NOTES

NITTAN

EV-OP Module

Installation Leaflet EV-OP Issue 3

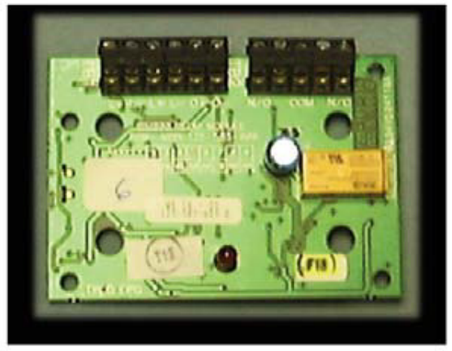

Fig. 1 EV-OP Relay Interface Module

INTRODUCTION

The **EV-OP** Relay Interface Module provides one volt-free relay changeover contact on a latching relay. The relay is controlled by a command sent from the Evolution fire panel via the addressable loop. The relay state (activated, deactivated or stuck) is returned to the controller.

FEATURES

EV-OP features include the following:

- Addressable functionality
  The control panel sends a command to operate the relay, then reports an activated or deactivated state back to the panel through the use of a set of contacts dedicated to monitor the state of the relay.
- One volt-free dry contact relay output.
- LED status indicator which is normally off. When the EV-OP receives a command to activate, the LED lights.

TECHNICAL SPECIFICATION

Type Identification Value: 49
System Compatibility: Use only with Evolution Fire Alarm panels which support this product
Loop Voltage: 20 - 38 Vdc
Environment: Indoor Application only
Operating Temperature: -25° to +70°C
Storage Temperature: -40° to +80°C
Operating Humidity: Up to 95% non-condensing
Dimensions (HWD): 87 x 148 x 14mm
Mounting Requirements: One MK dual gang backbox surface mount
Wire Size: Min 1.5mm^2
Max 2.5mm^2

Battery Requirements:
Stand-by current: 0.46mA max
Alarm current: 4.5mA max

Addressable Device Conditions:
Normal
Output Active
Device Type Invalid
Device No Response
Output Stuck

Relay Contact Rating: DC - 2A @ 24V dc
Declaration of Performance: 00114
CPR Certificate: 0905-CPR-00114
UKCA Certificate: 0359-UKCA-CPR-00001

Note: *The module must not be used to switch mains voltages.*

ELECTROMAGNETIC COMPATIBILITY

The EV-OP complies with the following:
Product family standard EN50130-4 in respect of Conducted Disturbances, Radiated Immunity, Electrostatic Discharge, Fast Transients and Slow High Energy
EN50081-1 for emissions

WIRING & INSTALLATION NOTES

The following notes apply:

1) There are no user-required settings (switches, headers) on the **EV-OP**. All wiring must be free of earths.

2) All wiring must conform to the current edition of IEE Wiring Regulations and BS5839 part 1.

3) See Fig.3 for EV-OP Simplified Wiring Diagram.

4) For 24V dc powered applications, only use a regulated supply suitable for fire protective signalling service.

5) For powered circuit operation, route the positive conductor through the EV-OP to the external device, while connecting the common (neutral) conductor to the external circuit.

6) For dry contact switching, connect the external circuit to the COM and N/O or N/C terminals for normally open or normally closed operation as required.

7) Verify that relay wiring is correct for the **EV-OP** before connecting to the addressable loop circuit.

8) For connection to an EV-240V MRA High Voltage. Relay Module, refer to Installation Sheet. Installation leaflet EV-240V MRA.

EV-OP Module

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ADDRESS PROGRAMMING

The **EV-OP** must have its Loop Address programmed prior to installation with the EV-AD2 Programmer, using the Universal Addressing Lead (Two Pin) supplied with the EV-AD2 kit, by connecting Red pin to L+ & Black pin to L- on the reverse of the device. You can also use the EV Module Addressing Lead (Three Pin) via the Programming Port in the front cover (See Fig.2), after the device is installed.

Note: *Once the address has been programmed, take note of the device location and address number, to include on site drawings.*

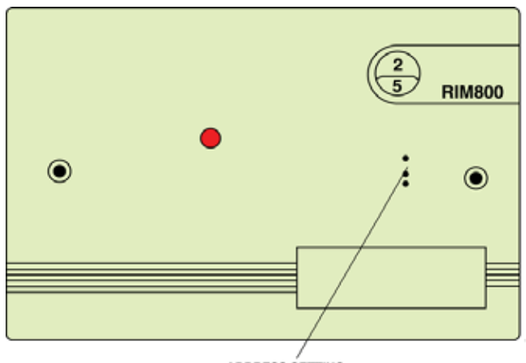

Fig. 2 EV-OP Relay Input Module Facia Plate

CABLING

The module will accept one 1.5mm² or one 2.5mm² cables per terminal.

ORDERING INFORMATION

EV-OP F16N82027

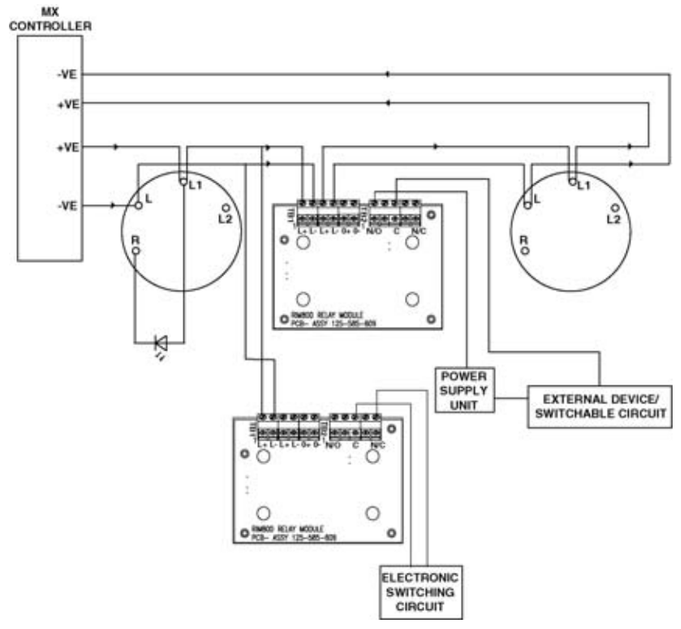

Fig. 3 EV-OP Simplified Wiring Diagram