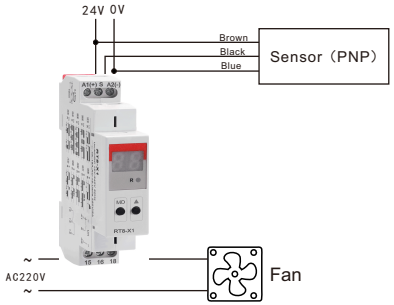
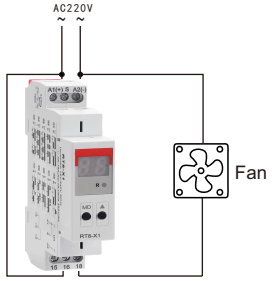
Examples

NOTE: the use case is for reference only to understand the working principle of the relay. The actual application should be wired according to the actual needs.

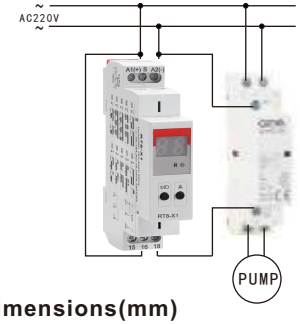
CASE1:
The working mode is set to 07 and accessed through the sensor (PNP). When the sensor senses the signal, the relay acts (15-18 is closed) and the ventilation fan works. When the sensor loses the signal, the relay disconnects after a delay t (15-18 is disconnected) and the ventilation fan stops working.



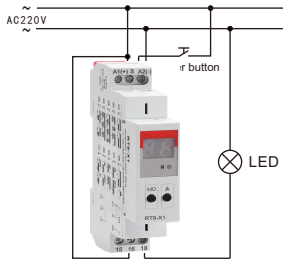
CASE 2:
The working mode is set to 03, the ventilation fan is turned on for 10 hours and turned off for 1 hour, and the ventilation fan is cycled on and off.



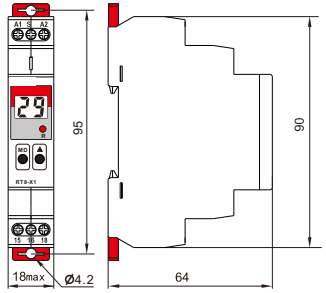
CASE 3:
When the working mode is set to 02, the time relay is powered on (15-18 is closed), the contactor is closed, the water pump starts to work, the delay t reaches, the relay is disconnected (15-18 is disconnected), the contactor is disconnected, and the water pump stops working.



CASE 4:
The working mode is set to 08, press the trigger button, the time relay acts (15-18 is closed), turn on the LED, delays t, the relay is disconnected (15-18 is disconnected), and the LED is closed.



Dimensions(mm)



Disposal of Electrical Waste
All electrical waste should be disposed of in compliance with current WEEE regulations.

Caution
The products must be installed by qualified electricians. All and any electrical connections of the time relay shall comply with the appropriate safety standards.

Digital display time relay
Instruction Manual



General

■Applications
-Multifunctional time relay can be used for industrial equipment, lighting control, heating element control, motor, fan control.
-With 20 delay modes, the delay range covers 0.1 seconds to 99 days.

■Function Features
-20 delay modes:
-5 delay modes controlled by power supply
-13 delay modes controlled by signal
-ON, OFF mode
-Ultra wide delay range, 0.1 seconds - 99 days can be set.
- Relay status is indicated by LED.
- 1-MODULE,DIN rail mounting.

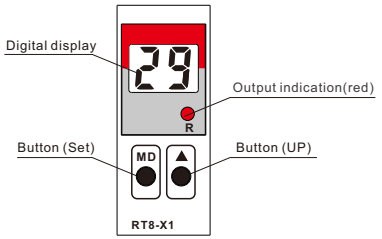
■Model and connotation

RT8 – X □/□
- Rated control supply voltage: A230:AC230V; W240:AC/DC12V-240V;
- Number of contacts: 1:1×SPDT; 2:2×SPDT;
- Digital Setting Time Relay
- RT8 Series

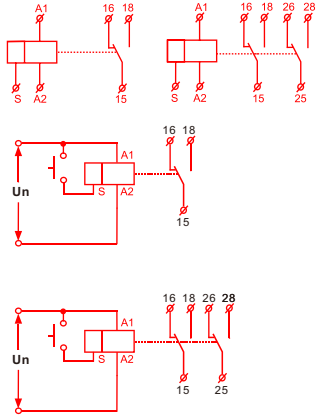
Technical parameters

		RT8-X1	RT8-X2
Function		20 functions	
Supply terminals		A1-A2	
Voltage range	W240	AC/DC 12-240V(50-60Hz)	
Burden	W240	AC 0.09-3VA/DC 0.05-1.7W	
Voltage range	A230	AC 230V(50-60Hz)	
Power input	A230	AC max.6VA/1.3W	AC max.6VA/1.9W
Supply voltage tolerance		-15%;+10%	
Time ranges		0.1s-99day,ON,OFF	
Time setting		Key setting	
Time deviation		≤1%	
Repeat accuracy		0.2%-set value stability	
Temperature coefficient		0.05%/℃,at=20℃(0.05%℉, at=68℉)	
Output		1×SPDT	2×SPDT
Current rating		1×16A(AC1)	2×16A(AC1)
Switching voltage		250VAC/24VDC	
Min.breaking capacity DC		500mW	
Output indication		red LED	
Mechanical life		1×10^7	
Electrical life(AC1)		1×10^5	
Reset time		max.200ms	
Operating temperature		-20℃ to +55℃ (-4℉ to 131℉)	
Storage temperature		-35℃ to +75℃ (-22℉ to 158℉)	
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^2)		solid wire max.1×2. 5or 2×1. 5/with sleeve max.1×2. 5(AWG 12)	
Dimensions		90×18×64mm	
Weight		1×SPDT: W240-62g,A230-60g	
		2×SPDT: W240-82g,A230-81g	
Standards		EN 61812-1,IEC60947-5-1	

Panel Diagram



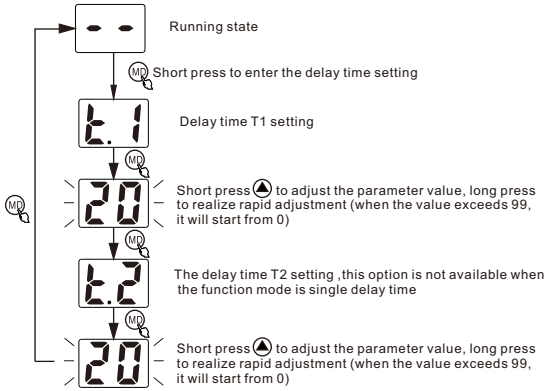
Wiring diagram



Adjustment of the product

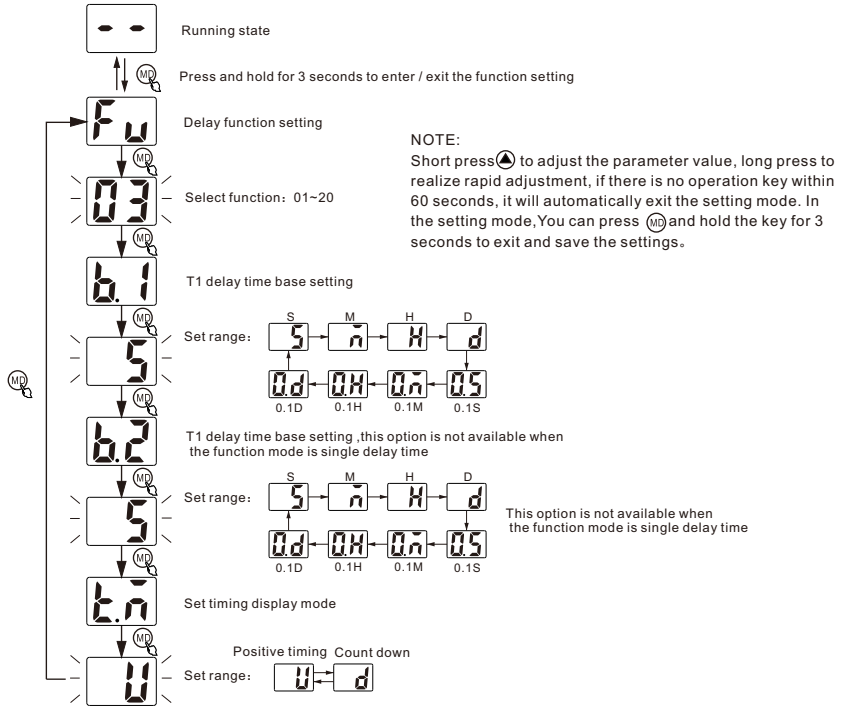
Fast adjustment of delay time

Short press MD to enter the interface of fast setting delay time, as shown below:



Delay function setting

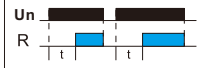
Long press MD 3 seconds to enter the function mode parameter setting interface, as shown below:



NOTE:
Short press ▲ to adjust the parameter value, long press to realize rapid adjustment, if there is no operation key within 60 seconds, it will automatically exit the setting mode. In the setting mode,You can press MD and hold the key for 3 seconds to exit and save the settings。

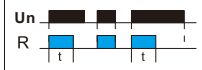
Function

01 On Delay (Power On)



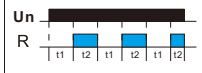
When relay Un is powered on, the relay starts to delay, and the output contact is closed after delay t. After the relay Un is de energized, the output contact is disconnected and the S control signal is invalid in this function mode.

02 Interval (Power On)



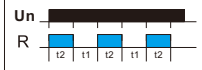
When relay Un is powered on, the relay output contact will be closed immediately and start delay. After delay t, the output contact will be disconnected. If the delay time t does not arrive and relay Un is powered off, the output contact will be disconnected, and the S control signal is invalid in this function mode.

03 Repeat cycle (Starting Off)



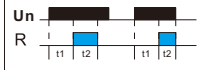
When relay Un is powered on, the relay starts to delay. After delay t1, the output contact is closed. At the same time, after delay t2, the relay output contact is disconnected. In this way, the cycle delay is delayed until relay Un is powered off, and the S control signal is invalid in this function mode.

04 Repeat cycle (Starting On)



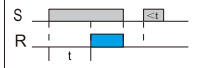
When the relay Un is powered on, the relay is closed and begins to delay. After the delay t2, the output contact is disconnected. At the same time, after the delay time t1, the relay output contact is closed. In this way, the cycle delay is delayed until the relay Un is powered off, and the S control signal is invalid in this function mode.

05 Pulse generator(Power On)



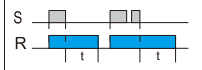
When relay Un is powered on, the relay starts to delay. After delay t1, the output contact is closed. At the same time, after delay t2, the relay is disconnected and maintained. After relay Un is powered off, the output contact is disconnected. S control signal is invalid in this function mode.

06 On delay with external contorl



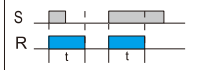
When the relay Un is in the power on state, when the S control terminal is connected, the relay starts to delay. After the delay t, the output contact is closed. When the S control terminal is disconnected, the output contact is disconnected.

07 Off delay with external start



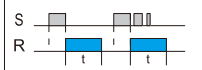
When the relay Un is in the power on state, when the S control terminal is connected, the relay will be closed immediately. When the S control terminal is disconnected, the delay will start. After the delay t, the output contact will be disconnected. During the delay process, the S control terminal will be connected and disconnected again, and the delay t will be cleared and delayed again。

08 Pulse I with external start



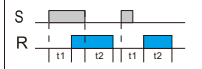
When the relay Un is in the energized state, when the S control terminal is connected, the relay is closed, and the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is connected again, and the delay t remains unchanged and continues to delay.

09 Pulse II with external start



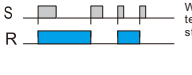
When the relay Un is in the energized state, when the S control terminal is disconnected, the relay is closed, and the relay starts to delay. After the delay t, the output contact is disconnected. During the delay t, the S control terminal is switched on and off again, and the delay t remains unchanged and continues to delay.

10 On/off delay with external contorl



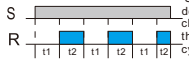
When the relay Un is in the energized state, when the S control terminal is connected, the relay starts to delay, and the output contact is closed after delay t1. When the S control terminal is disconnected, the relay starts to delay, and the output contact is opened after delay t2.

11 Latching relay



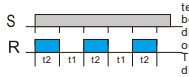
When the relay us is energized and the S control terminal is connected, the relay output contact state changes.

12 Repeat cycle with external contorl (Starting Off)



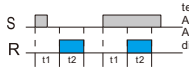
When the relay us is in the energized state, the S terminal is closed and the relay starts to delay. After the delay T1, the output contact is closed. At the same time, after the delay T2, the relay output contact is disconnected. This cycle delays until the S terminal is disconnected.

13 Repeat cycle with external contorl (Starting On)



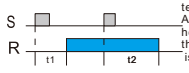
The relay Un is in the energized state, the S terminal is closed, the relay is closed and begins to delay, the output contact is disconnected after delay t2, and the relay output contact is closed after delay time t1. This cycle delays until the S terminal is disconnected.

14 Pulse generator with external start



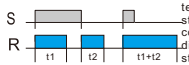
Relay Un is in the energized state. When terminal S is closed, the relay starts to delay. After delay T1, the output contact is closed. At the same time, after delay T2, the relay is disconnected.

15 Start-stop



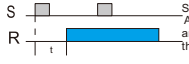
Relay Un is in the energized state. When terminal S is triggered, the relay starts to delay. After delay t1, the output contact is closed and held. When terminal S is triggered again, the relay starts to delay. After delay t2, the relay is disconnected.

16 Double delay off with external control



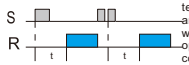
Relay Un is in the energized state. When terminal S is closed, the relay is closed and starts to delay. After delay t1, the output contact is disconnected. When terminal S is disconnected, the relay is closed again and starts to delay. After delay t2, the relay is disconnected.

17 On delay I by external start



The relay Un is in the energized state. When the S terminal is closed, the relay starts to delay. After the delay t, the output contact is closed and held. When the relay Un is disconnected, the relay is disconnected.

18 On delay II with external start



Relay Un is in the energized state. When terminal S is triggered, the relay starts to delay, and the output contact closes after delay t. when terminal S is triggered again, the relay opens and starts to delay, and the output contact closes after delay t. When relay Un is off, the relay is off.

19 Always ON



Relay Un is in the energized state, the relay is closed, Un is in the de energized state, and the relay is disconnected.

20 Always OFF



Relay Un is energized or de energized, and both relays are disconnected.