Honeywell

REFERENCE	BATTERIES	
RB012AHB	**1,2 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 97 x 48 x 54mm - VDS Approved (G104025)	
RB021AHB	**2,1 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 178 x 34 x 60mm - VDS Approved (G103124)	
RB040AHB	**4.5 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 90 x 70 x 102mm	
RB070AHB	**7.2 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 151 x 65 x 94mm - VDS Approved (G103125)	
RB120AHB	**12 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 151 x 98 x 94mm - VDS Approved (G103125)	
RB180AHB	**17 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 181 x 76 x 167mm - VDS Approved (G103126)	
RB260AHB	**24 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 166 x 175 x 125mm - VDS Approved (G104026)	
RB400AHB	**38 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 197 x 165 x 170mm	
RB650AHB	**65 Ah 12V SEALED LEAD ACID BATTERY** Dimensions 350 x 166 x 174mm	
RB1300AHB	**130 Ah 12V SEALED LEAD ACID BATTERY**	

INSTALLATION INSTRUCTIONS FOR TC809E1043 / TC809E1050 INPUT MODULES AND TC809E1068 INPUT / OUTPUT MODULE

This manual is intended as a quick reference installation guide. Please refer to the control panel manufacturers installation manual for detailed system information

GENERAL INFORMATION

The M200 series of modules are a family of microprocessor controlled interface devices permitting the monitoring and/or control of auxiliary devices.

SPECIFICATIONS

Operating Voltage Range	15 to 30VDC (Min 17.5VDC to ensure LED operation)		
Maximum Standby Current (µA)	**TC809E1043**	**TC809E1050**	**TC809E1068**
No Communications	310	340	340
Communication with LED enabled	510	600	660
LED Current (Red)	2.2mA		
LED Current (Yellow)	8.8mA		
Operating Temperature	-20°C to 60°C		
Humidity	5% to 95% Relative Humidity		
Module Dimensions	93mm(H) x 94mm(W) x 23mm(D)		
Surface Mount Box Dimensions	132mm(H) x 137mm(W) x 40mm(D)		
Weight (Module Only)	110g		
Weight (Module and M200E-SMB)	252g		
Maximum Wire Gauge	2.5mm²		

INSTALLATION

Note: These modules must only be connected to control panels using compatible proprietary analogue addressable communication protocols for monitoring and control.

M200 series modules can be mounted in several ways (See figure 1):

1. An M200E-SMB custom low profile surface-mounting box.
2. An M200E-DIN Adaptor allows mounting onto standard 35mm x 7.5mm "Top Hat" DIN rail.
3. An M200E-PMB Panel Mount Bracket allows the module to be mounted directly into a panel.

Wiring to all series M200 modules is via plug in type terminals capable of supporting conductors up to 2.5mm²

CAUTION

Disconnect loop power before installing modules or sensors

The module address is selected by means of rotary decade address switches (see figure 2). These can be accessed either from the front or the top of the module. A screwdriver should be used to rotate the wheels to select the desired address, either from the front, or the top of the module.

For modules having more than one channel, the address selected will refer to the first input channel, the module will automatically assign the next one or two addresses as appropriate to the second input channel and output channel. As a result, address 99 will be invalid for dual channel modules, and addresses 98 and 99 are invalid for three channel modules. If these addresses are selected, no response will be seen from the module.

Short Circuit Isolators

All M200 series modules are provided with short circuit monitoring and isolators on the intelligent loop. If required the isolators may be wired out of the loop to facilitate the use of the modules on high current loaded loops, for example if sounders are used. To achieve this, the loop out positive should be wired to terminal 5 rather than terminal 2. See the relevant wiring diagram for details.

TC809E1043 SINGLE CHANNEL INPUT MODULE

Provides single channel monitoring of normally open contact fire alarm and supervisory devices.

The TC809E1043 has a single tri-colour green/red/yellow LED, which can be set by panel command to pulse green each time the module is polled. In case of an alarm the panel can switch the red indicator on continuously. The Yellow LED is controlled by the module and blinks to indicate an open circuit on the input circuit. This fault indication is overridden by a panel command to turn the red LED on.

TC809E1043 Wiring

See figure 3 for wiring details.

TC809E1050 DUAL CHANNEL INPUT MODULE

The TC809E1050 is a dual channel module used for the monitoring of normally open contact fire alarm and supervisory devices.

It has two tri-colour LED's, one referring to each channel. Each LED can be set by panel command to pulse green each time the module channel is polled. In case of an alarm the panel can switch the red indicator on continuously. The Yellow LED is controlled by the module and blinks to indicate an open circuit on the input circuit. This fault indication is always overridden by a panel command to turn the red LED on.

TC809E1050 Wiring

See figure 3 for wiring details.

TC809E1068 DUAL INPUT, SINGLE OUTPUT MODULE

This module provides dual channel monitoring of normally open contact fire alarm and supervisory devices, and also provides single pole changeover contacts for the control of auxiliary devices such as fire shutters.

Three tri-colour LED's are provided to indicate the status of each channel.

LED's A and B refer to the two input channels. Each LED can be set by panel command to pulse green each time the module channel is polled. In case of an alarm the panel can switch the red indicator on continuously. The Yellow LED is controlled by the module and blinks to indicate an open circuit on the input circuit. This fault indication is always overridden by a panel command to turn the red LED on.

LED C refers to the output channel. The LED can be set by panel command to pulse green each time the channel is polled. The LED will be switched continuously on Green by command from the control panel when the relay contacts are in the energised state.

The TC809E1068 relay contact ratings are 30VDC, 2A or 30VAC, 0.5A (Resistive load).

TC809E1068 Wiring

See figure 4 for wiring details

WARNING:

When switching inductive loads, in order to protect the module from surges caused by back emf as the load is switched, it is important to protect the relay contacts.

A diode with a reverse breakdown voltage of at least ten times the circuit voltage (dc applications only), or a varistor (ac or dc applications) should be connected across the load.

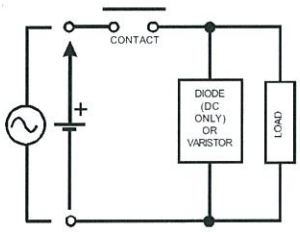
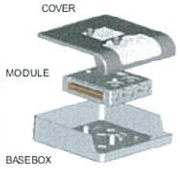


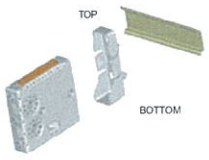
FIGURE 1: MODULE MOUNTING METHODS

M200E-SMB Surface Mount Box



Surface Mount Box Base is affixed to mounting surface, and then the module and cover are screwed onto the base using the two screws supplied.

M200E-DIN DIN Rail Bracket



Push Module into adaptor Bracket until it clips into place.

Locate top clip over DIN rail and rotate bottom down to clip into place.

To Remove, lift up, then rotate top away from the rail.

M200E-PMB Panel Mount Bracket

Adaptor bracket is mounted directly into panel using 2 x M4 Pan head screws.

Module is pushed into adaptor until it clips into place.

FIGURE 2: ROTARY DECADE ADDRESS SWITCHES

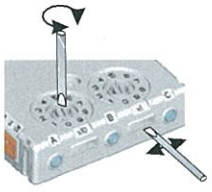
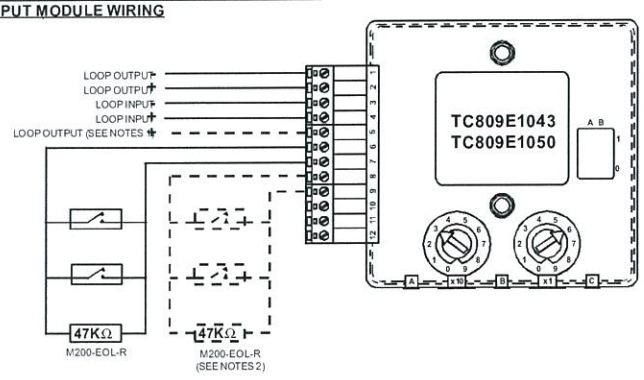


FIGURE 3: TC809E1043 SINGLE INPUT AND TC809E1050 DUAL INPUT MODULE WIRING



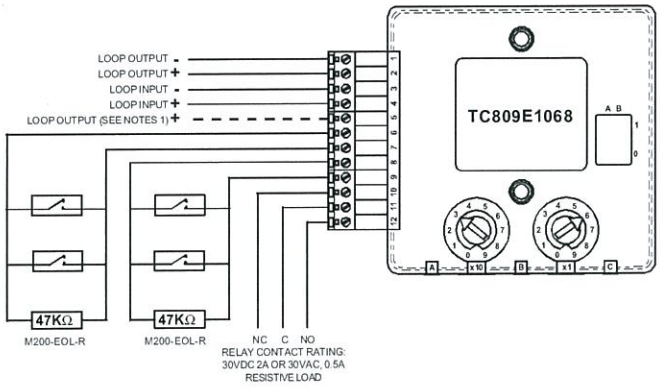
Notes:

1 If short circuit isolation is not required, loop output+ should be wired to terminal 5 and not 2. Terminal 5 is internally connected to terminal 4.

2 The dashed line circuit connected to terminals 8 and 9 should only be used with the TC809E1050. There are no connections to these terminals on the TC809E1043.

3 Provided the control panel is compatible, short circuit monitoring of the input circuit may be possible. An 18KΩ resistor should be wired in series with each device switch being monitored.

FIGURE 4: TC809E1068 DUAL INPUT SINGLE OUTPUT MODULE WIRING



Notes:

1 If short circuit isolation is not required, loop output+ should be wired to terminal 5 and not 2. Terminal 5 is internally connected to terminal 4.

2 Provided the control panel is compatible, short circuit fault monitoring of the input circuit may be possible. An 18KΩ resistor should be wired in series with each device switch being monitored.

Honeywell

INSTALLATION INSTRUCTIONS FOR TC810E1040, TC810E1040-KO AND TC810E1057 MAINS SWITCHING OUTPUT MODULES

This manual is intended as a quick reference installation guide. Please refer to the control panel manufacturers installation manual for detailed system information

GENERAL INFORMATION

The M200+ series of modules are a family of microprocessor controlled interface devices permitting the monitoring and/or control of auxiliary devices. The TC810E1040, TC810E1040-KO and TC810E1057 are output modules, providing 250VAC 5A rated voltage free contacts, both normally open and normally closed.

SPECIFICATIONS

Operating Voltage Range	15 to 30VDC (Min 17.5VDC to ensure LED operation)
Maximum Standby Current (µA)	275µA - No Communication 445µA - Communication w/ blink enabled
Fault Current	8.8mA (Yellow LED illuminated)
Coil Activation/Deactivation Current	76mA Maximum for 12mS
Relay Contact Rating	5A, at 30VDC 5A at 250VAC
Operating Temperature	-20°C to 60°C
Humidity	5% to 95% Relative Humidity
Dimensions TC810E1040 and TC810E1040-KO	134mm(H) x 139mm(W) x 40mm(D)
Dimensions TC810E1057	127mm(H) x 76mm(W) x 48mm(D) (Including terminals)
Weight TC810E1040 and TC810E1040-KO	195g
Weight TC810E1057	140g
Maximum Wire Gauge	1.5mm²

INSTALLATION

Note: These modules must only be connected to control panels using compatible proprietary analogue addressable communication protocols for monitoring and control.

CAUTION

Disconnect loop power before installing modules or sensors.

High voltages may be present on terminals 7 to 12.

TC810E1040 and TC810E1040-KO

1. The TC810E1040 (-KO) includes a custom low profile surface-mounting box with several options for fixing centres. To access all fixing points, and the rear cable entry knock out, the circuit board must be removed. It is held in place by two screws through the circuit board. Ensure that these screws are replaced when refitting the circuit board.
2. If rear cable entry is not required, the box has several cover drill points permitting the entry of cables using suitable glands.
3. Wiring to the TC810E1040 (-KO) is made via two 6 way terminal strips on the module circuit board, capable of supporting conductors up to 2.5mm². See figure 2 for connections.
4. An earthing terminal is provided in the surface mount box for connection of the loop cable screen, if used, to ensure continuity. See figure 1a.

TC810E1057

1. TC810E1057 mounts onto standard 35mm x 7.5mm "Top Hat" DIN rail. It must be mounted in a suitable cabinet meeting the applicable safety standards.
2. Wiring to the TC810E1057 is via plug in type terminals capable of supporting conductors up to 2.5mm². See figure 2 for connections.

WARNING

Ensure that the correct terminals are used for the loop and switched voltage as damage may result from incorrect usage.

For both modules, the address is selected by means of rotary decade address switches (see figure 2), accessed at the front of the module. A screwdriver should be used to rotate the wheels to select the desired address.

Short Circuit Isolators

All M200+ series modules are provided with short circuit monitoring and isolators on the intelligent loop. If required the isolators may be wired out of the loop to facilitate the use of the modules on high current loaded loops, for example if sounders are used. To achieve this, the loop out positive should be wired to terminal 5 rather than terminal 2.

Figure 1a: TC810E1040 (-KO) Surface Mount Output Module with 240V Relay Contacts

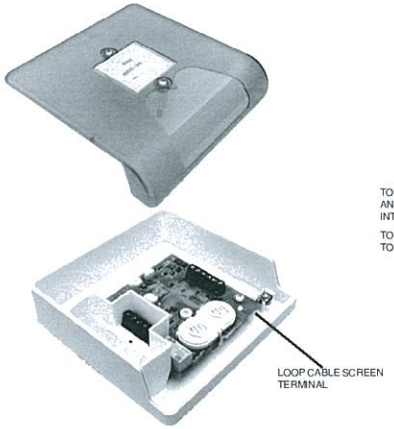
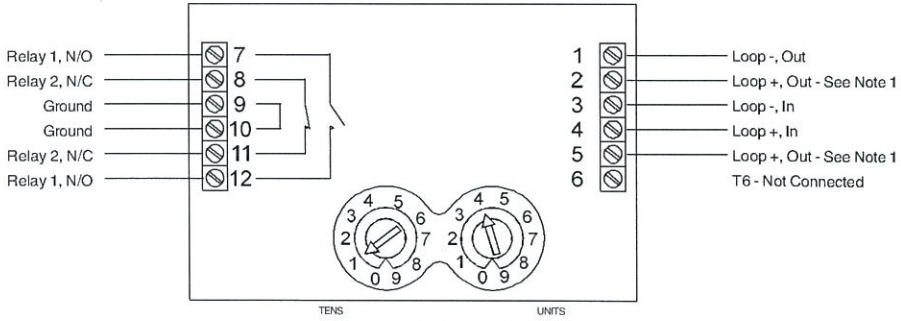


Figure 1b: TC810E1057 Din Rail Mounted Output Module with 240V Relay Contacts.

Figure 2: Module Wiring.

NOTE: WIRING IS THE SAME FOR TC810E1040 (-KO) AND TC810E1057



Rotary Decade Address Switches

ADDRESS 14 SHOWN.

Notes:

1. If short circuit isolation is not required, then the loop output should be wired to terminal 5 rather than terminal 2. Terminal 5 is internally connected directly to terminal 4.
2. In order to meet the requirements of European Safety Standards, ensure that all cables carrying voltages in excess of 48V (Live and Neutral) are suitably fused.

Pittway Tecnologica S.p.A, Via Caboto 19/3, 34147 Trieste, Italy

I56-2059-002