

Comsec Protection Systems

BF366

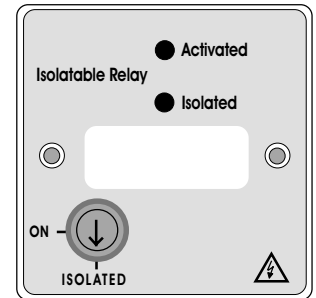
24V 5A ISOLATABLE RELAY ON A PLATE



THIS EQUIPMENT MUST BE INSTALLED BY A SUITABLY SKILLED AND TECHNICALLY COMPETENT PERSON

The BF366 is a double-pole 24V 5A polarised relay specifically designed for use in 24V fire alarm systems. It includes a keyswitch isolation facility allowing the relay operation to be temporarily disabled from the fire alarm signal during routine test and maintenance (to prevent autodiallers, water sprinklers, rollershutters, etc., from activating).

Mountable on a 25mm flush or surface mount back box, the relay is triggerable via a control panel's open collector output or a standard polarised fire alarm sounder circuit. If connecting to a sounder circuit, note that the relay will return to its normal state when the fire condition is cleared or silenced. Check with the approving authority that the proposed arrangement is acceptable prior to installation.



OPERATION

When the keyswitch is in the 'ON' position (i.e. during normal operation of the fire alarm system) and a suitable trigger stimulus (24V) is applied, the BF366's red 'Activated' LED will illuminate, its relay will switch on and any device(s) connected to it will operate accordingly. When the trigger is removed the relay will turn off.

When the keyswitch is in the 'ISOLATED' position (i.e. during routine test and maintenance), the BF366's yellow 'Isolated' LED will flash and a warning beeper will sound approximately every eight seconds. The relay is now isolated from the trigger stimulus and will be in the off state. Should a trigger be applied, the BF366's red 'Activated' LED will illuminate (to confirm that a signal is present) but the relay will remain off.

If required, the BF366's warning beeper can be disabled by removing link PLK1 on the rear of the PCB.

Note: It is vitally important the keyswitch is returned to the 'ON' position when testing/maintenance is complete.

WIRING



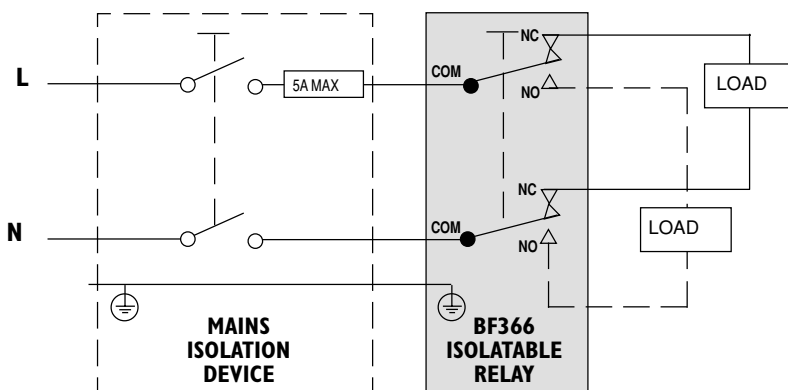
IMPORTANT NOTE: This product IS NOT a safety isolating device. It is designed to isolate the relay from the trigger signal for temporary functional disablement purposes only. The relay common (COM) to normally closed (NC) connections are still made when the keyswitch is in the "isolated" position.

Mains wiring (if used), should be provided in accordance with the current edition of the IEE Wiring Regs.16th.Ed. (BS7671 1993) or in accordance with the relevant national wiring rules.

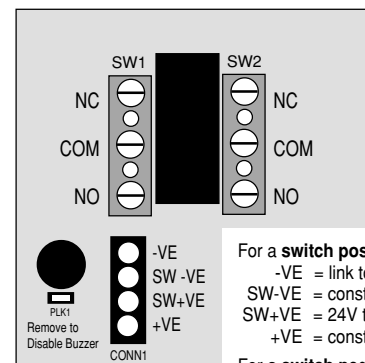
The general requirement for any mains supply to the BF366 is fixed wiring, using three core cable, not less than 1mm², fed from an isolating switch fuse spur, fused at 5A max. This should be exclusive to the BF366 and its load and be labelled accordingly. (As an alternative to a switched fused spur, any double pole isolating device with a contact separation of 3mm or greater which is fitted with suitable in-circuit protection devices and meets the appropriate national wiring regulations, can be used).

All low voltage wiring must be segregated from mains wiring. The relay contacts must not be used to switch extra low voltages (ELV) and mains at the same time and safety earths must never be switched. Ensure all earths are properly terminated in the back box or at an appropriate terminal block.

EXAMPLE WIRING CONFIGURATION (MAINS SWITCHING)



BF366 PCB LAYOUT



For a **switch positive** trigger connect:-
-VE = link to SW-VE
SW-VE = constant 0V
SW+VE = 24V trigger line
+VE = constant 24V

For a **switch negative** trigger connect:-
-VE = 0V
SW-VE = 0V trigger line
SW+VE = constant 24V
+VE = constant 24V

TECHNICAL SPECIFICATION

Contact configuration: Double pole changeover

Input coil voltage range: 17 - 30 V d.c.

Current consumption: typically 30mA @ 24V d.c. (relay activated)

Contact rating: @ 24V d.c = 5A (resistive) 2A (inductive); @ 240V a.c = 5A (resistive) 2A (inductive)

Approved Document No. DFU0366000 Rev 1