Ei Electronics®
fire + gas detection

Models: Ei128R
Ei128RBU
Ei128COV

RELAY BASES & COVERS

FOR SMOKE, HEAT & CARBON MONOXIDE ALARMS

Instruction Manual

Contains vital information on the product's operation and installation. Read and retain carefully. If you are just installing this product **the manual MUST be given to the householder**.

1. Description of Models & Usage

Ei128R - Relay Output 250VAC / 5 Amps. Normally used directly underneath Easi-fit Smoke & Heat Alarms. When used with accessory cover Ei128COV the combination may be sited at the fuse box or other suitable locations. The combination can also be used with other Ei Smoke, Heat & Carbon Monoxide Alarms - see section 3.

Ideal for appications where the device being switched is mains powered.

Ei128RBU - Same as the Ei128R above but with the addition of a rechargeable cell backup.

Ideal for applications where the device being switched is powered by a low voltage AC or DC supply.

Ei128COV - Plastic cover for use with Ei128R & Ei128RBU Relay Bases when they are not sited underneath the actual alarms they are serving.

2. Ei128R & Ei128RBU Instructions

2.1 Introduction

The Ei128R & Ei128RBU Relay Bases switch a relay upon receipt of an alarm signal from a suitable Ei Smoke, Heat or Carbon Monoxide Alarm. The electrically isolated contacts can be used for many applications such as signalling, turning on lights, etc. The Relay Bases are powered by 230VAC mains - with the Ei128RBU model having recharbeagle back-up cells.

As supplied the relay operates continuously (e.g. it switches when one of the Smoke / Heat Alarms detects fire and switches back when the smoke clears). When the slide switch is moved to the pulse 'P' position (see figures 1 & 2) the relay will switch when fire is detected but will automatically switch back after 5 seconds. This is commonly used with warden call systems where only momentary short circuit signalling is required.

2.2 Installation under Easifit Smoke / Heat Alarms

WARNING: Mains powered Relay Bases should be installed by a qualified electrician in accordance with the Regulations for Electrical Installations published by the Institution of Electrical Engineers (UK) (i.e. BS7671). Failure to install the unit correctly may expose the user to shock or fire hazards. This unit is not waterproof and must not be exposed to dripping or splashing.

Warning: The Relay Bases must not be used with any other devices - otherwise they would not comply with the mandatory safety regulations.

WARNING: First disconnect the mains from the circuit to be used.

1. Choose a mounting position following the siting instructions in the Smoke/Heat Alarm leaflet. Where the incoming wiring is on the surface of the ceiling, the appropriately sized ducting/conduit must be chosen to mate with the unit. Use a sharp knife to remove material from the selected knockout, making sure that there is no gap when mated with ducting / conduit. There are three knockouts – two on the sidewall and one on the rear.

2. Screw the Relay Base to the ceiling after first removing the required knockout and bringing the house wires through it (see figure 1a for Ei128R & figure 1b for Ei128RBU). If the central knockout is being used, seal around the wires with silicone or similar to prevent air draughts affecting the smoke entering the alarm.

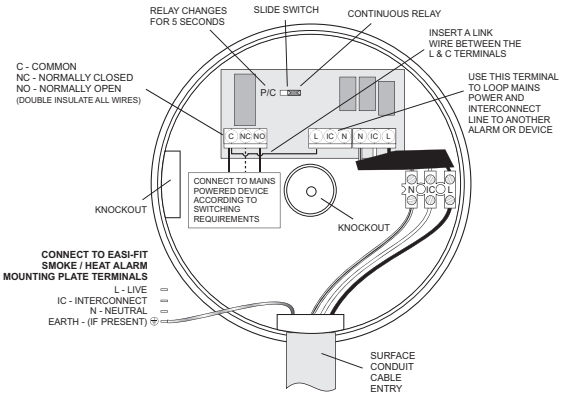


Figure 1a - Ei128R - Wiring details for connecting to a mains powered voltage device

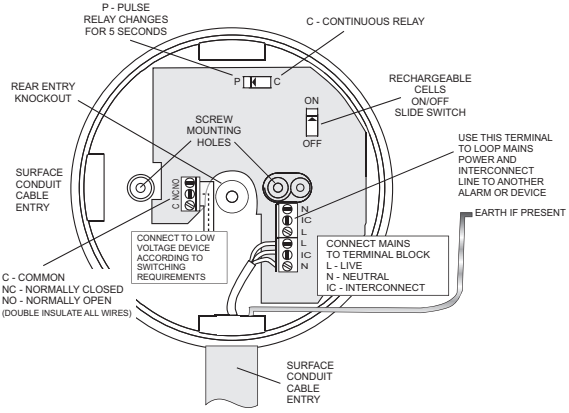


Figure 1b - Ei128RBU - Wiring details for connecting to a low voltage or voltage free device

3. Connect the three wires (“L”, “N” and “IC”) from the Relay Base to the connectors on the Smoke/Heat Alarms mounting plate. The “IC” wire must be connected even if it is a single alarm installation.

Connect the earth wire (if present) from the house wiring directly to the terminal on the mounting plate (see relevant Smoke Alarm Instructions). Replace the cover over the terminal wires.

Connect the wires to the required relay contacts for controlling the auxiliary device (the contacts are isolated and are rated at 250VAC, 5 Amps resistive).

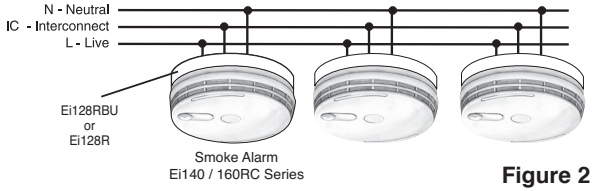


Figure 2

4. Connect the rechargeable cells (Ei128RBU only) by carefully and gently sliding the switch to the “on” position (see figure 1b). This switch must be in the ‘on’ position to ensure correct operation.

5. Screw the mounting plate to the Relay Base pillars using the two screws supplied.

6. Slide the alarm on to the mounting plate.

7. Re-connect the mains power – the green LED light on the alarm should be on. When the test button is pressed the horn should sound and the relay will switch within 10 seconds. (Note - with ionisation alarms the relay normally switches 4 seconds after the horn sounds. With optical alarms the relay normally switches within 2 seconds of the horn sounding).

Note: A maximum of 12 Smoke/Heat Alarm of the types specified may be interconnected to one Relay Base. When one alarm senses fire all interconnected units will alarm and the relay will switch.

3. Checking & Maintaining Your Smoke Alarm System

We recommend a weekly check is made of your alarm system. When checking the system also check the Relay Base as follows:

1.Check the green mains light is lit on the Smoke Alarm that is electrically connected to the Relay Base.

2.Check the relay switches and that the associated device operates when the system is in alarm (e.g. due to a smoke alarm test button being pressed).

3. On the Ei128RBU only the rechargeable cells are capable of powering the relay for up to 2 months in the event of the mains being off.

4. Checking Relay Back-Up Cells

Model Ei128RBU only

It is important to check that the rechargeable cells in the Ei128RBU Relay Base are switched on, charged and capable of powering the system. This should be done after installation and then at least annually.

(i) Disconnect the mains supply. Check the relay as described in section 3 above.

(ii) If everything is satisfactory, re-connect the mains.

If the relay fails to operate then the unit is defective and must be replaced (see getting your Relay Base Serviced as per section 5 below).

End of Life

After 10 years (see date label on the side of the Relay Base) the Ei128RBU Relay Base must be replaced.

5. Installation away from the alarm

5.1 Introduction

Whenever there is a need to install the Relay Base at locations other than underneath the Easi-fit alarms then an Ei128COV is required. This is to ensure that the user is not exposed to fire or shock hazards.

Warning: The Relay Bases must not be used with any other devices - otherwise they would not comply with the mandatory safety regulations.

5.2 Installation

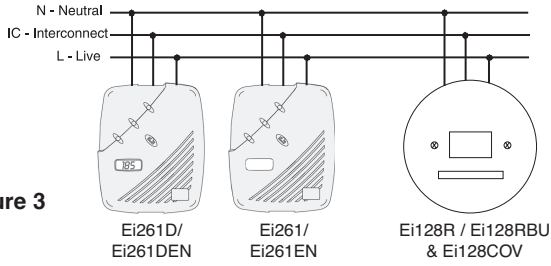
The installation of the Relay Bases themselves is covered in section 2 previously.

WARNING: Mains powered Carbon Monoxide / Smoke / Heat Alarms should be installed by a qualified electrician in accordance with the Building Regulations for Electrical Installations published by the Institution of Electrical Engineers (UK). Failure to install the unit correctly may expose the user to shock or fire hazards.

Warning: First disconnect the mains from the circuit to be used.

1. Install the Carbon Monoxide / Smoke / Heat Alarm as described in the leaflet supplied with the unit. The Relay Module can be located near the fuse box or in some other location convenient to the Carbon Monoxide / Smoke / Heat Alarm wiring. Where the incoming wiring is on the surface of the ceiling, the appropriately sized ducting/conduit must be chosen to mate with the unit. Use a sharp knife to remove to material from the selected knockout, making sure that there is no gap when mated with ducting / conduit. There are three knockouts – two on the sidewall and one on the rear.

Figure 3



The above shows the connection for Carbon Monoxide Alarms.
Connect the Smoke/Heat Alarm similarly but on a seperate circuit to the
Carbon Monoxide Alarm (unless an Ei159 Locator Switch is used on the system)

2. Screw the Relay Base to the ceiling after first removing the required knockout and bringing the house wires through it (see figures 1a & 1b).

3. Connect the three wires (L - Live, N - Neutral and IC - Interconnect) from the Carbon Monoxide / Smoke / Heat Alarm to the alarm relay module as shown in figures 1a & 1b. The IC - Interconnect wire must be connected even if it is a single alarm installation.

As an Easi-fit Alarm is not being mounted on top of the Relay Base, remove the three cables (for the Easi-fit Alarm connection) from the terminal block and discard (see figures 1a & 1b).

Connect the wires to the required relay contacts for controlling the auxiliary device (the contacts are isolated and are rated at 250VAC, 5 Amps resistive). If momentary (pulse) relay operation is required, carefully and gently slide the yellow switch to the 'P' position with a small screwdriver (see figures 1a & 1b).

4. Screw the cover plate to the Relay Module using the two screws supplied.

5. Connect the mains power – the green LED light on the alarm should be on. When the test button is pressed the horn should sound and the relay will switch within 10 seconds. With some alarms it may take up to 5 seconds for the relay to switch after the horn has sounded.

Note 1: A maximum of 12 Carbon Monoxide Alarms or 12 Smoke Alarm of the types specified may be interconnected to one Relay Base. When one unit alarms all interconnected units will alarm and the relay will switch.

Warning: Do not connect Carbon Monoxide Alarms and Smoke / Heat Alarms on the same system without using an Ei159 Locator Switch. The Ei159 Locator Switch will allow the user to identify the source of the alarm (e.g. smoke or CO gas). This is important because if the Carbon Monoxide Alarm triggers the user must ventilate the premises. If the Smoke Alarm triggers the user should close doors to slow down the spread of fire.

Note 2: An alarm with battery back-up will continue to operate during a mains failure but will not be able to switch the Ei128R relay (the relay requires the 230 VAC to operate). However the Ei128RBU relay will be able to switch during mains failure because of its back-up cells.

Note 3: Devices connected to the relay contacts do not give a warning until the contacts have switched for at least 200mSec.

6. Getting your Relay Base Serviced

If your Relay fails to work after your have carefully read all the instructions, checked that the unit has been installed correctly, and is receiving AC power, then contact Customer Assistance at the nearest address given at the end of this leaflet. If it needs to be returned for repair or replacement, remove the unit and turn off the rechargeable cells with slide switch (*see Figure1b*). Put the Relay in a padded box and send it to "Customer Assistance and Information" at the nearest address given on the unit or in this leaflet. State the nature of the fault, where the Base was purchased and date of purchase.

7. Five Year Guarantee

Ei Electronics, guarantees the Relay Bases for five years from date of purchase against any defects that are due to faulty materials or workmanship. This guarantee only applies to normal conditions of use and service, and does not include damage resulting from accident, neglect, misuse, unauthorised dismantling, or contamination howsoever caused. This guarantee does not cover costs associated with the removal and/or installation of units. If this Relay Base should become defective within the guarantee period, it must be returned to with proof of purchase, carefully packaged, and with the problem clearly stated to one of the addresses detailed below (see "Getting Your Relay Base Serviced"). We shall at our discretion repair or replace the faulty unit.

Do not interfere with the Relay Base or attempt to tamper with it. This will invalidate the guarantee, but more importantly may expose the user to shock or fire hazards. This guarantee is in addition to your statutory rights as a consumer.

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CAUTION

1. **Alternative Energy Sources (Wind, Solar, UPS etc.)**

   This product must be connected to a Pure or True Sine Wave 230 Vac supply.

   It must not be connected to devices giving a "Modified Sine Wave" or "Quasi Sine Wave" 230 Vac such as most inverters connected to solar panels, wind turbines, water turbines or batteries.

   This also applies to battery powered UPS (Uninterruptible Power Supply) inverters.

2. **Light Dimmer Circuits**

   This product **must not** be powered from a light dimmer circuit.

Either of these power sources will cause over heating which will damage the product

The crossed out wheelie bin symbol that is on your product indicates that this product should not be disposed of via the normal household waste stream. Proper disposal will prevent possible harm to the environment or to human health. When disposing of this product please separate it from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on collection and proper disposal, please contact your local government office or the retailer where you purchased this product.

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