2%	8%	0.1s...10s	●	●
06	2%...20%	-20%...2%	5%...15%	2s	●	●
07			8%	2s	●	●
08	15%	-15%	8%	2s	●	●

Note:the function is available

Motor Control & Protection

YCV8 Voltage Relay

Technical parameters

Technical parameters	YCV8-01	YCV8-02
Function	Monitoring 3-phase voltage	
Monitoring terminals	L1-L2-L3	L1-L2-L3-N
Supply terminals	L1-L2	L1-N
Voltage range	220-230-240-380-400-415-440-460(P-P)	127-132-138-220-230-240-254-265(P-N)
Rated supply frequency	45Hz-65Hz	
Measuring range	176V-552V	101V-318V
Threshold adjustment voltage	2%-20%of Un selected	
Adjustment of asymmetry threshold	5%-15%	
Hysteresis	2%	
Supply indication	green LED	
Time delay	Adjustable 0.1s-10s,10%	
Measurement error	<1%	
Run up delay at power up	0.5s time delay	
Knob setting accuracy	10% of scale value	
Reset time	1000ms	
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)	
Output	1XSPDT	
Current rating	10A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1X10 ⁷	
Electrical life(AC1)	1X10 ⁵	
Operating temperature	-20°C to +55°C (-4°F to 131°F)	
Storage temperature	-35°C to +75°C (-22°F to 158°F)	
Mounting/DIN rail	Din rail EN/IEC 60715	
Protection degree	IP40 for front panel/IP20 terminals	
Operating position	any	
Overvoltage cathegory	III.	
Pollution degree	2	
Max.cable size(mm?)	solid wiremax.1X2. 5or2X1.5/with sleeve max.1X2. 5(AWG 12)	
Dimensions	90X18X64mm	
Weight	64g	
Standards	EN 60255-1,IEC60947-5-1	

Note:

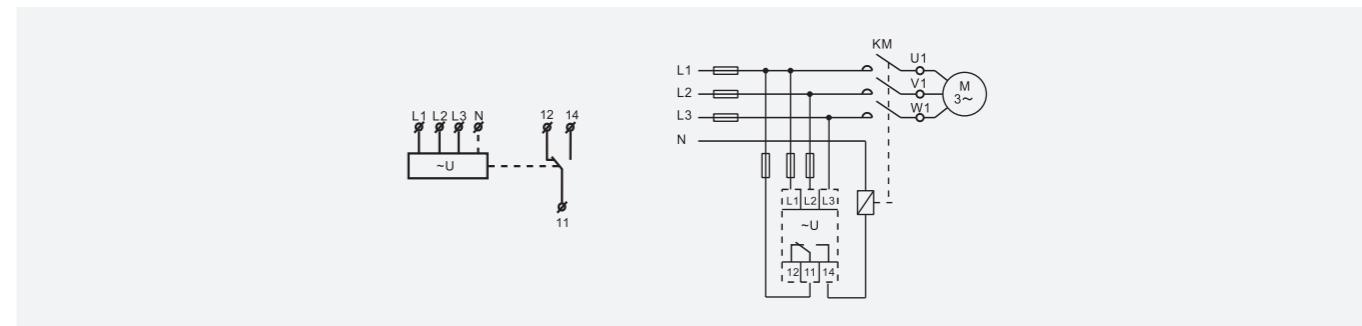
$$\text{Asy} = \frac{\text{Umax}-\text{Umin}}{\text{Uavr}} \times 100\% \quad \text{Umax}=\text{Max}(\text{U}_1, \text{U}_2, \text{U}_3) \\ \text{Umin}=\text{Min}(\text{U}_1, \text{U}_2, \text{U}_3)$$

$$\text{Uavr} = \frac{\text{U}_1+\text{U}_2+\text{U}_3}{3}$$

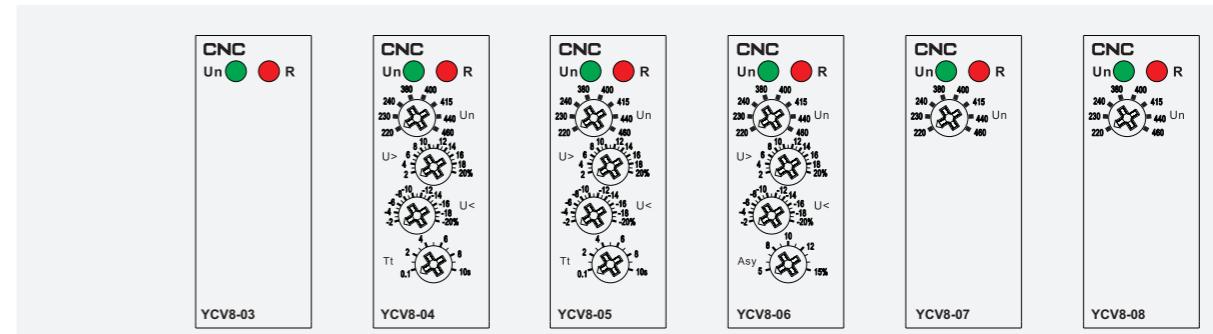
Motor Control & Protection

YCV8 Voltage Relay

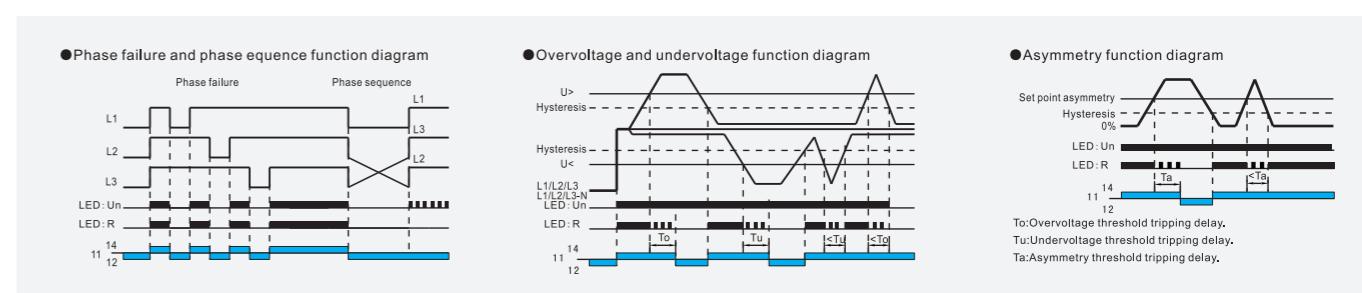
Wiring Diagram



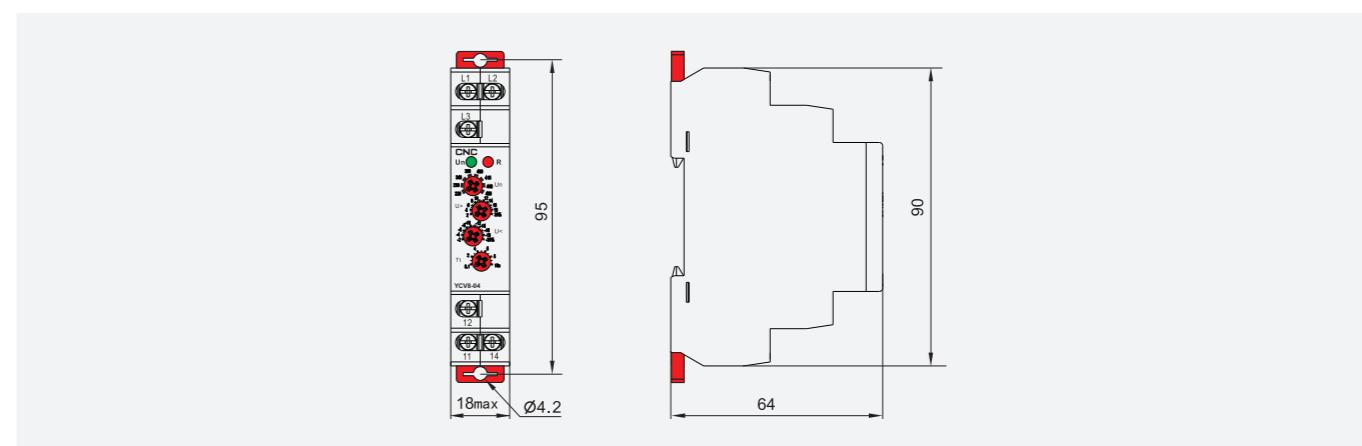
Panel Diagram



Functions Diagram



Dimensions(mm)



Motor Control & Protection

YCV8 Voltage Relay



Applications

- Control for connection of moving equipment(site equipment,agricultural equipent,refrigerated trucks).
- Control for protection of persons and equipment against the consequences of reverse running.
- Normal/emergency power supply switching.
- Protection against the risk of a driving load(phase failure).



Function Features

- Controls its own supply voltage(True RMS measurement).
- Set 8-level rated operating voltage through knob.
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- 2 C/O output.
- Relay status is indicated by LED.
- 1-MODULE,DIN rail mounting.

Type Designation

YCV8 - □ / □

- Rated control supply voltage:
M460:220-230-240-380-400-415-440-460VAC(P-P)
M265:127-132-138-220-230-240-254-265VAC(P-N)
- Funcion Mode:table 1
- YCV8 Series

Table 1

Function code	Over-voltage	Under-voltage	Asymmetry	Delay time	Phase sequence	Phase failure
03D					●	●
04D	2%...20%	-20%...2%		0.1s...10s	●	●
05D	2%...20%	-20%...2%	8%	0.1s...10s	●	●
06D	2%...20%	-20%...2%	5%...15%	2s	●	●
07D			8%	2s	●	●
08D	15%	-15%	8%	2s	●	●

Note:the function is available

Motor Control & Protection

YCV8 Voltage Relay

Technical parameters

Technical parameters	M460	M265
Function	Monitoring 3-phase voltage	
Monitoring terminals	L1-L2-L3	L1-L2-L3-N
Supply terminals	L1-L2	L1-N
Voltage range	220-230-240-380-400-415-440-460(P-P)	127-132-138-220-230-240-254-265(P-N)
Rated supply frequency	45Hz-65Hz	
Measuring range	176V-552V	101V-318V
Threshold adjustment voltage	2%-20%of Un selected	
Adjustment of asymmetry threshold	5%-15%	
Hysteresis	2%	
Supply indication	green LED	
Time delay	Adjustable 0.1s-10s,10%	
Measurement error	<1%	
Run up delay at power up	0.5s time delay	
Knob setting accuracy	10% of scale value	
Reset time	1000ms	
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)	
Output	1XSPDT	
Current rating	10A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1X10 ⁷	
Electrical life(AC1)	1X10 ⁵	
Operating temperature	-20°C to +55°C (-4°F to 131°F)	
Storage temperature	-35°C to +75°C (-22°F to 158°F)	
Mounting/DIN rail	Din rail EN/IEC 60715	
Protection degree	IP40 for front panel/IP20 terminals	
Operating position	any	
Overvoltage category	III.	
Pollution degree	2	
Max.cable size(mn?)	solid wiremax.1X2. 5or2X1.5/with sleeve max.1X2. 5(AWG 12)	
Dimensions	90X18X64mm	
Weight	64g	
Standards	EN 60255-1,IEC60947-5-1	

Note:

$$\text{Asy} = \frac{U_{\text{max}} - U_{\text{min}}}{U_{\text{avr}}} \times 100\%$$

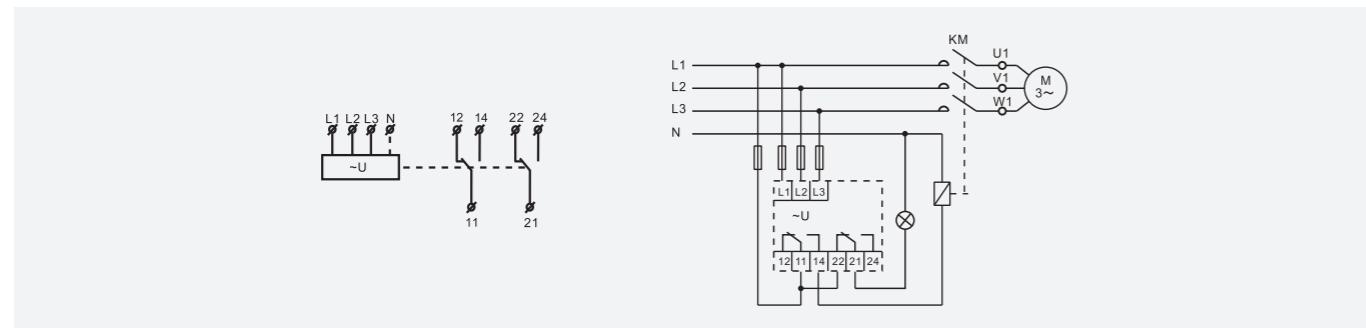
$$U_{\text{max}} = \text{Max}(U_1, U_2, U_3)$$

$$U_{\text{avr}} = \frac{U_1 + U_2 + U_3}{3}$$

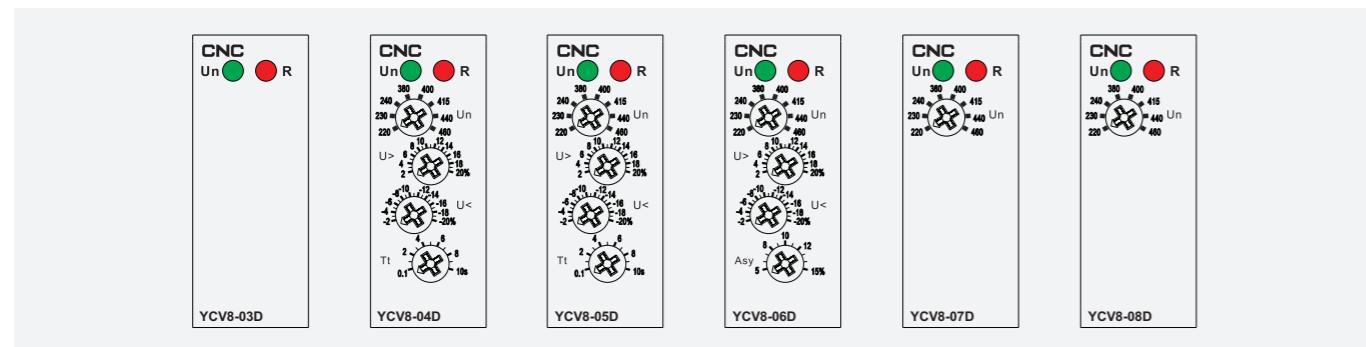
Motor Control & Protection

YCV8 Voltage Relay

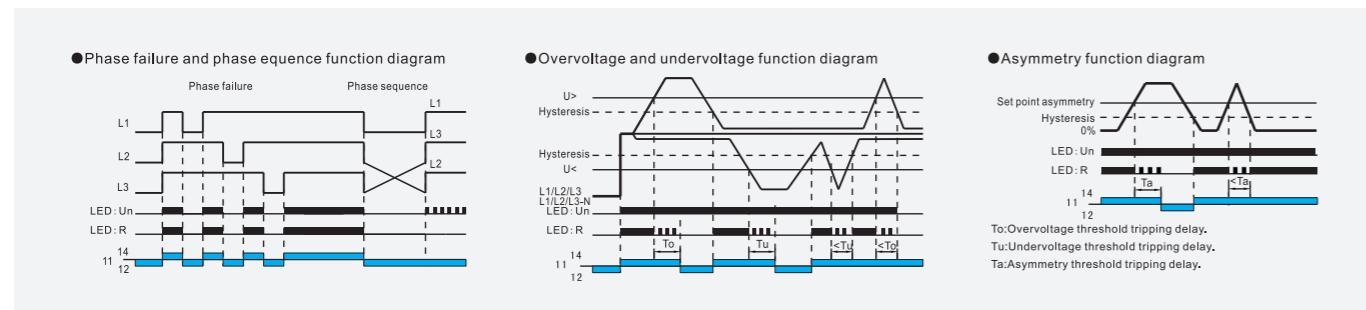
Wiring Diagram



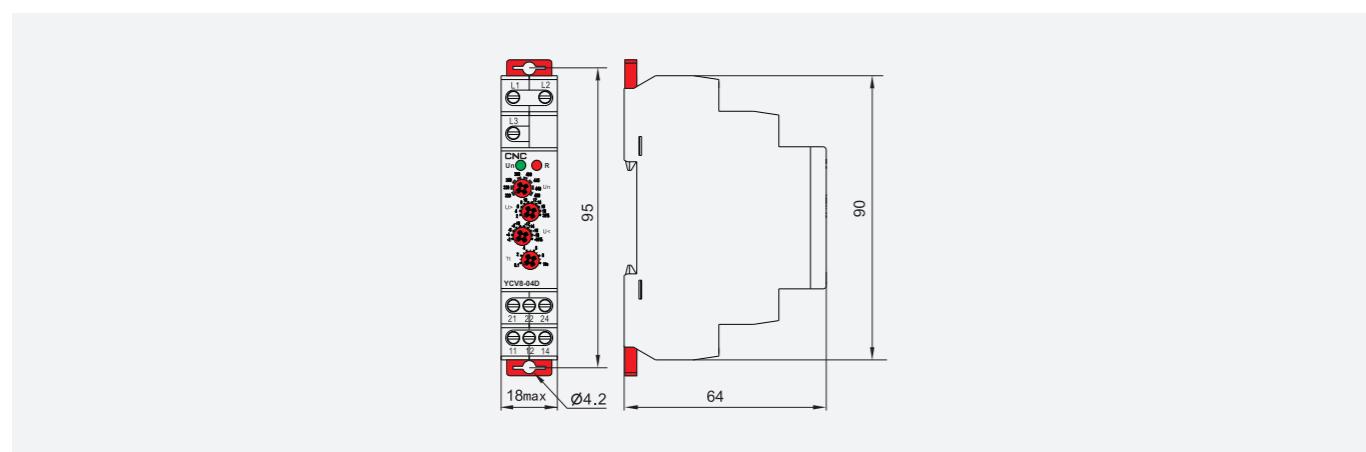
Panel Diagram



Functions Diagram



Dimensions(mm)



Motor Control & Protection

YCV8 Voltage Relay

Applications

- Control for connection of moving equipment(site equipment,agricultural equipment,refrigerated trucks).
- Control for protection of persons and equipment against the consequences of reverse running.
- Normal/emergency power supply switching.
- Protection against the risk of a driving load(phase failure).



Function Features

- Controls its own supply voltage(True RMS measurement).
- Set 8-level rated operating voltage through knob.
- Set the reset delay time through the knob.
- 2 C/O output.
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1 %.
- Relay status is indicated by LED.
- 2-MODULE,DIN rail mounting.

Type Designation

YCV8 - □ / □	Rated control supply voltage: M460:220-230-240-380-400-415-440-460VAC(P-P) M265:127-132-138-220-230-240-254-265VAC(P-N)
	Funcion Mode:table 1
	YCV8 Series

Table 1

Function code	Over-voltage	Under-voltage	Asymmetry	Delay time	Phase sequence	Phase failure	Reset time
09			8%		●	●	
10	2%...20%	-20%...2%	5%...15%	0.1s...10s	●	●	0.1s...10s

Note:the function is available

Motor Control & Protection

YCV8 Voltage Relay

Technical parameters

Technical parameters	M460	M265
Function	Monitoring 3-phase voltage	
Monitoring terminals	L1-L2-L3	L1-L2-L3-N
Supply terminals	L1-L2	L1-N
Voltage range	220-230-240-380-400-415-440-460(P-P)	127-132-138-220-230-240-254-265(P-N)
Rated supply frequency	45Hz-65Hz	
Measuring range	176V-552V	101V-318V
Threshold adjustment voltage	2%-20%of Un selected	
Adjustment of asymmetry threshold	5%-15%	
Hysteresis	2%	
Supply indication	green LED	
Time delay	Adjustable 0.1s-10s,10%	
Measurement error	<1%	
Run up delay at power up	0.5s time delay	
Knob setting accuracy	10% of scale value	
Reset time	1000ms	
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)	
Output	1XSPDT	
Current rating	10A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1X10 ⁷	
Electrical life(AC1)	1X10 ⁵	
Operating temperature	-20°C to +55°C (-4°F to 131°F)	
Storage temperature	-35°C to +75°C (-22°F to 158°F)	
Mounting/DIN rail	Din rail EN/IEC 60715	
Protection degree	IP40 for front panel/IP20 terminals	
Operating position	any	
Overvoltage cathegory	III.	
Pollution degree	2	
Max.cable size(mn?)	solid wiremax.1X2.5or2X1.5/with sleeve max.1X2.5(AWG 12)	
Dimensions	90X18X64mm	
Weight	64g	
Standards	EN 60255-1,IEC60947-5-1	

Note:

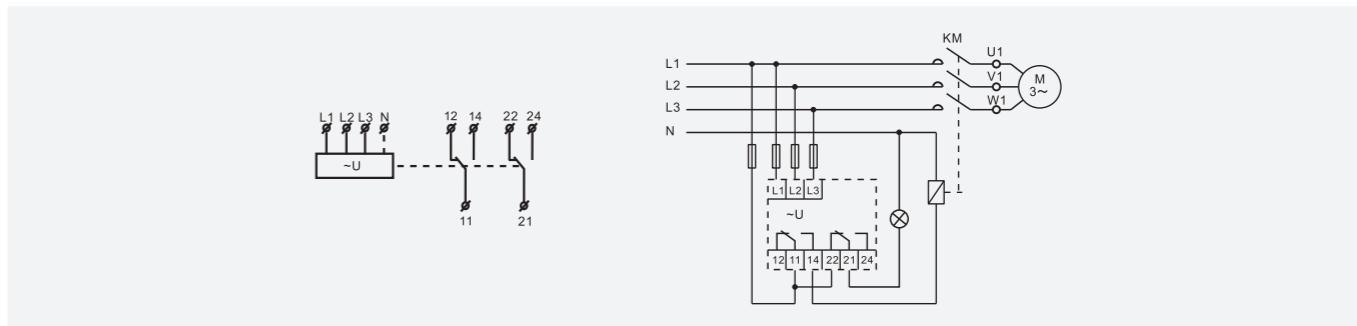
$$\text{Asy} = \frac{\text{Umax}-\text{Umin}}{\text{Uavr}} \times 100\% \quad \text{Umax} = \text{Max}(\text{U}_1, \text{U}_2, \text{U}_3) \\ \text{Umin} = \text{Min}(\text{U}_1, \text{U}_2, \text{U}_3)$$

$$\text{Uavr} = \frac{\text{U}_1+\text{U}_2+\text{U}_3}{3}$$

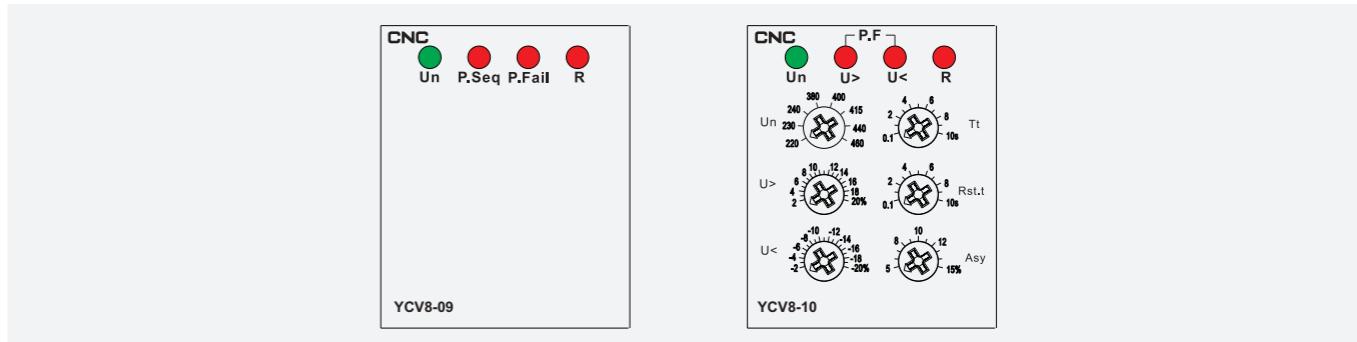
Motor Control & Protection

YCV8 Voltage Relay

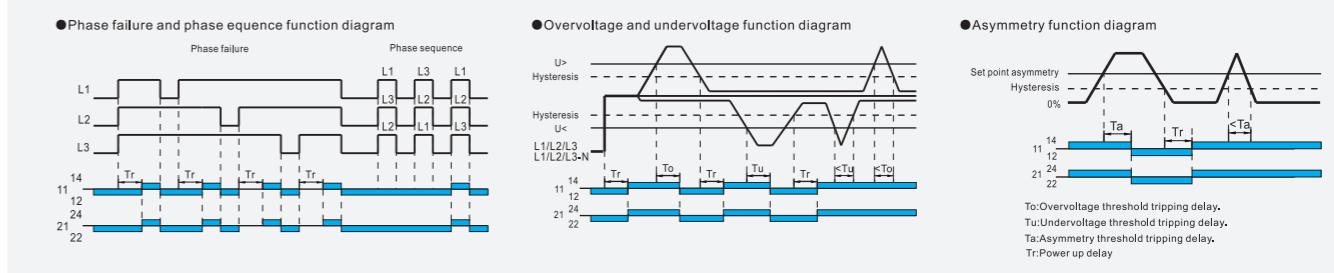
Wiring Diagram



Panel Diagram



Functions Diagram



Dimensions(mm)

