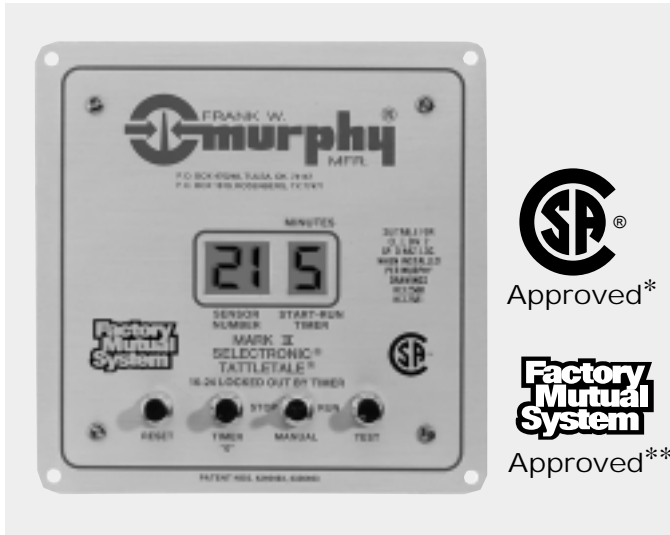


# Digital Fault Annunciator TATTLETALE®



## MARK II Series

- Monitor Engine Driven Pumps and Compressors
- 24 Sensors Can Be Displayed for Alarm and Shutdown
- Built-in Power Supply
- CSA\* and FM\*\* Approved for Class I, Division 2, Group D Hazardous Areas

### Description

The Murphy SELECTRONIC® MARK II control system is an integrated fault annunciator and alarm/shutdown controller designed to protect engines and associated equipment. It is designed for use with capacitor discharge ignitions. The power supply is built into the display head and receives its input from either positive or negative ground CD ignitions. The MARK II receives its signal inputs from normally open sensors such as standard Murphy SWICHGAGE® instruments. Fault in any of its 24 input sensors will annunciate via an LCD digital display.

A 5-minute start-run timer is displayed during start-up. The unit also features a test mode which allows testing of the sensor circuits without shutting down the equipment.

A backup battery is included to retain the fault display after engine shutdown. The MARK II provides for both closing of a fuel valve and grounding of the ignition for shutdown. If desired, a 3-second time delay will allow a delay in grounding the ignition after the fuel valve closes.

### Features

- Built-in power supply.
- Plug-in sensor input terminal block.
- 24 sensors can be displayed for alarm/shutdown
  - Sensors 16–24 can be used for timed, alarm-override at start-up.
  - Sensor 15 is dedicated for manual stop.
  - Sensor 14 is dedicated for electronic digital speed switches having an SCR output.
- 4 Point compression screw type connection block for convenient hook up.
- An easy-to-read liquid crystal display that indicates the tripped sensor and allows you to view the timer countdown during the start-up period.
- Use the test timer to override shutdown during sensor tests (indicates tripped sensor without shutdown).
- 3-second time delay allows the fuel valve to close before grounding the ignition.

### Specifications

**Power:** CD ignition (90-250 VDC), specify positive or negative ground.

**NOTE:** MARK II Series models cannot be powered by a magneto ignition.

**Power Consumption:** 450  $\mu$ a, 100 VDC.

#### Power Inputs (Operating Voltages):

MARK II-N: 90-250 VDC, CD ignition, negative ground.

MARK II-P: 90-250 VDC, CD ignition, positive ground.

**Sensor Inputs:** The MARK II was designed to be used with sensor switches having grounding contacts such as Murphy SWICHGAGE® instruments.

**NOTE:** An isolation barrier must be used between the sensor switch and input terminals if the sensor outputs come from any energy storing device such as relay or transistor.

#### Outputs:

MARK II-N: FET (Field Effect Transistor) rated @ 0.5 amp/250 V max.

MARK II-P: SCR (Silicon Controlled Rectifier) rated @ 0.5 amp 250 V max.

**Operating Temperature:** -4 to 158°F (-20 to 70°C).

**Storage Temperature:** -40 to 302°F (-40 to 150°C).

**Case:** Anodized aluminum.

**Multiplexer Scan Rate:** Scans all 24 sensors in 0.5 seconds.

**Start-Run/Test Time:** Standard 5 minutes, specify other, up to 7 minutes maximum.

**Laboratory Approvals:** MARK II is CSA\* and Factory Mutual\*\* approved for Class I, Division 2, Group D hazardous areas.

**Backup Battery Power:** On-board 6 VDC lithium battery.

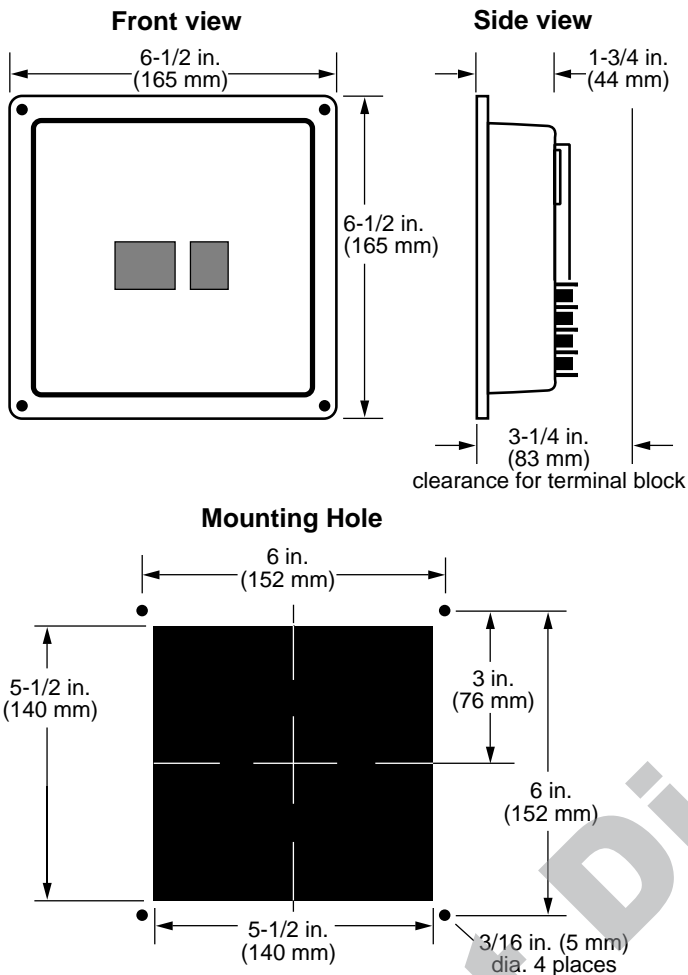
\*When used with approved ignitions. Contact Murphy for details.

\*\*Approved for CD ignition, 90–250 VDC.



**CAUTION:** We do NOT recommend the use of sensor switches having contacts immersed in oil. Because the MARK II operates on low voltage, the oil may act as an insulator between the contacts.

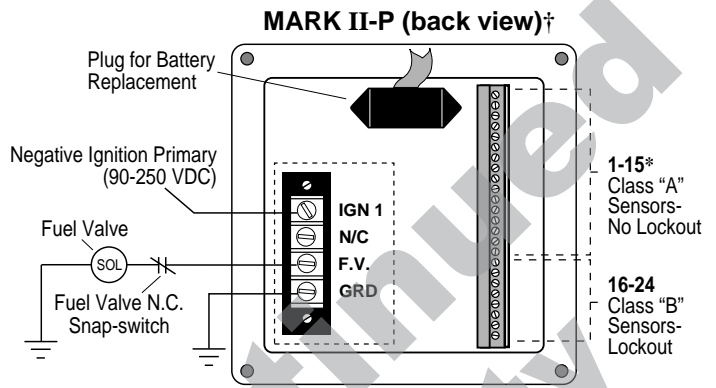
## Dimensions-All Models



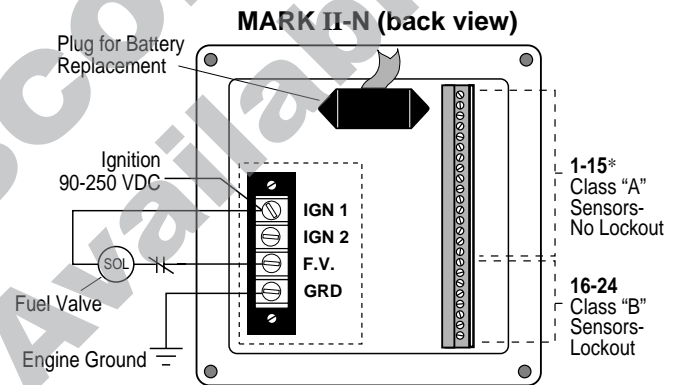
## Typical Wiring Diagrams



**CAUTION:** These typical wiring diagrams are shown for clarity only. They are not intended for use as installation instructions.



\* Terminal 14 is dedicated for electronic digital speed switches with SCR output.  
 † Sensor terminal strip is negative to ground.



\*Terminal 14 is dedicated for electronic digital speed switches with SCR output.

## How to Order

To order the MARK II specify the letter "N" for negative ground ignition; "P" for positive ground ignition. These letters are to be indicated after the model MARK II. Example: **MARK II-N**

**Shipping dimensions:** 7-1/2 x 9-1/2 x 3-1/4 in. (191 x 241 x 83 mm)

**Shipping Weight:** 1 lb. (.45 kg.)

## Warranty

A two-year limited warranty on materials and workmanship is provided with this Murphy product. Details are available on request and are packed with each unit.

Find us on the internet: <http://www.fwmurphy.com>

*In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.*



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