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TIME DELAY RELAYS

# Multi-Time Range/Function/Input Voltage

## **Flatpak DMM Series**

## **FEATURES**

- 35mm DIN rail mount Flatpak enclosure
- Universal input voltage
- Microprocessor controlled timing circuit
- Five logic modes, user selectable
- Six time ranges, user selectable
- Time cycles from 0.05 seconds to 999 hours
- Easy 3-digit time cycle setting
- ±0.1% repeatability
- Timing light
- Superior transient protection
- UI 94VO plastic housing
- 🔊 File #E59090

The DMM Series offers selectable multiple time ranges, functional logic modes and universal input voltage range, all in one DIN rail mount space saving Flatpak enclosure.

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.

## **SPECIFICATIONS**

### TIME DELAY

Adjustment: 3 digit push-button switch Range: 50 ms to 999 hours in 6 ranges Repeatability: ±0.1% of set time or ±20 ms whichever is greater

Accuracies: All functions  $\pm 1\%$  of set time or  $\pm 20$  ms whichever is greater

### INPUT

**Operating Voltage:** 24 to 240 VAC  $\pm 12\%$ , 50/60 Hz; 24 to 240 VDC  $\pm 12\%$ , (DC unfiltered input voltage must be full-wave rectified)

Power On Response: 50 ms max.

Power Off Reset Time: Requires power interrup-

tion of 150 ms max. (50 ms typical)

Start Switch Closure Time: 50 ms. min. to initi-

ate timing cycle; 50 ms. min. to reset delay during timing cycle

Power Consumption: 14 VA max. at 270 VAC, 2.5 VA max. at 24 VAC

### OUTPUT

Type: Relay SPDT (1 form C)

Rating: 8 A max. resistive at 250 VAC, 5 A max. resistive at 30 VDC; 10 mA at 5 VDC min. load current

Life:

Mechanical: 10,000,000 operations Full Load: 100,000 operations

#### **ENVIRONMENTAL**

Storage Temperature: -25°C to 70°C

Operating Temperature: -25°C to 55°C

Humidity: 95% relative

## **MECHANICAL**

**Termination:** 6 screw terminals; Permissible wire size 22-12 gauge

Mounting: 35mm DIN rail mount

AMETEK NCC P/N for 3 foot section of 35 mm

rail: MRL-SOCKT-011

Note: The DMM Series also mounts on 7.5 mm and 15 mm rails.

#### **PROTECTION**

**Transient Voltage:** 30 joule, 250 V metal oxide varistor

**Dielectric Breakdown:** 1800 VAC, RMS min. at 60 Hz between input and outputs and between 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: 0.05 to 9.99 sec.; 0.1 to 99.9 sec.; 1 to 99.9 sec.; 0.1 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:

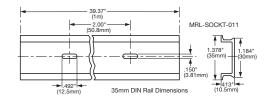
Repeat Cycle (50% fixed duty cycle) Single Shot (1 shot)

Delay On Break (D.O.B.) Interval (Intervi)

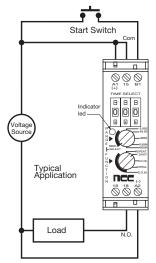
Delay On Make (D.O.M.)

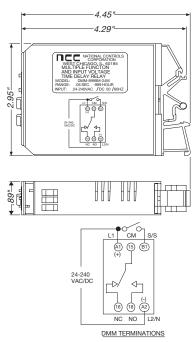
## **PROGRAMMING**

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)









## ORDERING INFORMATION

TIME RANGE	PART NUMBER	MOUNTING TYPE
0.05 sec. to 999 hrs.	DMM-9999M-24M	35 mm DIN rail
ACCESSORY	PART NUMBER	MOUNTING TYPE
35 mm, 3 ft DIN rail	MRL-SOCKT-011	Continuous screw slots