

**LIFESAVER
MODEL RK10A/9 ISOLATION RELAY**

SPECIFICATION:

Operating Voltage	5V – 10V DC
Secondary Contacts	Normally Open Normally Closed (change-over contacts)
Secondary Contact Rating	240V AC 50Hz @ 10Amps 30V DC @ 10Amps
Contact Switching Time Delay (one smoke alarm connected)	8 seconds once activated
Minimum cable size	1mm ² Neutral 1mm ² Switch line
Maximum number of interconnected smoke alarms to a single RK10A/9 unit	24
Operating Temperature	0° - 50°C
Fire Indicator Panel INPUT Voltage. 4 th Terminal Operation (Early Warning System)	24V DC

OPERATION.

The RK10A/9 Smoke Alarm Isolation Relay is a device designed to provide compatible 240VAC Smoke Alarms with a set of Normally Closed (NC) and Normally Open (NO) change over contacts. This permits the Smoke Alarm to trigger auxiliary devices such as strobe lights, sirens, bells, burglar and fire alarm panels, activate emergency lights, shutting down air conditioners or releasing magnetic door holders. (See Figure 1)

The RK10A/9 will in the absence of mains power and only operates when the smoke alarm is in alarm state.

The RK10A/9 Isolation Relay has an additional feature capable of receiving a 24Vdc power signal from a fire panel or external device which will activate a separate NO contact to trigger another smoke alarm with a fourth terminal. This feature allows the smoke alarm to be triggered by the fire panel to initiate an early warning alarm. (See Figure 2)

COMPATIBLE SMOKE ALARMS

Note that when used with an output from the smoke alarm this device is intended and designed only for use with the following smoke alarms and devices;

- LIFESAVER** LIF3000, LIF4800RL, LIF5800R,
LIF5800RL, LIFHA240, LIFSL240
LANSON Lansd240P

WARNING: Use with other smoke alarms may damage this device and the smoke alarm(s) and could create a definite shock risk and would not be covered by any warranty.

The Isolation Relay RK10A/9 must be installed by a Licensed Electrician.

Wiring from the Smoke Alarm N and S terminals must be correctly connected to the RK10A/9 N and S terminals. Incorrect wiring will short and damage the isolation relay and the Smoke Alarm and will void warranty.

The Isolation Relay RK10A/9 is triggered once the Smoke Alarm activates and sends a signal down the switch line.

Note there will be a 8 second delay before the relay operates the RK10A/9's Normally Open and Normally Closed contacts. This is to help prevent any unnecessary false alarms from the smoke alarm.

In the above case the changeover contacts of the relay, connected to the output terminals may be used to make or break an external E.L.V. or L.V. circuit operating at up to 240Vac 10A or 30Vdc 10A.

WARNING: UNDER NO CIRCUMSTANCES MUST AN INSULATION RESISTANCE TEST BE CARRIED OUT BETWEEN THE INPUT CONDUCTORS OF THIS RK10A/9. SUCH A TEST COULD CAUSE IRREPARABLE DAMAGE TO THE INTERNAL CIRCUITRY OF THE DEVICE AND MAKE IT INOPERATIVE AND FURTHER, THE WARRANTY WOULD BE VOID UNDER THIS CONDITION.

INSTALLATION.

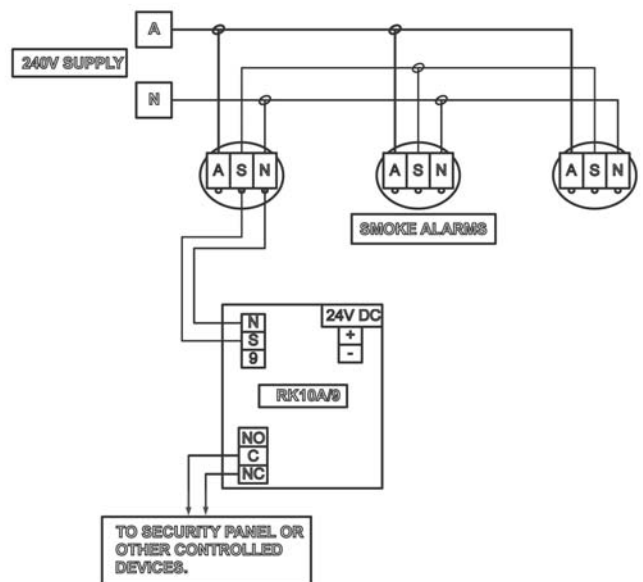
General:

The RK10A/9 requires no earthing conductor as it is double insulated. It must be suitably fixed in position and protected from mechanical damage. If the output terminals are connected to low voltage (240V) circuits, the associated wiring must be installed in accordance with the relevant requirements of the SAA Wiring Rules, AS3000.

Warning: A combination of the N.O. and N.C. contacts is not permissible and will not operate.

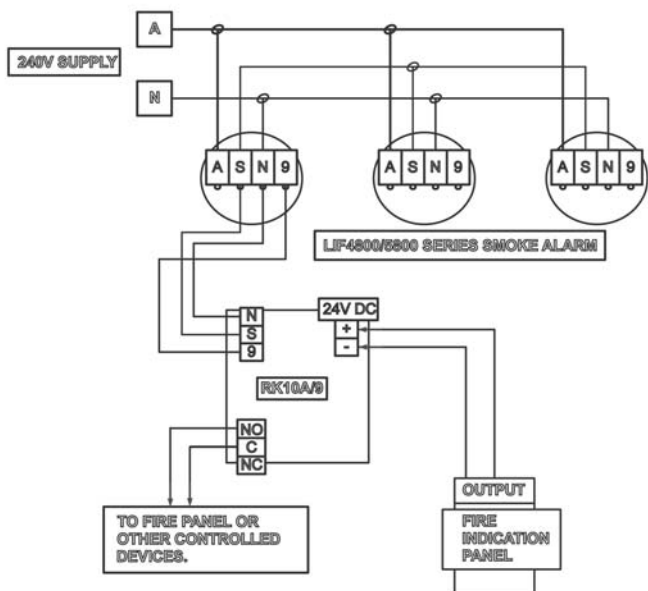
WIRING DIAGRAM

Figure 1: Connecting to Auxiliary Devices



By installing the RK10A/9 in this manner it will allow you to operate such devices such as sirens, strobes, bells, lights, air conditioners or any devices which do not exceed 240V AC @ 10 Amps.

Figure 2: Connections using the 4th Terminal and using 24Vdc input



Connecting the 24V DC input from the Fire Indicator Panel permits the smoke alarm to be activated externally using the 4th terminal. The Smoke Alarm can be used as part of an early warning system. The activation of the Fire Indicator Panel will send an alarm signal via its auxiliary output to the RK10A/9. The 24 Volts DC signal will be relayed to the RK10A/9 relay which will activate the 24 volt dc relay and close the contacts between 9 volt and switch-line connections.

This will activate all smoke alarms in all apartments, thus acting as an early warning to all occupants.

TECHNICAL NOTE

The wiring connecting the module with the external device is not supervised. Be sure to test the operation of all the devices controlling the module or controlled by the module. Devices controlled by the module can be tested by pushing the test button on the alarms and verifying that the controlled device responds in the desired manner. Devices controlling the module can be tested by activating the device and verifying that all of the interconnected alarms enter alarm.

WARRANTY.

The liability of PSA Products Pty Ltd arising from the sale of this Isolation Relay or under the terms of this limited warranty shall not exceed the cost of replacement of the Isolation Relay and in no case shall PSA Products Pty Ltd be liable for consequential loss or damages resulting from the failure of the Isolation Relay or breach of this or any other warranty, express or implied, loss or damages caused by failure to abide by the instructions supplied in this leaflet.

This warranty shall not apply to the Isolation Relay if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper installation or misuse.

Another Quality Product by:

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