

Multi-Function Multi-Range Timer



Description

Microprocessor based Multi-function timer with four selectable modes of operation and time range from 0.3sec - 60hrs. Extensive applications due to combination of functions and time ranges. Due to the advanced design of the unit a high accuracy can be achieved. All commonly used functions are incorporated in the unit. Any adjustment on the front potentiometer after the supply is applied is not acknowledged. This prevents unwanted changes of the time range. For a unit with a instantaneous contact the T3M can be used.

FEATURES

- Microprocessor based design
- Time range 0.3sec - 60hrs
- Rear DIP switch selection of 4 function
- Rear DIP switch selection of 8 timer ranges
- Potentiometer adjustable time setting
- Repeatable deviation: < 0.2%
- Power supply ON and Relay ON LEDs
- Output 5A DPDT

Time Specifications

Time Ranges	A Pins 5 & 6 open	B Pins 5 & 6 closed
	0.3 - 6sec	0.3 - 6min
	3 - 60 sec	3 - 60 min
	0.3 - 6min	0.3 - 6 hrs
	3 - 60 min	3 - 6 hrs
Range Accuracy	≤ 0.5%	
Scale Accuracy	± 5%	
Repeat Accuracy	± 0.2%	
Time Variation	≤ 0.05% / V	
within rated power supply and ambient temperature	≤ 0.2% / °C	
Reset Time	500 ms	
Pulse Duration	500 ms (pins 6 & 7)	

Output Specifications

Output Specifications	DPDT
Rated Isolation	6000 VAC (contact / electric)
Voltage	1000 VAC (contact / contact)
Nominal Rate in AC1 (Ag-Ni)	1500 VA
Rated Current	5A
Rated Voltage	250V
Mechanical Life	10x10 ⁶ cycles
Electrical Life	110x10 ³ cycles (at max load)
Operation Frequency	≤ 1800 cycles/h

Supply Specifications

Power Supply AC Type (Galvanic)	110, 230, 400V
	525V ± 10%
	50 / 60 Hz ± 5Hz
Isolation	4kV
Consumption	± 3VA
	± 6VA 525 V
Power Supply DC Types (Non-galvanic)	12,24,48 V ± 10%
Isolation	None
Consumption	± 100 mA

General Specifications

Power ON Delay	≤ 300 ms
Power OFF Delay	≤ 200 ms
Indication for Power Supply ON	LED red
Output ON	LED green
Environment	
Degree Of Protection	IP 20
Operating Temperature	-10 to + 50°C
Storage Temperature	-50 to + 85°C
Weight	200g

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Mode of Operations

Function 1: Delay on operate



When applying supply the relay is de-energized and timing starts. The relay only energizes after the set time is elapsed and will remain so until the supply is removed.

Example

Delaying energization of a load on applying power.

Function 3: Pulse Controlled Interval



Permanent supply is applied to the unit. When closing contacts 6 & 7 the relay energizes for the set time period. The relay then de-energizes until contacts 6 & 7 are closed again.

Example

Delaying release after limit switch operation.

Function 2: Interval



When applying the supply the relay is energized and remains so until the set time is elapsed. The relay will then de-energize until the supply is removed and reappplied.

Example

Energization of a load for a set time period.

Function 4: Equal Repeating

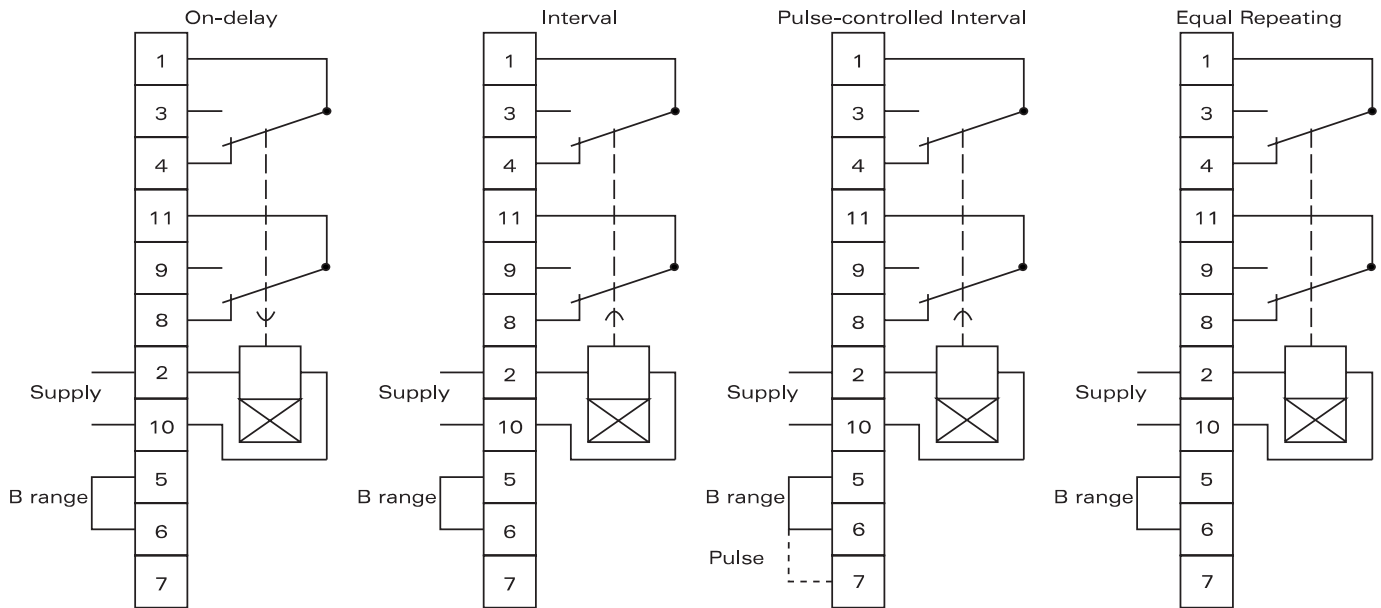


When applying supply the set OFF time period is activated where after an equal ON time begins. This cycle is repeated until the supply is removed.

Example

Switching a load on and off repetitively in equal intervals.

Wiring Diagram



Operations Diagram

Function 1- Delayed On Operation



Function 3: Interval pulse controlled



Function 2: Interval



Function 4 - Equal repeating

