

General

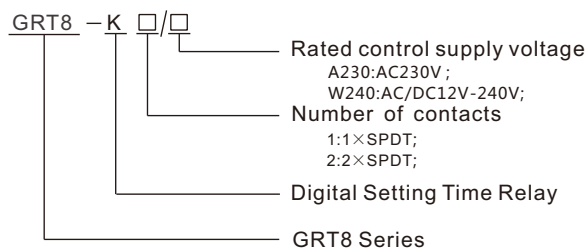
■ Applications

-Multifunctional time relay with digital settings can be used for industrial equipment, lighting control, heating element control, motor and fan control. It has four delay modes and the delay range covers 0.1 seconds to 99 hours.

■ Function Features

- Four functional modes can be set.
- Through digital dialing settings, it is easy to operate and set more precisely.
- Extra wide delay range, 0.1 seconds - 99 hours can be set.
- With AC/DC 12V-240V ultra wide operating voltage specifications are optional.
- The working state of the relay is indicated by the LED indicator.
- Ultra small size, only 18mm width, 35mm rail installation.

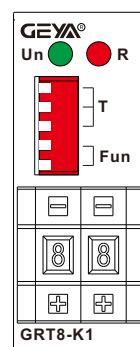
■ Model and connotation



Technical parameters

	GRT8-K1	GRT8-K2
Function	A,B,E,F,	
Supply terminals	A1-A2	
Voltage range	AC/DC 12-240V(50-60Hz)	
Burden	AC 0.09-3VA/DC 0.05-1.7W	
Voltage range	AC 230V(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-99h,ON,OFF	
Time setting	Digital setting	
Time deviation	≤1%	
Repeat accuracy	0.2%-set value stability	
Temperature coefficient	0.05%/°C, at=20°C(0.05°F, at=68°F)	
Output	1×SPDT	2×SPDT
Current rating	1×16A(AC1)	2×8A(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°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(mm ²)	solid wire max.1×2. 5or 2×1. 5/ with sleeve max.1×2. 5(AWG 12)	
Tightening torque	0.4Nm	
Dimensions	90×18×64mm	
Weight	1×SPDT: W240-64g,A230-64g 2×SPDT: W240-72g,A230-72g	
Standards	EN 61812-1,IEC60947-5-1	

Panel Diagram



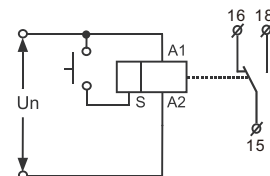
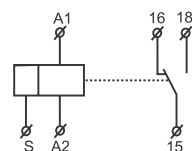
← Time Range setting

← Fuction setting

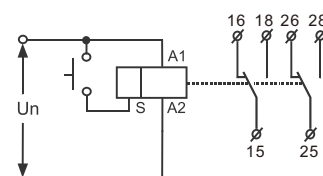
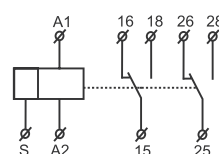
← Time setting

Wiring Diagram

GRT8-K1



GRT8-K2



Functions Diagram

A: On Delay (Power On)

When the input voltage U is applied, timing delay t begins. Relay contacts 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.



E: Off Delay (S Break)

Input voltage U must be applied continuously. When trigger switch S is closed, 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.



B: Interval (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 shelf state. Trigger switch is not used in this function.

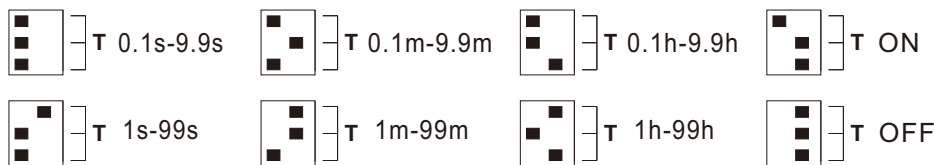


F: Single Shot

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.

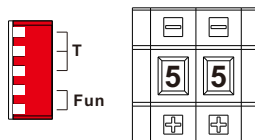


Time Range

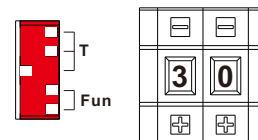


Setting example

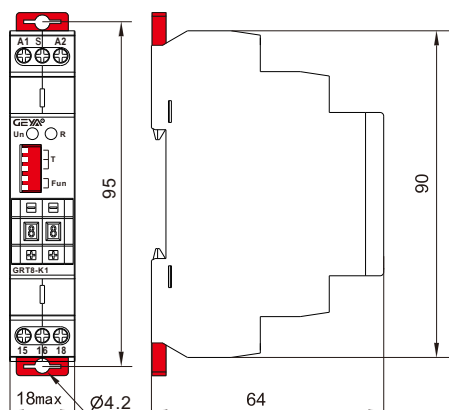
Example 1: set the working mode as A for 5.5 seconds as follows:



Example 2: set the working mode as E for 30 minutes as follows:



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 product shall comply with the appropriate safety standards.

<http://www.geya.net>