NOTES

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EV-OP
Installation Leaflet EV-OP Issue 1

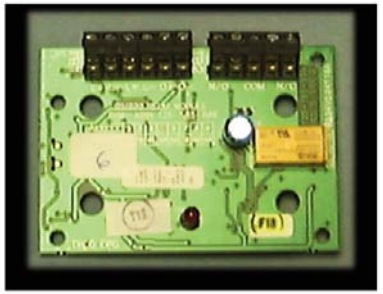

Fig. 1 EV-OP Relay Interface Module

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
Environment:	Indoor Application only
Operating Temperature:	-25°C to +70°C
Storage Temperature:	-40°C to +80°C
Operating Humidity:	Up to 95% non-condensing
Dimensions (HWD):	87 x 148 x 14mm
Mounting Requirements:	One MK backbox surface mount
Wire Size:	Min 1.5mm^2 Max 2.5mm^2
Battery Requirements:	
Standby current:	0.46mA max
Alarm current:	4.5mA max

Addressable Device Conditions:

- Normal
- Active
- Device Type Invalid
- Device No Response
- Output Stock

Relay Contact Rating: DC - 2A @ 24V dc

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 current edition of IEE Wiring Regulations and BS5839 part 1.
3) See Figure 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.

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ADDRESS PROGRAMMING

The **EV-OP** must be set to the loop address of the device using the EV-AD2. The **EV-OP** may be programmed with the address prior to being installed by using the internal programming port or after being installed by using the programming port on the front cover (see Fig. 2).

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

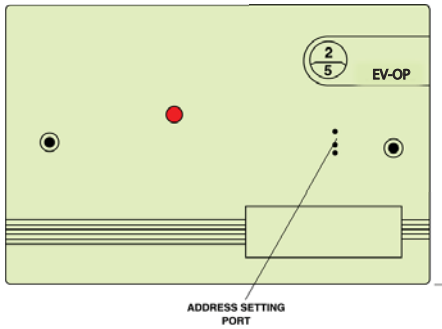

Fig. 2 EV-OP Relay Output Module Facia Plate

CABLING

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

ORDERING INFORMATION

EV-OP F16N82027

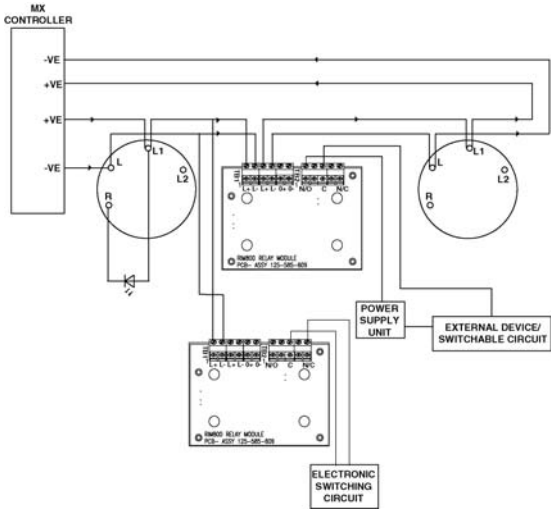

Fig. 3 EV-OP Simplified Wiring Diagram