

Multi-Function Timer Relay

Model:CCMFMVTS12-230VAC/DC

Crompton controls
Monckton Road
Wakefield WF2 7AL
West Yorks,UK
info@cromptoncontrols.co.uk
www.cromptoncontrols.co.uk



General

■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).

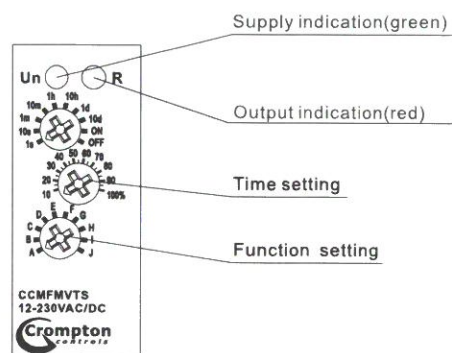
■Function Features

- 10 functions: - 5 time functions controlled by supply voltage
- 4 time functions controlled by control input
- 1 function of latching relay
- Easy 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.

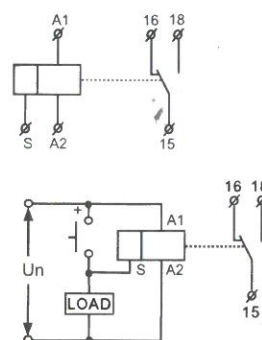
Technical parameters

Technical parameters	CCMFMVTS12-230VAC/DC
Function	A,B,C,D,E,F,G,H,I,J
Supply terminals	A1-A2
Voltage range	AC/DC 12-230V(50-60Hz)
Burden	AC 0.09-3VA/DC 0.05-1.7W
Supply voltage tolerance	-15%;+10%
Supply indication	green LED
Time ranges	0.1s-10days,ON,OFF
Time setting	potentionmeter
Time deviation	5%-mechanical setting
Repeat accuracy	0.2%-set value stability
Temperature coecient	0.05%/°C,at=20°C(0.05°F , at=68°F)
Output	1×SPDT
Current rating	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 ⁶
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 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	62g
Standards	IEC/EN 61812-1,IEC/EN61010-1

Panel Diagram



Wiring Diagram



It is possible to connect load between S-A2 (e.g contactor , control of light or any other device, without disturbing a correctgunction of relay(load is energized while the switch is ON.)

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.



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.



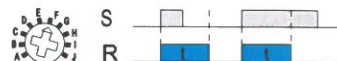
E: Off Delay (S Break)

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.



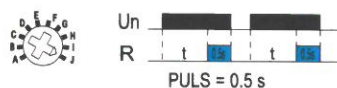
I: Latching relay

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 re-applied to repeat pulse. Trigger switch is not used in this function.

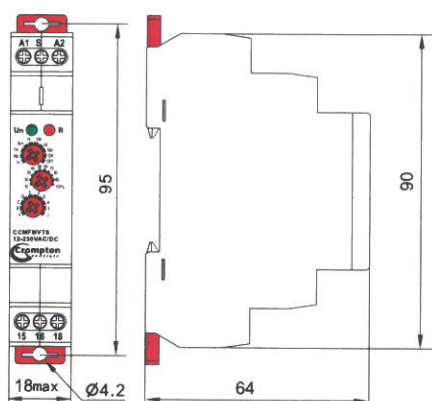


PULS = 0.5 s

Time Range



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.