

# Installation Instructions



## FM1D Series

### One Channel Electronic Time Switch

The FM1D Series Timers are compact electronic 24 hour/7 day time switch module with heavy duty relay contacts for switching low or line voltage loads. Applicable for time of day control of pumps, fans, heaters, HVAC control circuits, lighting, machinery and many other types of commercial, industrial, and agricultural equipment.

The FM1D Series features large keys with unique "circular pattern" for easy programming, an easy-to-read LCD display and capacitor backup to retain program memory during power outages.



#### TECHNICAL DATA:

Holiday Program: No  
Daylight time changeover: Manual  
Manual 3 way override: On-Auto-Off  
Shortest switching time: 1 minute  
Reserve carryover: 3 years (Non-Replaceable Battery)  
Input voltage available:

#### 20 set point models:

24VAC/DC;  
120VAC;  
208/240VAC

#### 50 set point models:

12VAC/DC;  
24VAC;  
120VAC  
240VAC

Switch ratings:

N.O. Contact:

- 1/2hp, 120 V ac
- 1hp, 240 V ac
- 8 A, 24 V dc resistive
- 16 A, 277 V ac resistive
- 12 A Ballast, 120 V ac
- 8 A Ballast, 240 V ac
- 720 VA 240 V ac Pilot Duty
- 360 VA 120 V ac Pilot Duty
- 1000W Tungsten, 240 V ac
- 600W Tungsten, 120 V ac

N.C. Contact

- 16 A, 277 V ac resistive
- 8 A, 24 V dc Pilot Duty
- 360 VA, 120 V ac Pilot Duty

Switching output: SPDT relay

Input draw: 4VA

Input frequency: 60Hz

Wiring connections: 1/4" quick connects

Ambient temperature: -14°F to 131°F (-10°C to 55°C)

Agency Approvals: UL Recognized

#### INSTALLATION & WIRING:

Note: Although the FM1D models contain some degree of spike and electrical noise protection, as with all electronic devices, these units can be affected by electrical noise. Therefore, it is recommended that they be powered from a voltage source that has no switching devices or inductive loads connected.

1. Check the input and output ratings marked on the unit to make sure this product is suitable for your supply voltage, load, and application.

2. Disconnect supply power prior to installation to prevent electrical shock.

3. Install in accordance with all applicable National and Local electrical code requirements.

#### MOUNTING OPTIONS:

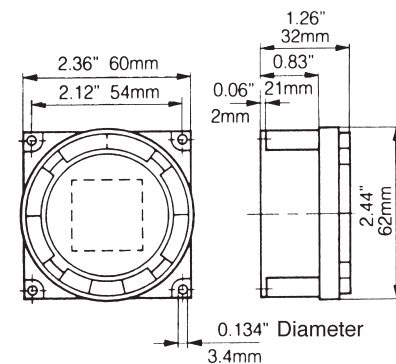
The standard FM1D models may be surface mounted inside a panel or flush mounted with FM-FU mounting kit, available from Intermatic. Indoor NEMA 1, and outdoor NEMA 3R enclosures are available for stand-alone mounting. Consult Intermatic catalog or price sheet for various options.

FM1D20A and FM1D50A models are available with screw terminals and din rail mounting.

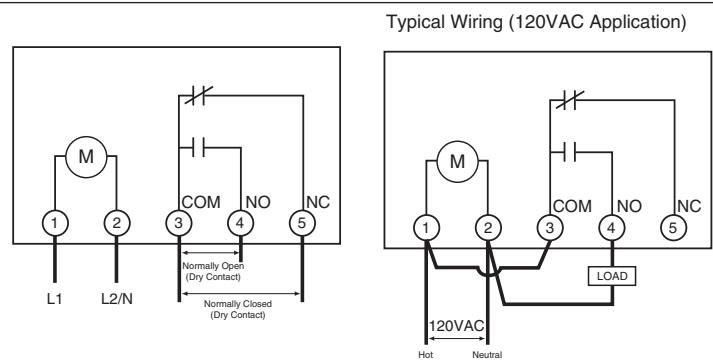
FM1D20E and FM1D50E models are available for flush mounting and include a protective housing.

All models include a clear plastic snap on dust cover.

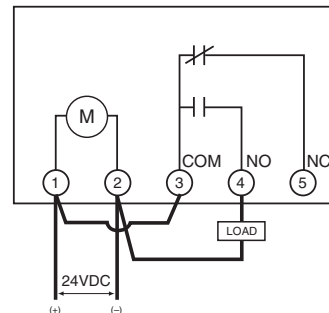
#### Dimensions



#### Terminal Connections



#### Typical Wiring (24VDC Application)



### FM1D Series Program Schedules

| Prog | ON/OFF | h    | m  | Day(s)                        |
|------|--------|------|----|-------------------------------|
| Ex   | On     | 7 am | 30 | Mon., Tue., Wed., Thurs, Fri. |
| 1    |        |      |    |                               |
| 2    |        |      |    |                               |
| 3    |        |      |    |                               |
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| 5    |        |      |    |                               |
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| 8    |        |      |    |                               |
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| 48   |        |      |    |                               |
| 49   |        |      |    |                               |
| 50   |        |      |    |                               |