

## TC809E Monitor, TC810E Control, and TC811E Fault Isolator Modules

### SPECIFICATION DATA



### FEATURES

- Provide individual addressable input for fire alarm or security devices
- Provide addressable control to indicating devices
- Provide integral LED to indicate scan, alarm, or activation
- Isolate short circuit faults from rest of circuit
- Monitor either two or four wire (fault tolerant) initiating device circuits
- Control and supervises two or four wire (fault tolerant) indicating device circuits
- Provide full analog supervision of circuits
- Compatible with FS90 Plus, FS45/M1000 and XLS200/1000 systems

### DESCRIPTION

The TC809E Standard and Mini Monitor Modules, the TC810E Control Module, and the TC811E Fault Isolator Module are addressable loop interface devices that provide two-way communication with Honeywell's Life Safety systems. These modules, along with analogue addressable smoke and thermal sensors in the TC800 family, provide a complete range of intelligent loop functions, which include addressable analog sensing, monitoring and control, plus enhanced survivability of loop communications.

The TC809E Standard Monitor Module monitors dry contact type fire or security initiating devices. It reports its unique address to the fire alarm panel to pinpoint the exact alarm location. TC809E Mini is a compact monitor that can be mounted on the monitored device.

The TC809E Standard Monitor Module provides a two or four wire fault tolerant, and the TC809E Mini a two wire, initiating circuit for normally open or normally closed devices. The monitor modules are assigned a point address (via two direct-dial decade switches). The address and circuit status (normal, open, short) are output to the fire alarm panel. Each time the panel scans the TC809E-Standard, an integral LED blinks. The LED latches ON by command from the fire alarm panel. The TC809E-Mini has no LED.

The TC810E Control Module supervises and controls indicating devices and their associated wiring. It can also provide single pole double throw (spdt) switching action for other locally powered equipment.

The TC810E Control Module provides a supervised two or four wire fault tolerant output indicating circuit (eg. audible devices, strobes) and responds to normal, open or short conditions on the circuit. It is assigned a point address via two direct-dial decade switches.

When the TC810E receives a command from the fire alarm panel, the internal relay energises and switches externally supplied power to activate connected polarised indicating or other control devices. An integral LED blinks each time the panel scans the TC810E. The LED latches ON when the output circuit or relay is commanded ON.

The TC810 is field configurable from indicating device control and supervision of wiring to dry contact control action.

the TC811E Fault Isolator Module is used analogue addressable circuits along with other modules and sensors. It detects a wire to wire short and electrically isolates that condition from the circuit so that communication is maintained with unaffected devices on the same circuit.

Two TC811Es isolate a short or open part of the loop between them. In a star configuration a TC811E can be used in each leg so that a short on one leg does not affect communications with the other legs. An integral LED blinks to indicate normal status and is ON to indicate a short in the loop.

## SPECIFICATIONS

### Models:

TC809E-Standard Monitor  
 TC809E-Mini Monitor Module  
 TC810E Control Module  
 TC811E Fault Isolator Module

### Operating Voltage:

15 to 28V dc

### Environmental Operating Limits:

Temperature: 32° to 120°F (-10° to 49°C)  
 Humidity: 10 to 93% rh, noncondensing

### Shipping Weight:

16 oz (454 gm)  
 TC809E-Mini: 8 oz (227 gm)

### Control Module Output:

Spdt contacts, 2A resistive at 28V dc; 300 mA at 120V ac  
 (0.35 Power Factor)

### Indicator:

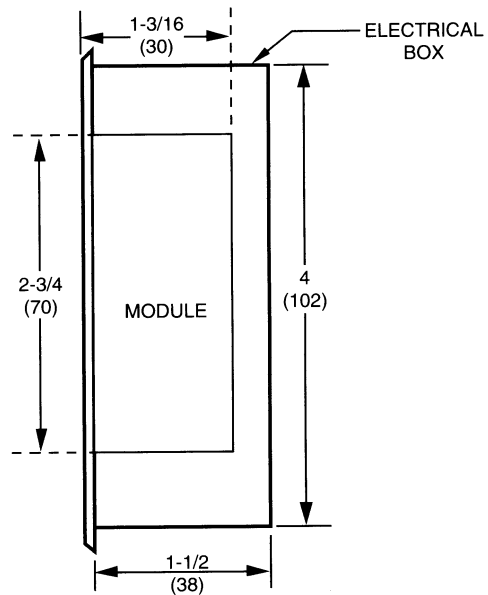
Red LED  
 TC809E-Standard and TC810E: Blinks when addressed, steady ON in alarm or when output activates  
 Yellow LED  
 TC811E: Blinks when normal; stady ON in response to loop short

### Mounting:

TC809E-Standard, TC810E, TC811E: Semi-flush or surface mounted on wall using standard electrical box 4 in. (102 mm) square by 1.5 in. (38 mm) deep or using 2.125 in. (54 mm) deep electrical box if conduit connects to the rear. Mounts to optional mud ring. Can also be surface mounted using a SSDSMB500 box.  
 TC809E-Mini: Fits inside a single-gang junction box behind the monitored device

### Dimensions In Inches (Millimeters):

TC809E-Standard, TC810E, TC811E: 2.75 in. (70 mm) high by 2.5 in. (64 mm) wide by 1.188 in. (30 mm) deep  
 TC809E-Mini: 2.75 in. (70 mm) high by 1.313 in. (34 mm) wide by 0.5 in. (13 mm) deep



TC809E-Standard, TC810E, or TC811E in Electrical Box.

### Module Power Consumption:

0.18 mA maximum supervisory current  
 TC809E-Standard, TC809E-Mini and TC810E: 7.6 mA maximum, 160 microamperes standby  
 TC811E: 8.6 mA maximum, 120 microamperes standby  
 LED ON: 5.0 mA

### Address Selection:

TC809E-Standard, TC809E-Mini and TC810E:  
 01 through 99 using two address selection switches  
 TC811E: No addressing

### System Constraints:

Maximum TC809E-Standard, TC809E-Mini or TC810E per loop: 99  
 Maximum TC811Es per loop: 20

### Approvals:

UL 864 Listed  
 FM Approved  
 CSFM Listed

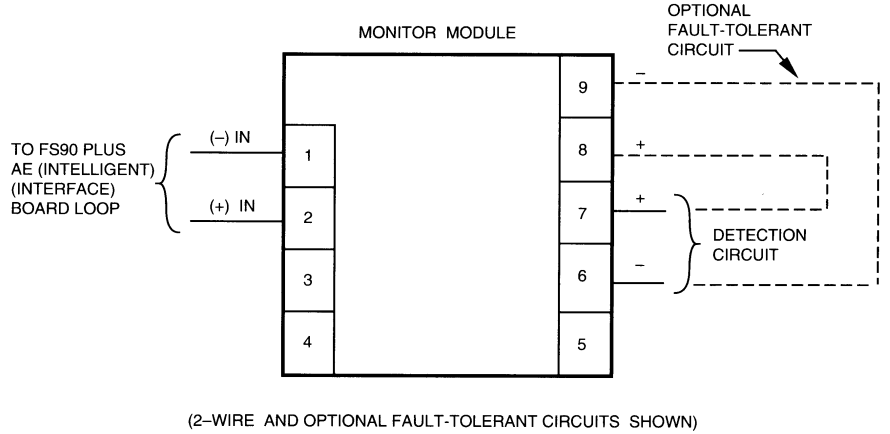
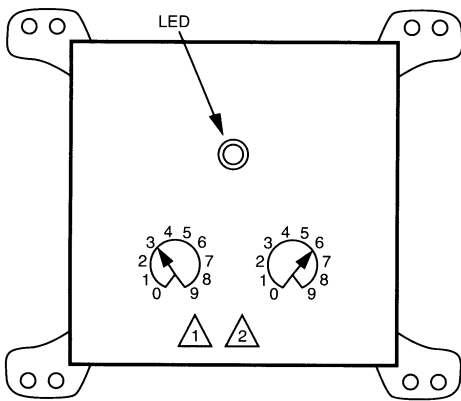
### Additional Equipment:

14501600-027 End-of Line Resistor

### Terminals:

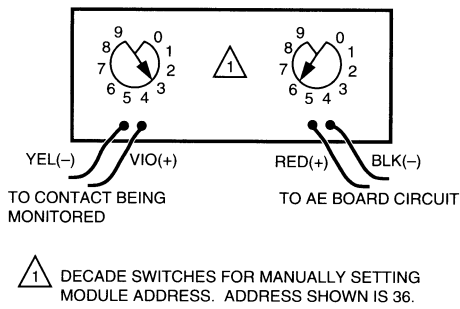
Screw terminal strips accomodate up to 12 AWG (3.301 sq mm) wire

**Terminal Designations and Wiring Configurations:**

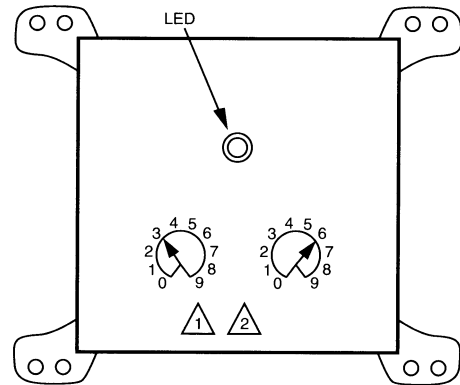


- 1 MODULE SHOWN WITHOUT COVERPLATE.
- 2 DECADE SWITCHES FOR MANUALLY SETTING MODULE ADDRESS. ADDRESS SHOWN IS 36.

**TC809E-Standard Monitor Module Mounting and Terminal Designations**



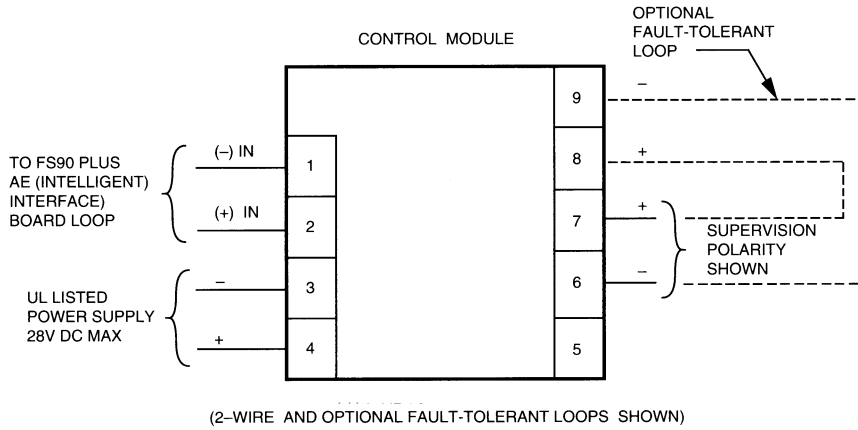
- 1 DECADE SWITCHES FOR MANUALLY SETTING MODULE ADDRESS. ADDRESS SHOWN IS 36.



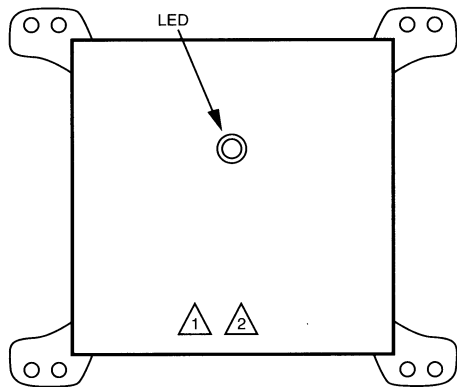
- NOTES:
- 1 MODULE SHOWN WITHOUT COVERPLATE.
  - 2 DECADE SWITCHES FOR MANUALLY SETTING MODULE ADDRESS. ADDRESS SHOWN IS 36.

**TC809E-Mini Monitor Module Terminal Designations  
(For use on two wire AE circuits only)**

**TC810E Control Module Mounting.**

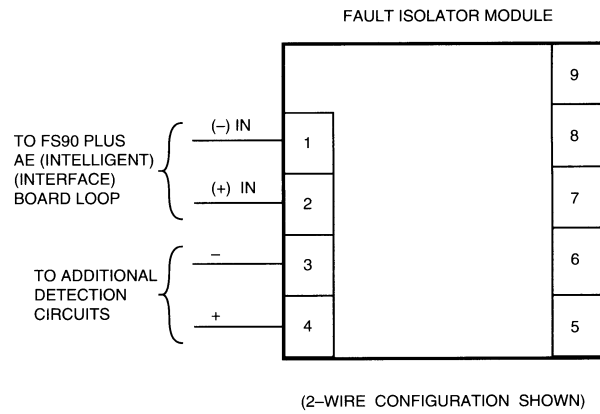


**TC810E Control Module Terminal Designations.**



NOTES:

- 1 MODULE SHOWN WITHOUT COVERPLATE.
- 2 TC811A DOES NOT HAVE ADDRESS SWITCHES.



**TC811E Fault Isolator Module Mounting and Terminal Designations.**

**Honeywell**

Comfort from Experience

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