Multi-Time Range/Function/Input Voltage

1/16 DIN TMM Series

FEATURES

- *100% functionally tested*
- *1/16 DIN panel mountable enclosure*
- *Universal input voltage*
- *Microprocessor controlled timing circuit*
- *Five logic modes, user selectable*
- *Six time ranges, user selectable*
- *Time cycles from 50 ms to 999 hours*
- *Easy 3-digit time cycle setting*
- *±0.1% repeatability*
- *Timing light*
- *Superior transient protection*
- *Reinforced base locator pin*
- *Flame-retardant polycarbonate housing*
- *File #E59090*

The TMM Series offers selectable multiple time ranges, functional logic modes and universal input voltage range, all in one plug-in 1/16 DIN style panel mountable package.

Programming is accomplished by using two multi-position rotary switches. One switch selects one of six time ranges. The other switch selects one of five operating logic modes. A 3-digit push-button switch selects the amount of time required for a timing cycle.

Note: 1) Do not apply voltage or ground to the start switch, 2) Switch leads should be shielded when running close to other wires (Start switch suppled by customer)

SPECIFICATIONS

TIME DELAY

Adjustment: 3 digit push-button switch

Range: .05 seconds to 999 hours in 6 ranges

Repeatability: ±0.1% of set time or ±20 ms whichever is greater

Accuracies: All functions ±1% of set time or ±20 ms whichever is greater

INPUT

Operating Voltage: 24 to 240 VAC ±15%, 50/60 Hz; 24 to 240 VDC ±15%, (DC unfiltered input voltage must be full-wave rectified)

Power On Response: 50 ms max.

Power Off Reset Time: Requires power interruption of 150 ms max. (50 ms typical)

Start Switch Closure Time: 50 ms min. to initiate timing cycle; 50 ms min. to reset delay during timing cycle

Power Consumption: 14 VA max. at 276 VAC, 2.5 VA max. at 24 VAC

OUTPUT

Type: Relay DPDT (2 form C)

Rating: 10 A max. resistive at 240 VAC, 125 VDC 1/2 hp at 240 VAC; 10 mA at 5 VDC min. load current

Life:
Mechanical: 10,000,000 operations
Full Load: 500,000 operations

ENVIRONMENTAL

Storage Temperature: -25°C to 70°C

Operating Temperature: -25°C to 55°C

Humidity: 95% relative

MECHANICAL

Termination: 11-pin plug or spade type

Mounting:
Back Panel Mounting:
11-pin Base use MSO-0011P-012
Front Panel Mounting: 1.78" sq. opening required
Front Panel Mounting Bracket MBK-1/16D-011
11-pin Base use MSO-0011P-013

PROTECTION

Transient Voltage: 7 joule, 250 V metal oxide varistor

Dielectric Breakdown: 1800 VAC, RMS min. at 60 Hz between input and outputs

TIMING LIGHT LOGIC

Repeat Cycle: Full On During OFF time Flashing during ON time;

Other Logic Modes: Flashing during timing; Full On after time out

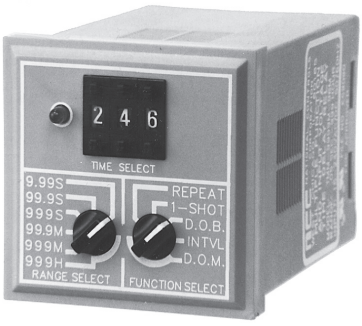
TIMING

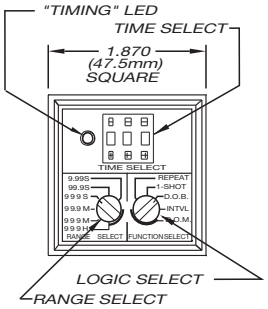
Selectable Time Ranges: .05 to 9.99 sec.; .1 to 99.9 sec.; 1 to 999 sec.; .1 to 99.9 minutes; 1 to 999 minutes; 1 to 999 hours (times less than 50 ms are not recommended due to the response time of the mechanical relay)

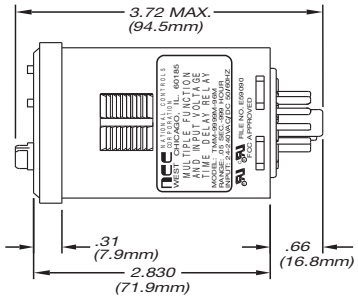
Selectable Operating Logic Modes:
Repeat Cycle (50% fixed duty cycle)
Single Shot (1 shot)
Delay On Break (D.O.B.)
Interval (Intervl)
Delay On Make (D.O.M.)

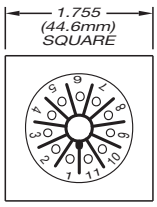
PROGRAMMING

To program the timer, remove voltage from the unit and select the operating logic mode and the time range; use the digital switches to select the required time (0 to 999)

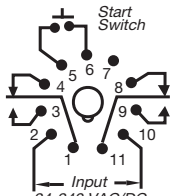








TMM-9999M-96M
PLUGS INTO
11-PIN SOCKET



TMM PIN CONFIGURATION

ORDERING INFORMATION

TIME RANGE	PART NUMBER	MOUNTING TYPE
0.05 sec. to 999 hrs.	TMM-9999M-96M	35 mm DIN rail

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