

# Series 65A Relay Bases Installation Instructions

## General

These instructions apply to the range of 2-wire and 4-wire relay bases used with Series 65A smoke and heat detectors.

Standard relay base 45681-255	This provides one set of volt-free, form C changeover contacts that change state when the detector signals an alarm.
Auxiliary relay base 45681-256	This provides two sets of volt-free, form C contacts to facilitate the switching of a remote LED and/or other ancillary devices.
End-of-line 12V relay base 45681-257	This is intended for use with 4-wire circuits having a supply voltage between 9 and 18V dc. It features two sets of form C contacts and a power supervision relay.
End-of-line 24V relay base 45681-258	This has the same functionality as 45681-257 but is designed for use with 4-wire, 16–33V dc circuits.

## Relay

The relay resets when the detector is reset or the supply voltage falls below the drop-out voltage. It is essential that the supply to the detector does not fall below 9V when the detector signals a fire.

## Installation

These products must be installed in accordance with the applicable NFPA standards, local codes and jurisdictional authorities. Failure to follow these instructions may result in failure of the detectors to report an alarm condition. Apollo Fire Detectors Limited is not responsible for detectors which are improperly installed, maintained and tested.

Before installing these products check the continuity, polarity and insulation resistance of all wiring. Check that siting is in accordance with the fire system drawings and conforms to all applicable local codes such as NFPA 72.

Use 3" octagonal box for direct connection to the base. 4" octagonal and 4" square boxes may be used with proper UL listed mounting brackets. When mounting on a wall, install 4" to 12" from the ceiling. Use 3M Weatherban 606 Non-Flammable sealing compound (or equivalent) to seal field wiring conduit opening in the electrical box, this will reduce the stacking effect. **Do not overtighten the screws**. The raised mark on the side of the base indicates the direction of the detector LED when fitted. Connect the shield, if required, to the SHIELD terminal on the base.



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# Warning

These bases must not be connected to a main supply. The maximum voltage applied to the relay contact terminals must not exceed 50V ac and 75V dc.

## Wiring

Connect as shown in Fig. 1 for a 4-wire system and Fig. 3 for a 2-wire system. In each case connect only to a compatible control panel. Fig. 2 shows how to use the auxiliary contact of the auxiliary relay base to connect a low-current remote LED. Do not connect a LED or any other device to the –R terminal.

## Maintenance

Observe local codes of practice. Regularly test detectors in situ with smoke or heat as appropriate and check that all systems respond correctly. Check supply voltage, the condition of the terminals and the integrity of the wiring annually. Relay bases are not field serviceable and must be replaced if defective.

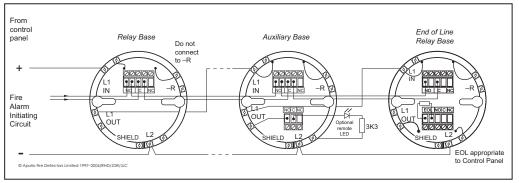


Fig. 1 - Wiring diagram of Series 65A 4 Wire Relay Bases

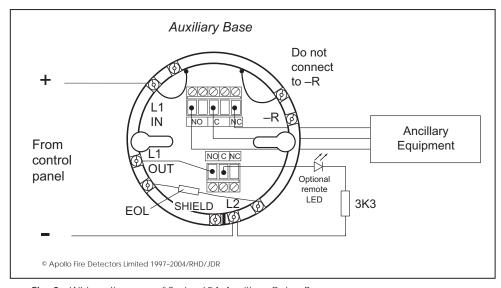


Fig. 2 - Wiring diagram of Series 65A Auxiliary Relay Bases

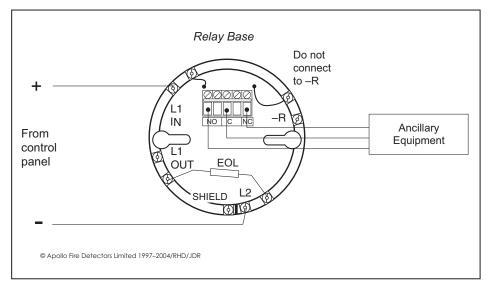


Fig. 3 - Wiring diagram of Series 65A 2 Wire Relay Bases

## **Technical Data**

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Part No.	45681-255, 256, 257, 258
Туре	Relay bases
Style	Base
Dimensions	4" diameter, ½" deep
Working Voltage	9 – 33V dc
Relay Set	15mA
Surge Current	0mA
Supervisory Current	<1µA
Relay Switching Power	30W, 50VA
Relay Contact Ratings (resistive)	1A at 75V dc; 50V ac
Relay Drop-out Voltage	<6V (minimum 0.9V)
Environmental	Indoor use, non-icing, non-condensing
Operating Temperature	0°F ( $-20$ °C) to 155°F ( $68$ °C), 32°F ( $0$ °C) to 100°F ( $38$ °C) (UL approved for continuous operating range)
Humidity	0 to 95% RH
Base Material	Polycarbonate, white, V-0 to UL94
Compatibility Identifier	45681-255, 256, 257, 258