BROOKS
Fire Products & Solutions

BA128 - Surface Mount Relay Base

Mains Powered 230V

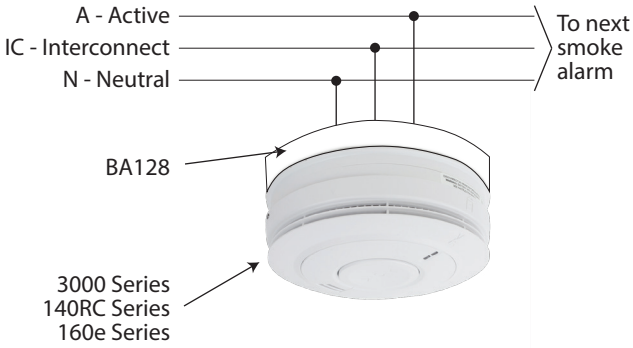
Key Features

- For use with 3000, 140RC and 160e Series Smoke and Heat Alarms
- Facilitates bulky wiring and conduits
- Built-in 8A Relay

Product Description

The BA128 is a surface mount relay base designed to operate with the Brooks 3000, 140RC & 160e Series. The Smoke / Heat Alarm can be mounted on the BA128 and when a fire is detected, the relay contacts change over. The electrically isolated contacts can be used for signalling, emergency lighting, switching lights and sirens or activating door release devices etc.

Warning: To comply with the mandatory safety regulations, the BA128 must either be fitted under one of the 3000, 140RC or 160e Series alarms as per these instructions or be fully enclosed with the supplied cover. With the cover, it allows the BA128 to be placed anywhere.



The BA128 replaces the EIB128 .

Technical Specification

Input Supply:	230 VAC / 35mA Maximum
Maximum carry current of the relay contacts:	8A @ 250VAC/24VDC, resistive load
Input driving current from the interconnect:	150uA max @ 9V
Maximum number of Alarms connected to BA128:	11
Compatible:	3000 Series, 140RC Series, 161e Series
High Isolation Relay:	Insulation distance 8mm, dielectric strength 5000Vac, Surge strength 10000V
Temperature Range:	0°C to 40°C
Material:	Flame retardant
Dimensions:	140mm diameter x 21mm depth
Approvals:	Meets AS3000 requirements

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Installation

Warning: Mains powered smoke / heat Alarms and BA128 must be installed by a licensed electrician in accordance with AS3000. Failure to install the unit correctly may expose the user to shock or fire hazards.

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.
2. Screw the BA128 base to the ceiling after first removing the required knockout and bringing the wires through it.
3. If more than one smoke alarms are to be used, connect the 2nd set of marked A - Active, N - Neutral and IC-Interconnect, on the terminal block on the PCB. The extra 3-Way terminal block is provided if the cables cannot fit into the PCB's terminal block.
4. Connect three double insulated wires between the terminals on BA128 PCB and the terminals on the Smoke / Heat Alarm base as shown in Figure 1. This "IC" wire must be connected even if it is a single alarm installation.
5. Connect the wires to the required relay contacts for controlling the auxiliary device as shown in the examples in either Figure 2 or Figure 3.
6. Screw the base plate of Smoke / Heat Alarms onto the top of BA128 using the two screws supplied.
7. Slide the Alarm on to its base plate.
8. Switch on the mains power to the Alarm – the green LED light on the Alarm should be on. Press and hold down the test button for approximately 8 seconds, the relay will switch over.

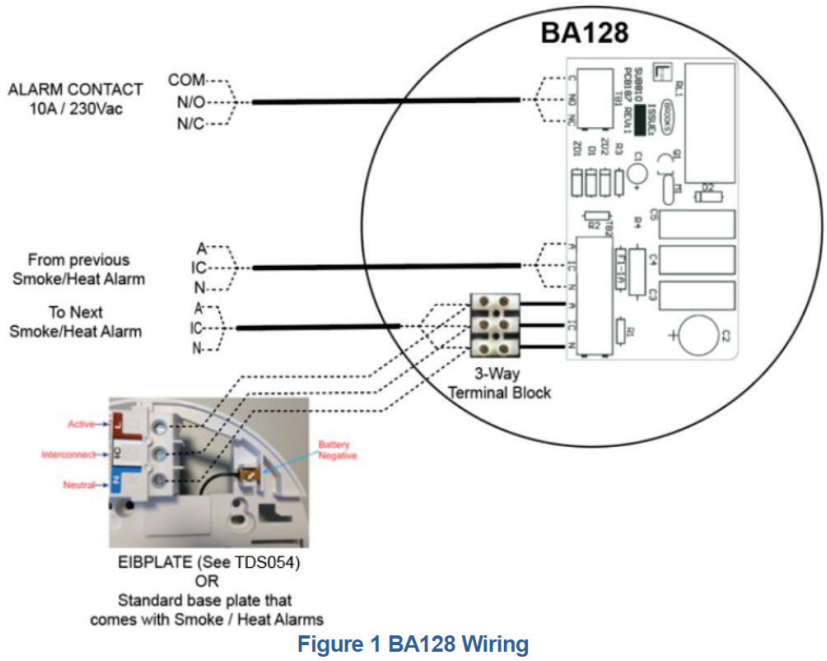

Figure 1 BA128 Wiring

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Wiring Examples

Figure 2 below shows a typical example of how the relay contacts of BA128 can be connected to control external emergency lights via the normally closed contact of the BA128 relay.

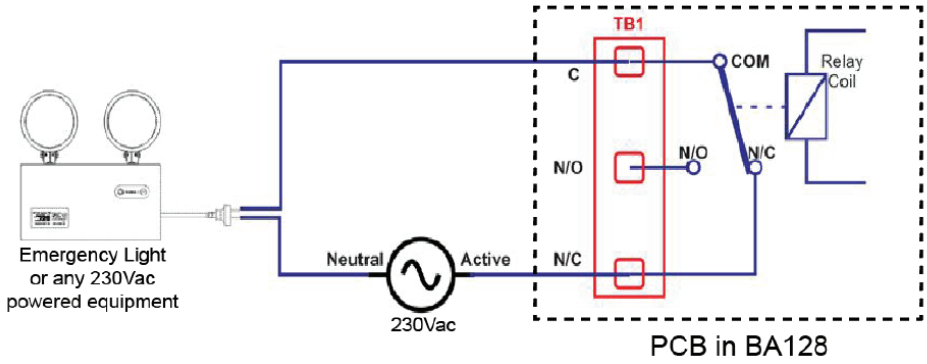

Figure 2 Control of AC Powered Ancillary Devices

Figure 3 below shows a second example to drive external sirens or sounders by connecting a DC source to the normally closed contact of the BA128 relay.

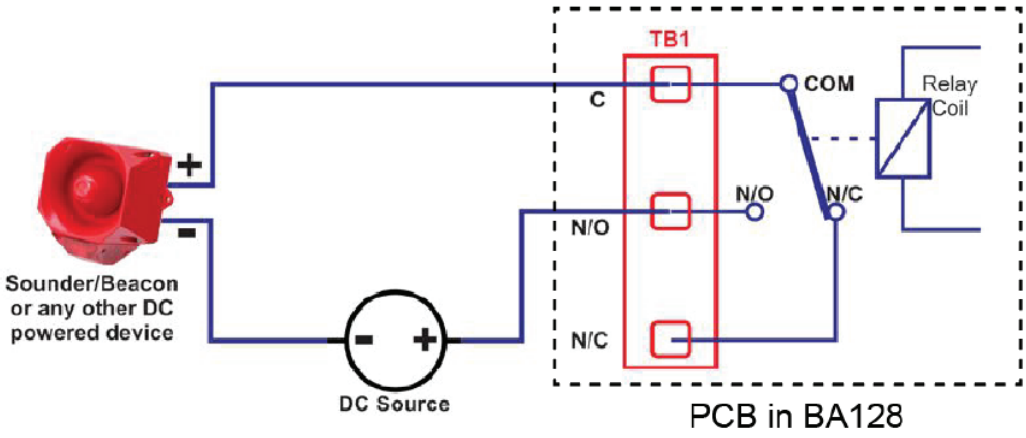

Figure 3 Control of DC Powered Ancillary Devices

Notes

1. A maximum of 11 Smoke/Heat Alarm of the types specified may be interconnected to one or two BA128 units. When one alarm senses fire all interconnected units will alarm and the relay will switch over.
2. Additional surface mount relay bases BA128 can be added to the interconnected Smoke or Heat Alarms. For every 2 additional relay bases, reduce the total number of interconnected Alarms by one Alarm.
3. The relay board is not battery backed and requires 230VAC to operate i.e. a Smoke / Heat Alarm with battery backup will continue to operate during mains failure but will not be able to switch the relay.
4. Inbuilt filter is incorporated in the relay board to reduce the effects of external noise interference.
5. Devices connected to the relay contacts must not give a fire warning until the contacts have switched for at least 200ms. (The contacts may switch momentarily when subjected to electromagnetic

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