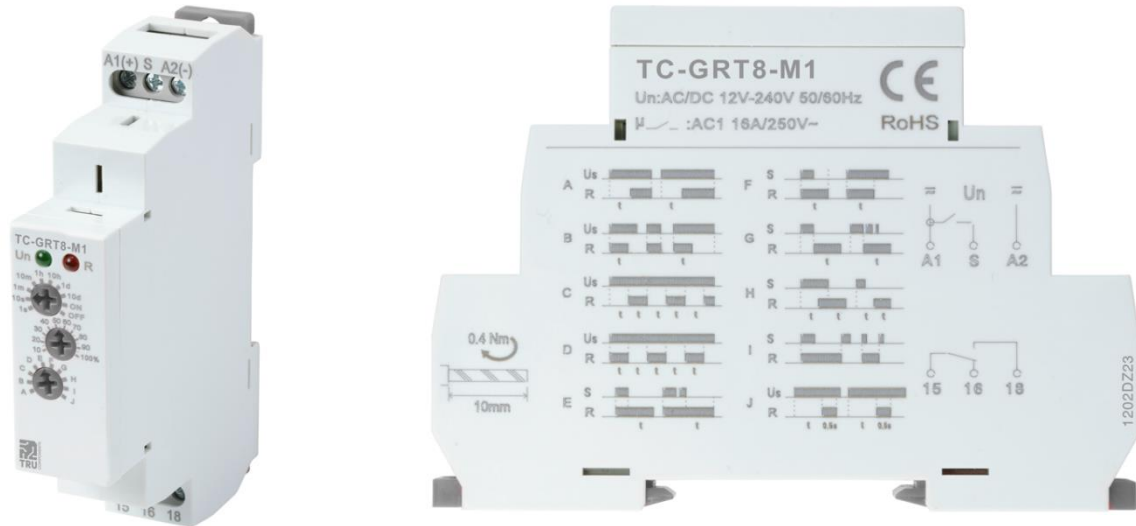


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Data Sheet

Multifunction Time Relay



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 delay modes with power supply control (A, B, C, D, J)
 - 4 delay models with signal control (E, F, G, H)
 - 1 delay mode with pulse (I)
- Rotary switches for setting functions and time ranges.
- Wide range of time settings (0.1 secs – 10 days)
- Relay status is indicated by LED.
- 1-module (18 mm), DIN rail mounting.

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Technical data

Supply terminals	A1-A2
Voltage range	AC/DC 12-240V(50-60Hz)
Burden	AC 0.09-3VA/DC 0.05-1.7W
Power input	AC max.6VA/1.3W
Supply voltage tolerance	-15%; +10%
Supply indication	green LED
Time Ranges	0.1s-10days, ON,OFF
Time setting	Selected by rotary microswitch
Accuracy	10%
Repeat time setting accuracy	0.2%
Temperature coefficient	0.05%/°C, at=20°C(0.05%°F · at=68°F)
Output	1 × SPDT
Current rating	1 × 16A(AC1)
Switching voltage	250VAC/24VDC
Min. switching power	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°Fto131°F)
Storage temperature	-35°C to+75°C (-22°Fto158°F)
Mounting/DIN rail	Din rail EN/IEC 60715
Protection degree	IP20
Mounting attitude	≤2000 m
Over voltage category	III
Pollution degree	2
Max. cable size(mm ²)	solid wire max.1×2.5mm ² or 2×1.5mm ²
Dimensions	90×18×64mm
Standards	EN/ IEC60947-5-1; 61812-1

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Function 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.



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.



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 immediately 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 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.



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.



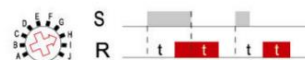
G: Single Shot Trailing Edge (Non-Retriggerable)

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.



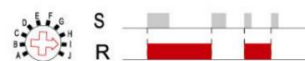
H: On/Off Delay

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 shelf state.



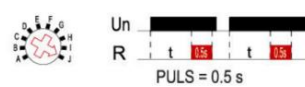
I: Latching relay

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 reapplied to repeat pulse. Trigger switch is not used in this function.



Wiring Diagram

