YCT8 Time Relay
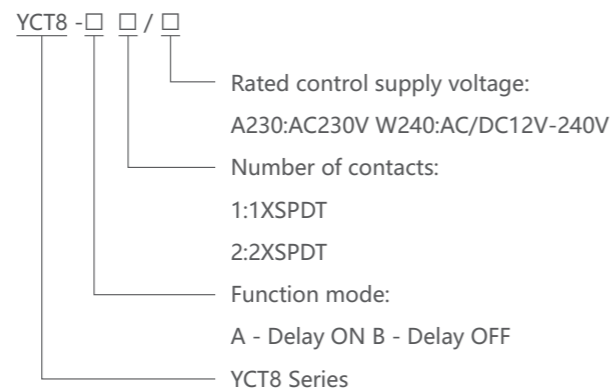
Applications

-Suitable for applications where function and time requirements are know.
-Time switch , possible to be used for pump decay time after switching heating off,
 switching of fans.

Function Features

-Single-function relay with possibility of time setting by a potentiometer. -Choice of
 2 functions:
 A:Delay ON
 B:Delay OFF
-Time scale 0.1 s -10 days divided into 10 ranges.
-Relay status is indicated by LED.
-1-MODULE.DIN rail mounting.

Type Designation

YCT8 -☐ ☐ / ☐

Rated control supply voltage:
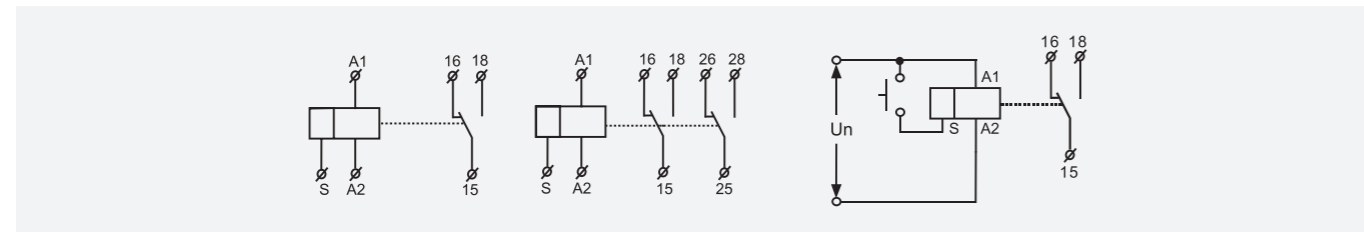
A230:AC230V W240:AC/DC12V-240V

Number of contacts:

1:1XSPDT

2:2XSPDT

Function mode:

A - Delay ON B - Delay OFF

YCT8 Series

D

Technical parameters

Technical parameters	YCT8-A1/B1	YCT8-A2/B2
Function	A,B,C,D,E,F,G,H,I,J	
Supply terminals	A1-A2	
Voltage range	AC/DC 12-240V(50-60Hz)	
Burden	AC 0.09-3VA/DC 0.05-1.7W	
Voltage range	AC230V(50-60Hz)	
Power input	AC max.6VA/1,3W	AC max.6VA/1,9W
Supply voltage tolerance	-15%;+10%	
Supply indication	green LED	
Time ranges	0.1s-10days,ON,OFF	
Time setting	potentionmeter	
Time deviation	10%-mechanical setting	
Repeat accuracy	0.2%-set value stability	
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)	
Output	1XSPDT	2XSPDT
Current rating	1X16A(AC1)	2X16A(AC1)
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	$1X10^7$	
Electrical life(AC1)	$1X10^5$	
Reset time	max.200ms	
Operating temperature	-20°C to +55°C (-4°Fto131°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(mn²)	solid wire max.1X2. 5or2X1. 5/with sleeve max.1X2.5 (AWG 12)	
Dimensions	90X18X64mm	
Weight	1XSPDT: W240-62g,A230-60g	
	2XSPDT:W240-82g,A230-81g	
Standards	EN 61812-1,IEC60947-5-1	

D

Functions Diagram

A - Delay ON

B - Delay OFF

Wiring Diagram

Time Range

0.1 - 1s   1 - 10s   6 - 60s   1 - 10min   6 - 60min   1 - 10hr   0.1 - 1day   1 - 10day   only ON   only OFF

Dimensions(mm)
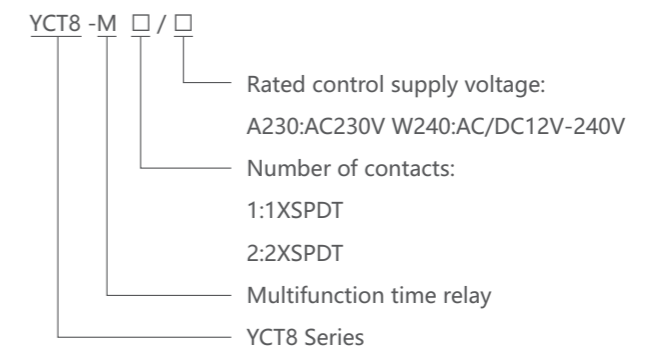
95

90

18max   Ø4.2   64

D

D

Applications

-Multifunction time relay can be used for electrical appliances, control of lights, heating, motors, pumps and fans (10 functions, 10 time ranges, multi-voltage).

Function Features

-10 functions: - 5 time functions controlled by supply voltage
-4 time functions controlled by control input
-1 function of latching relay
-Comfortable and well-arranged function and time-range setting by rotary switches.
-Time scale 0.1 s -10 days divided into 10 ranges.
-Relay status is indicated by LED.
-1-MODULE.DIN rail mounting.

Type Designation

YCT8 -M ☐ / ☐

Rated control supply voltage:

A230:AC230V W240:AC/DC12V-240V

Number of contacts:

1:1XSPDT

2:2XSPDT

Multifunction time relay

YCT8 Series

YCT8 Time Relay

Technical parameters

Technical parameters	YCT8-M1	YCT8-M2
Function	A,B,C,D,E,F,G,H,I,J	
Supply terminals	A1-A2	
Voltage range	AC/DC 12-240V(50-60Hz)	
Burden	AC 0.09-3VA/DC 0.05-1.7W	
Voltage range	AC230V(50-60Hz)	
Power input	AC max.6VA/1,3W	AC max.6VA/1,9W
Supply voltage tolerance	-15%;+10%	
Supply indication	green LED	
Time ranges	0.1s-10days,ON,OFF	
Time setting	potentionmeter	
Time deviation	10%-mechanical setting	
Repeat accuracy	0.2%-set value stability	
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)	
Output	1XSPDT	2XSPDT
Current rating	1X16A(AC1)	2X16A(AC1)
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	$1X10^7$	
Electrical life(AC1)	$1X10^5$	
Reset time	max.200ms	
Operating temperature	-20°C to +55°C (-4°Fto131°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^2)	solid wire max.1X2. 5or2X1. 5/with sleeve max.1X2.5 (AWG 12)	
Dimensions	90X18X64mm	
Weight	1XSPDT: W240-62g,A230-60g	
	2XSPDT:W240-82g,A230-81g	
Standards	EN 61812-1,IEC60947-5-1	

D

Functions Diagram

A:On Delay (Power On)
When the input voltage U is applied, timing delay t begins. Relay con¬tacts R change state after time delay is complete. Contacts R return to their shelf state when input voltage U is removed. Trigger switch is not used in this function.
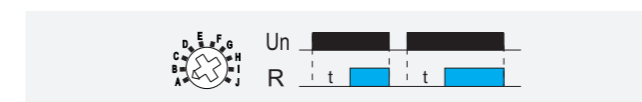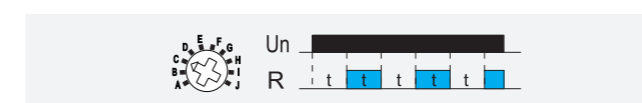
BJnterval (Power On)
When input voltage U is applied, relay contacts R change state immediately and timing cycle begins. When time delay is complete, contacts return to shelf state. When input voltage U is removed, contacts will also return to their shelfstate. Trigger switch is not used in this function.

C:Repeat Cycle (Starting Off)
When input voltage U is applied, time delay t begins. When time delay t is complete, relay contacts R change state for time delay t. This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function.

D: Repeat Cycle (Starting On)
When input voltage U is applied, relay contacts R change state imme¬diately and time delay t begins. When time delay t is complete, contacts return to their shelf state for time delay t. This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function.

E: Off Delay (S Break)
Input voltage U must be applied continuously. When trigger switch S is clo¬sed, relay contacts R change state. When trigger switch S is opened, delay t begins. When delay t is complete, contacts R return to their shelf state. If trigger switch S is closed before time delay t is complete, then time is reset. When trigger switch S is opened, the delay begins again, and relay contacts R remain in their energized state. If input voltage U is removed, relay contacts R return to their shelf state.
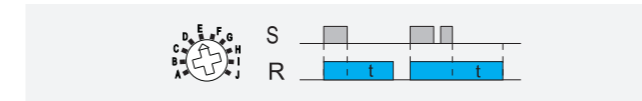
F:Single Shot
Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of the trigger signal S, the relay contacts R transfer and the preset time t begins. During time-out, the trigger signal S is ignored. The relay resets by applying the trigger switch S when the relay is not energized.
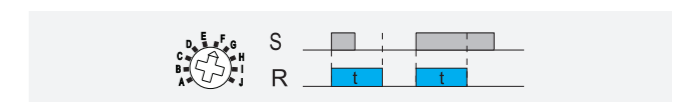
G:Single Shot Trailing Edge (Non-Retriggerable)
Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of the trigger signal S, the relay contacts R transfer and the preset time t begins. At the end of the preset time t, the relay contacts R return to their normal condition unless the trigger switch S is opened and closed prior to time out t (before preset time elapses). Continuous cycling of the trigger switch S at a rate faster than the preset time will cause the relay contacts R to remain closed. If input voltage U is removed, relay contacts R return to their shelf state.
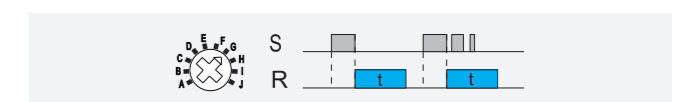
H:On/Off Delay
Input voltage U must be applied continuously. When trigger switch S is closed, time delay t begins. When time delay t is complete, relay contacts R change state and remain transferred until trigger switch S is opened.
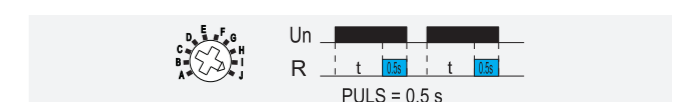If input voltage U is removed, relay contacts R return to their shelfesta.
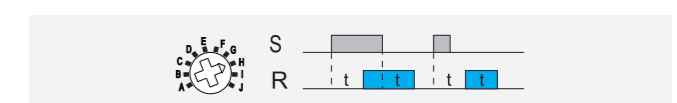
I: Latching relay
Input voltage U must be applied continuously. Output changes state with every trigger switch S closure. If input voltage U is removed, relay contacts R return to their shelf state.
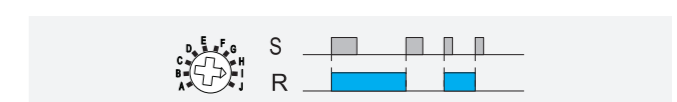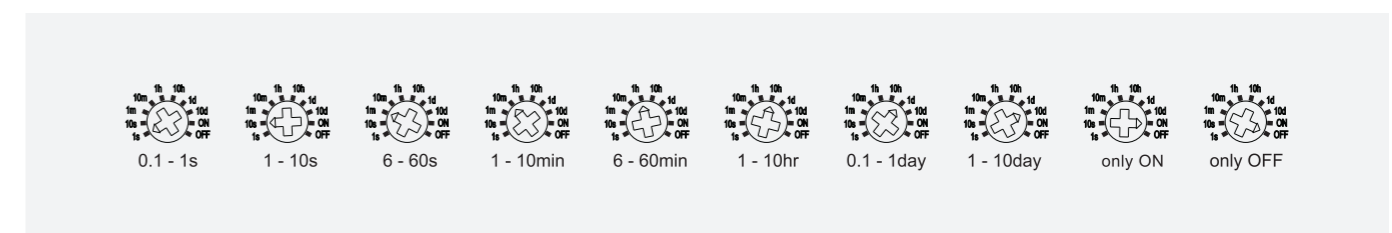
J:Pulse generator
Upon application of input voltage U, a single output pulse of 0.5 seconds is delivered to relay after time delay t. Power must be removed and re¬applied to repeat pulse. Trigger switch is not used in this function.
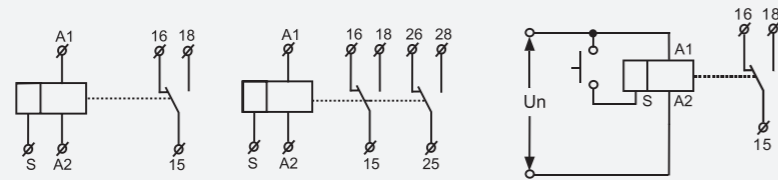
PULS = 0.5 s
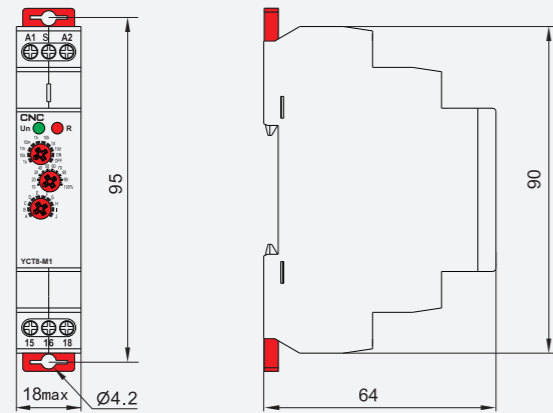
Time Range

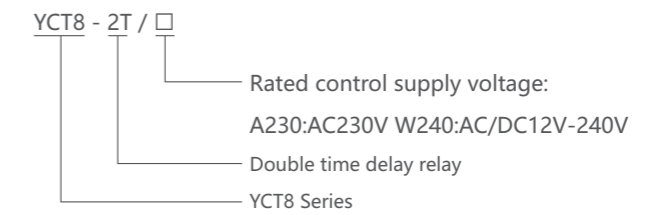| 0.1 - 1s	1 - 10s	6 - 60s	1 - 10min	6 - 60min	1 - 10hr	0.1 - 1day	1 - 10day	only ON	only OFF

D

Wiring Diagram

Dimensions(mm)

Applications

-For gradual switching of heavy powers (e.g. el.heating), prevents current strokes in the main.

Function Features

-2x Delay ON (2 time relays in one)
-Time scale 0.1s -10 days divided into 10 time ranges: 0.1s-1s/1s-10s/ 0.1 min -1 min / 1min - 10min /0.1h - 1h/ 1h - 10hrs / 0.1 day -1 day /1 day -10 days / ON / OFF.
-Times t1 and t2 are independantly adjustable.
-11 and t2 are switched on after supply voltage connection
-Relay status is indicated by LED.
-1-MODULE,DIN rail mounting.

Type Designation

YCT8 - 2T / □

Rated control supply voltage:

A230:AC230V W240:AC/DC12V-240V

Double time delay relay

YCT8 Series

YCT8 Time Relay

Technical parameters

| Technical parameters	YCT8-2T
Function	2x Delay ON
Supply terminals	A1-A2
Voltage range	AC/DC 12-240V(50-60Hz)
Burden	AC 0.09-3VA/DC 0.05-1.7W
Voltage range	AC230V(50-60Hz)
Power input	ACmax.6VA/1.9W
Supply voltage tolerance	-15%;+10%
Supply indication	green LED
Time ranges	0.1s-10days,ON,OFF
Time setting	potentionmeter
Time deviation	10%-mechanical setting
Repeat accuracy	0.2%-set value stability
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)
Output	2XSPDT
Current rating	16A/AC1
Switching voltage	250VAC/24VDC
Min.breaking capacity DC	500mW
Output indication	red LED
Mechanical life	1X107
Electrical life(AC1)	1X105
Reset time	max.200ms
Operating temperature	-20°C to +55°C (-4Tto131°F)
Storage temperature	-35°C to +75°C (-22°F to 158°F)
Mounting/DIN rail	Din rail EN/IEC 60715
Protection degree	IP40 forfront panel/IP20 terminals
Operating position	any
Overvoltage cathegory	III.
Pollution degree	2
Max.cable size(mrrf)	solid wire max.1X2. 5or2X1.5/with sleeve max.1X2. 5(AWG 12)
Dimensions	90X18X64mm
Weight	W240-82g,A230-82g
Standards	EN61812-1JEC60947-5-1

Wiring Diagram
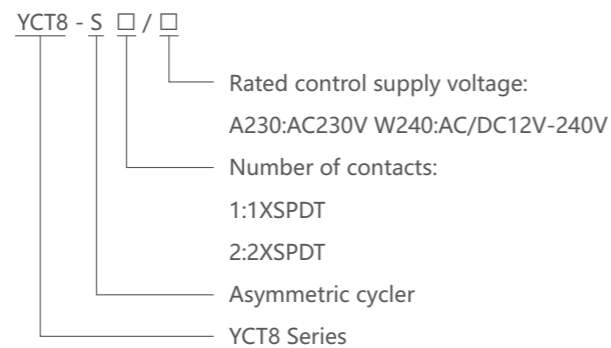

Functions Diagram

Dimensions(mm)

D
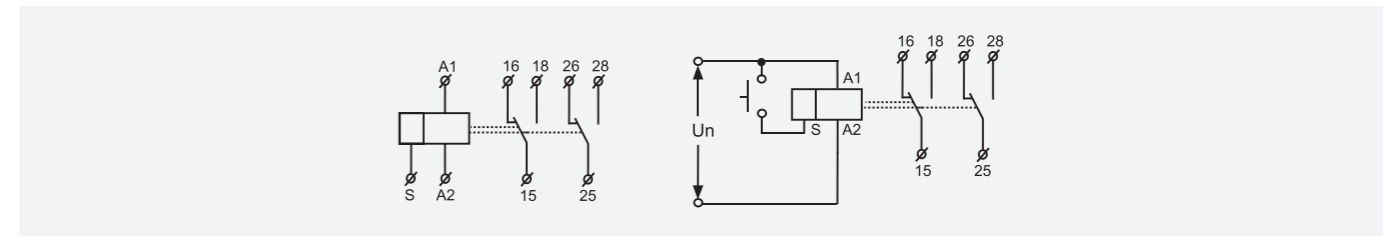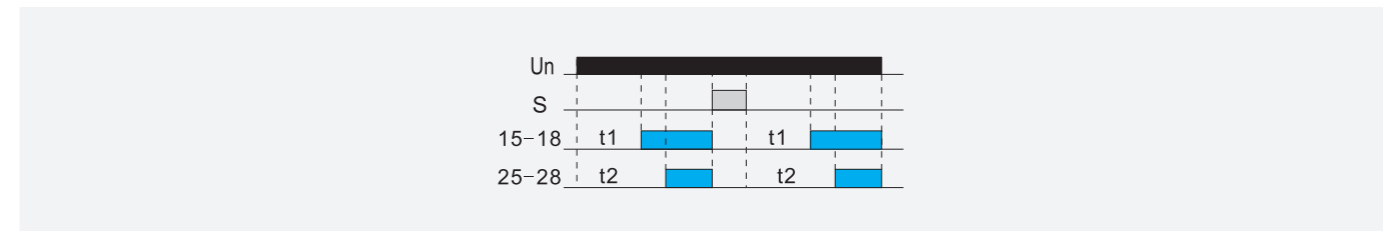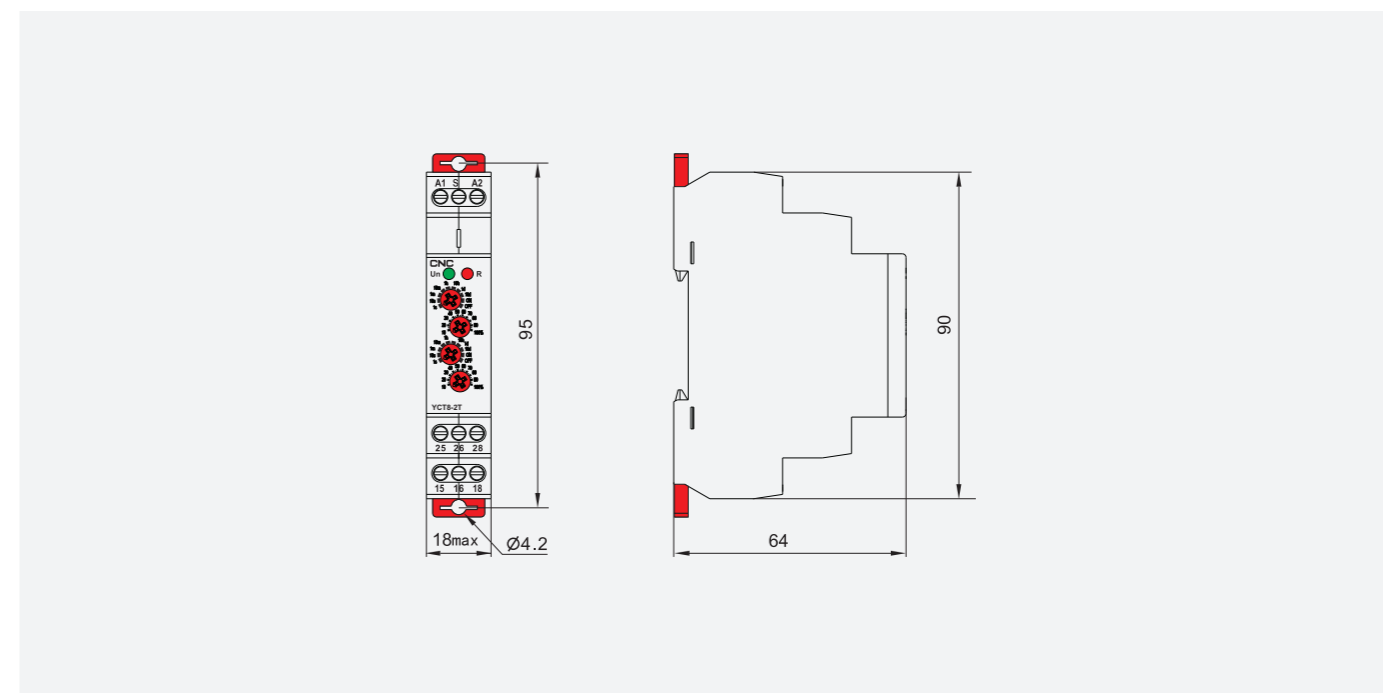
Applications

-It is used for regular room ventilation, cyclic dehumidification, light control, circulating pumps, noon signs, etc.

Function Features

-2 time functions:
-Cycler beginning with pulse
-Cycler beginning with pause
-Function choice is done by an external jumper of terminals S-A1.
-Time scale 0.1 s -100 days devided into 10 time ranges:
(0.1 s -1 s/1 s- 10s/0.1 min -1 min /1 min -10 min /0.1 hrs -1 h
/1 hrs -10 hrs / 0.1 day -1 day/1 day -10 days /3 days - 30 days / 10 days -100 days).
-Relay status is indicated by LED.
-1-MODULE,DIN rail mounting.

Type Designation

YCT8 - S □ / □

Rated control supply voltage:
A230:AC230V W240:AC/DC12V-240V

Number of contacts:
1:1XSPDT
2:2XSPDT

Asymmetric cycler

YCT8 Series

D

Technical parameters

| Technical parameters	YCT8-S1	YCT8-S2
Function	Asymmetric cycler time relay	
Supply terminals	A1-A2	
Voltage range	AC/DC12-240V(50-60Hz)	
Burden	AC 0.09-3VA/DC 0.05-1.7W	
Voltage range	AC230V(50-60Hz)	
Power input	AC max.6VA/1,3W	AC max.6VA/1,9W
Supply voltage tolerance	-15%; + 10%	
Supply indication	green LED	
Time ranges	0.1s-10days	
Time setting	potentionmeter	
Time deviation	10%-mechanical setting	
Repeat accuracy	0.2%-set value stability	
Temperature coefficient	0.05%/°C,at=20°C(0.05%T, at=68T)	
Output	1XSPDT	2XSPDT
Current rating	1X16A(AC1)	2X16A(AC1)
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1X107	
Electrical life(AC1)	1X105	
Reset time	max.200ms	
Operating temperature	-20°C to +55°C (-4T to 131T)	
Storage temperature	-35°C to +75°C (-22T to 158T)	
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(mn²)	solid wire max.1X2.5or2X1. 5/with sleeve max.1X2. 5(AWG 12)	
Dimensions	90X18X64mm	
Weight	1XSPDT: W240-62g,A230-61g	
	2XSPDT: W240-82g,A230-82g	
Standards	EN 61812-1,IEC60947-5-1	

YCT8 Time Relay

D

D

Wiring Diagram
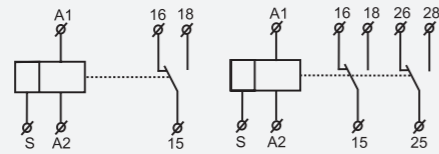
Functions Diagram

Cycler beginning with pulse
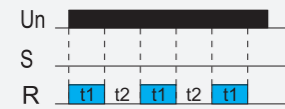
Cycler beginning with pause(jumper A1-S)
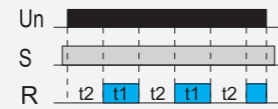
Dimensions(mm)
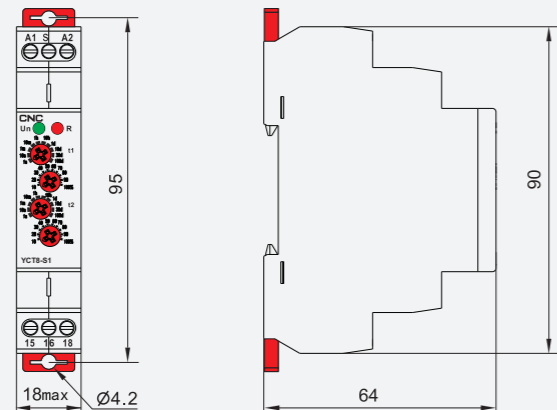
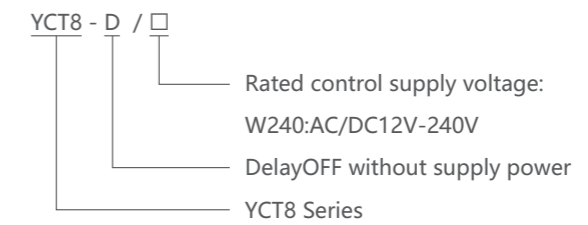## Applications

-Back-up source for Delay OFF in case of voltage failure (emergency lighting, emergency respirator,or protection of el. controlled doors - in case of fire).

Function Features

-Time range (adjustable by rotary switch and fi ne setting by potentiometer): 0.1 s - 10 min.
-Voltage range: AC/DC12-240V , clamp terminals.
-Relay status is indicated by LED.
-1-MODULE.DIN rail mounting.

Type Designation

YCT8 - D / □

Rated control supply voltage:

W240:AC/DC12V-240V

DelayOFF without supply power

YCT8 Series

YCT8 Time Relay

Technical parameters

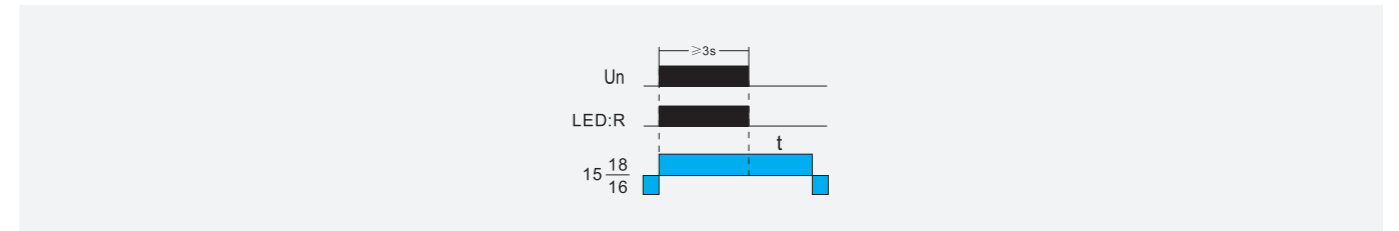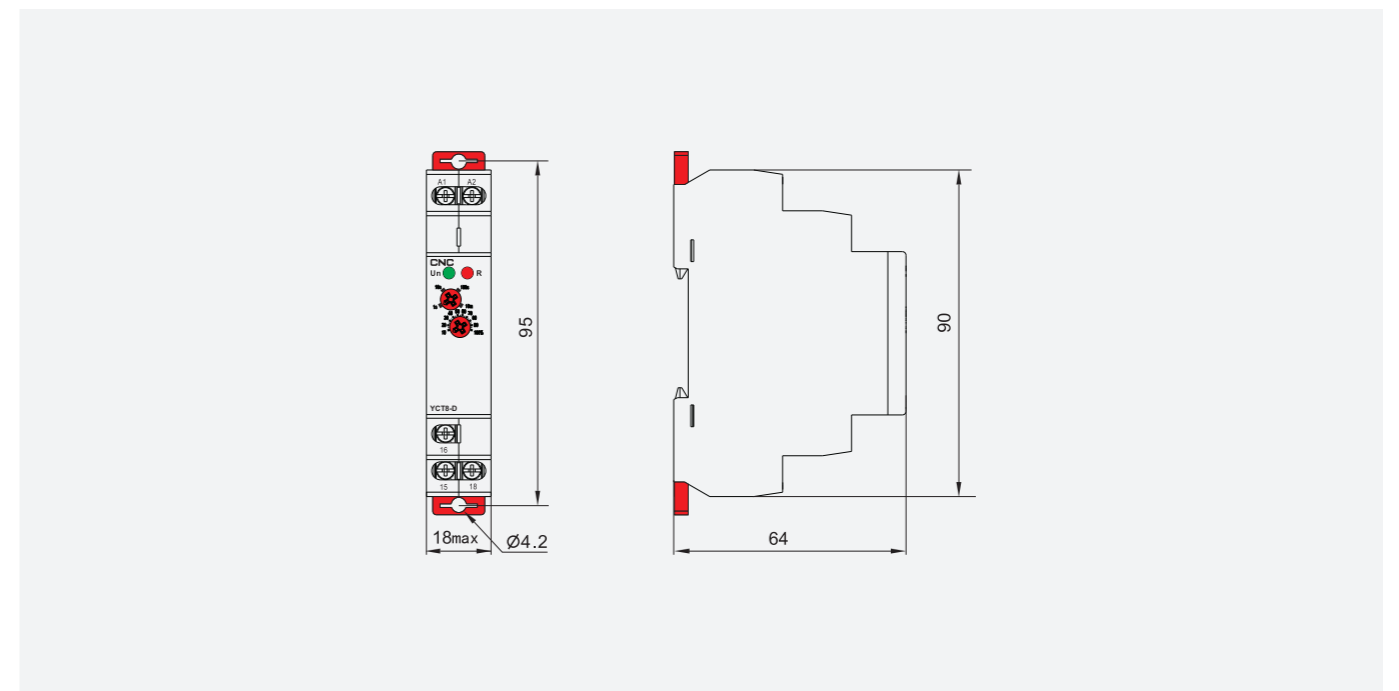| Technical parameters	YCT8-D
Function	Delay OFF without supply power
Supply terminals	A1-A2
Voltage range	AC/DC 12-240V(50-60Hz)
Burden	AC 0.09-3VA/DC 0.05-1.5W
Supply voltage tolerance	-15%; + 10%
Supply indication	green LED
Time ranges	0.1s-10min
Time setting	potentionmeter
Time deviation	10%-mechanical setting
Repeat accuracy	0.2%-set value stability
Mininum power time	3s
Temperature coefficient	0.05%/°C,at=20°C(0.05%°F, at=68°F)
Output	1XSPDT
Current rating	16A/AC1
Switching voltage	250VAC/24VDC
Min.breaking capacity DC	500mW
Output indication	red LED
Mechanical life	1X106
Electrical life(AC1)	5X104
Reset time	max.200ms
Operating temperature	-20°C to +55°C (-4T to131°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 wire max.1X2.5or2X1,5/with sleeve max. 1X2. 5(AWG 12)
Dimensions	90X18X64mm
Weight	66g
Standards	EN 61812-1,IEC60947-5-1

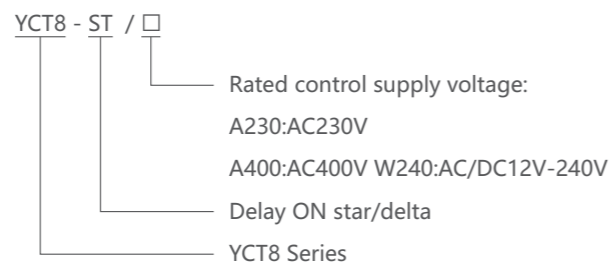## Wiring Diagram

Functions Diagram

Dimensions(mm)

Applications

-Designated for delay ON of motors star/delta.

Function Features

-Time t1 (star):
time scale 0.1 s - 10min devided into 4 time ranges rough time setting by rotary switch.
-Time t2 (delay):
time scale 0.1 s -1 s
time setting by potentiometer
-Relay status is indicated by LED.
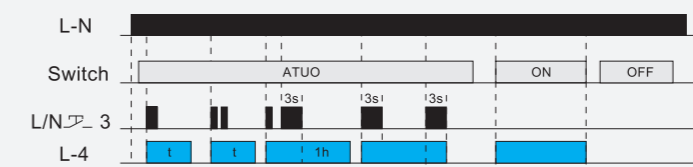-1-MODULE.DIN rail mounting.

Type Designation

YCT8 - ST / □

Rated control supply voltage:
A230:AC230V
A400:AC400V W240:AC/DC12V-240V
Delay ON star/delta
YCT8 Series

Technical parameters

| Technical parameters	YCT8-LS
Function	Delay ON star/delta
Supply terminals	A1-A2
Voltage range	AC/DC 12-240V(50-60Hz)
Burden	AC0.3-2VA/DC0.1-1.2W
Voltage rangeo	AC 230V/AC400V(50-60Hz)
Power input< <	ACmax.6VA/1.3W
Supply voltage tolerance	-15%;+10%
Supply indication	green LED
Time ranges	Range of time delay H：0.1 s-10 min .Switch time t2:0.1 s-1 s
Time setting	potentionmeter
Time deviation	10%-mechanical setting
Repeat accuracy	0.2%-set value stability
Temperature coefficient	0.05%/oC,at=20oC(0.05%T, at=68T)
Output	2XSPDT
Current rating	16A/AC1
Switching voltage	250VAC/24VDC
Min.breaking capacity DC	500mW
Output indication	red LED
Mechanical life	1X107
Electrical life(AC1)	1X105
Reset time	max.200ms
Operating temperature	-20°C to +55°C (-4°F to 131T)
Storage temperature	-35°C to +75°C (-22T to 158T)
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(mrr?)	solid wire max.1X2.5or2X1.5/with sleeve max. 1X2. 5(AWG 12)
Dimensions	90X18X64mm
Weight	W240-82g,A230-80g
Standards	EN 61812-1,IEC60947-5-1

Functions Diagram

YCT8 Time Relay

Wiring Diagram

A1
A2
16 18 26 28
15 25
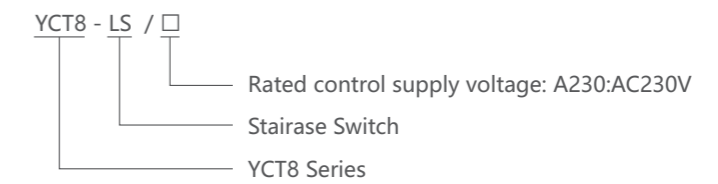
Start up of motor(λ-Δ)
(motor)
S1 S3 S2
Δ λ
L1
L2
L3
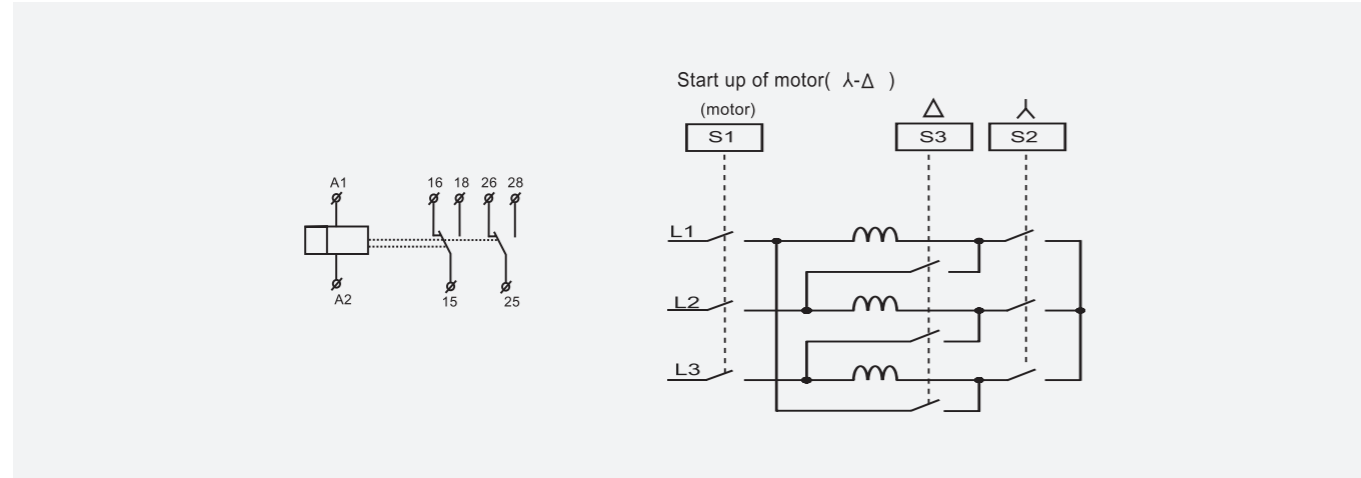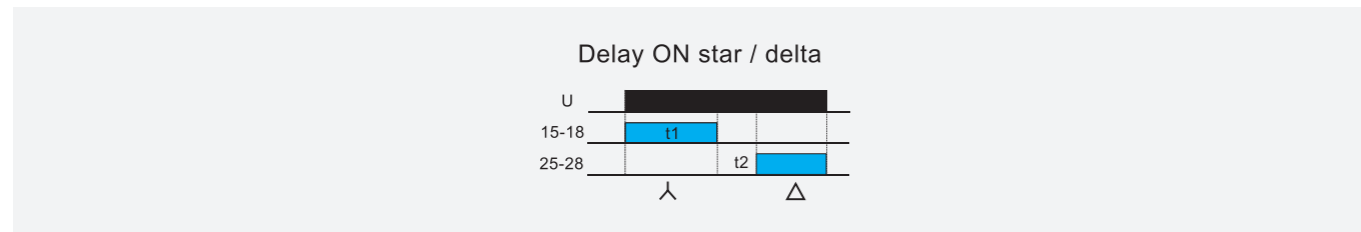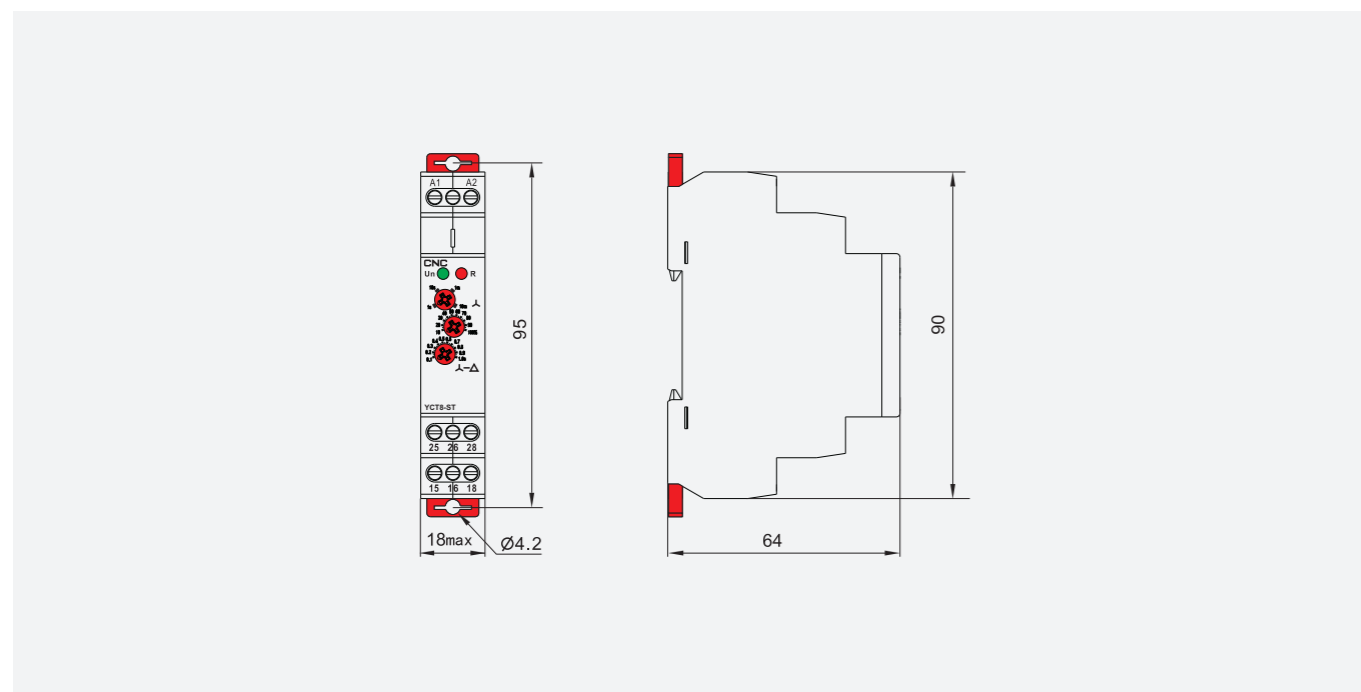
Applications

-It is used for delayed switching of lights in the corridors, entrances, stairways, halls or for delayed finish of fans (WC, bathroom, etc.).

Function Features

-Operating system switch:
ON - output is constantly ON .
AUTO - timing according to adjusting by potentiometer in range 0.5 - 20 min OFF- output is constantly OFF .
-Voltage range: AC 230 V, clamp terminals.
-Relay status is indicated by LED.
-1-MODULE.DIN rail mounting.

Functions Diagram

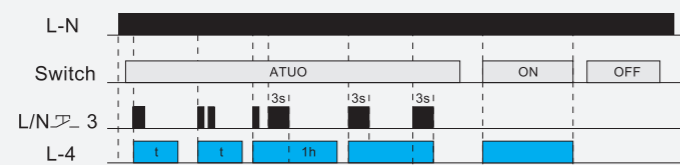Delay ON star / delta

U
15-18   t1
25-28   t2
λ   Δ

Dimensions(mm)

95
90
18max   Ø4.2
64

Type Designation

YCT8 - LS / □

Rated control supply voltage: A230:AC230V

Stairase Switch

YCT8 Series

YCT8 Time Relay

Technical parameters

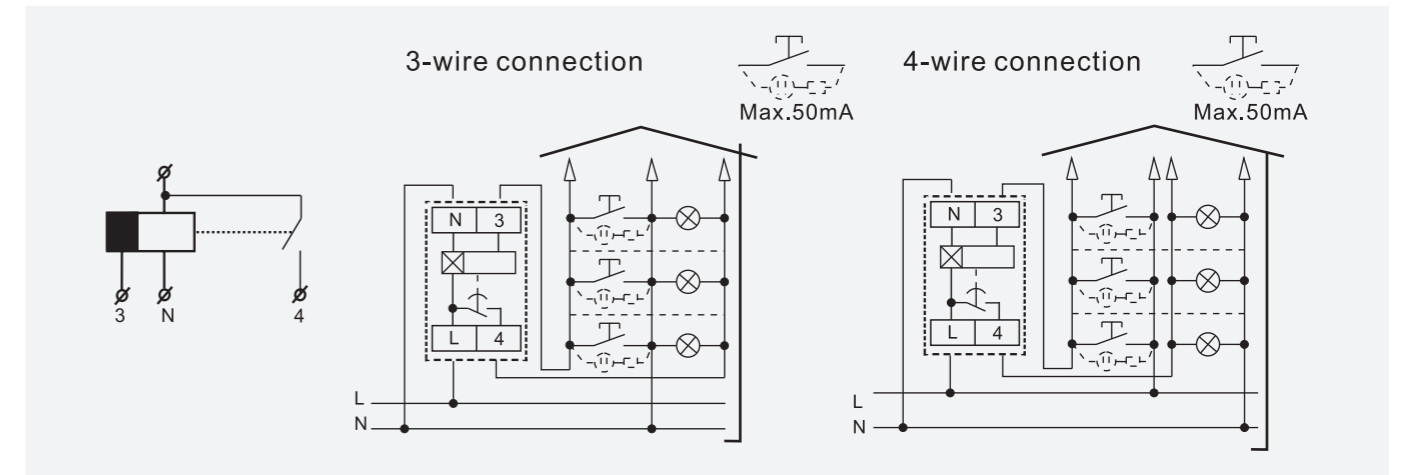| Technical parameters	YCT8-LS
Function	Delay ON star/delta
Supply terminals	A1-A2
Voltage range	AC/DC 12-240V(50-60Hz)
Burden	AC0.3-2VA/DC0.1-1.2W
Voltage rangeo	AC 230V/AC400V(50-60Hz)
Power input< <	ACmax.6VA/1.3W
Supply voltage tolerance	-15%;+10%
Supply indication	green LED
Time ranges	Range of time delay H：0.1 s-10 min .Switch time t2:0.1 s-1 s
Time setting	potentionmeter
Time deviation	10%-mechanical setting
Repeat accuracy	0.2%-set value stability
Temperature coefficient	0.05%/oC,at=20oC(0.05%T, at=68T)
Output	2XSPDT
Current rating	16A/AC1
Switching voltage	250VAC/24VDC
Min.breaking capacity DC	500mW
Output indication	red LED
Mechanical life	1X107
Electrical life(AC1)	1X105
Reset time	max.200ms
Operating temperature	-20°C to +55°C (-4°F to 131T)
Storage temperature	-35°C to +75°C (-22T to 158T)
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(mrr?)	solid wire max.1X2.5or2X1.5/with sleeve max. 1X2. 5(AWG 12)
Dimensions	90X18X64mm
Weight	W240-82g,A230-80g
Standards	EN 61812-1,IEC60947-5-1

Functions Diagram

Wiring Diagram

3-wire connection   Max.50mA   4-wire connection   Max.50mA

Types of lamps

2000W	2000W	1000W	900W(125uF)	400W	300W

Example

Dimensions(mm)