

FSR – ‘B’ SERIES P.S.U. INFORMATION

GENERAL

The FSR units have been designed to provide the necessary voltage and current for various electromagnetic Firedoor Stays and Door Holders.

Each of the FSR units can supply a variety of Door Control Units, but **care must be taken not to exceed the Maximum Design Current.**

NOTE: Current consumption for each of the door control units differs therefore the number of these devices that can be supplied by each FSR is as per the table below.

MAXIMUM NUMBER OF DOOR CONTROL UNITS TO BE SUPPLIED BY ONE FSR			
DOOR CONTROLLER	FSR-4B UNIT	FSR-20B UNIT	FSR-50B UNIT
2130B.TE	3	15	38
996	3	15	38
533	5	28	70
503	5	28	70

Where an FSR is used to supply a variety of devices, work to the above figures, not exceeding the Maximum Design Current.

NOTE:

When installing any fire controls consult your LOCAL FIRE AUTHORITY, use BS 5839 Part 1 as a guide for cables etc.

SUMMARY OF FSR-B SERIES P.S.U.

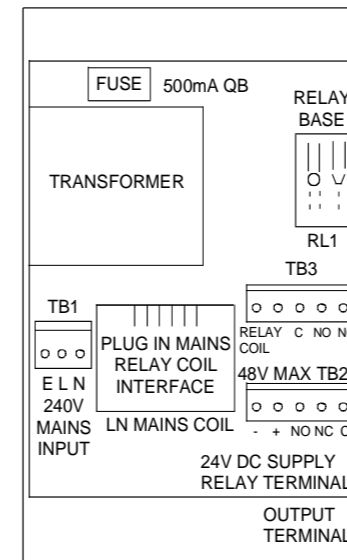
	FSR-4B	FSR-20B	FSR-50B
Maximum Design Current	280mA	1.4 Amps	3.5 Amps
Minimum Load Resistance	85 Ohms	17 Ohms	6.8 Ohms
20mm Fuse Rating	500mA Quick-blow	2 Amp Slow-blow	5 Amp Slow-blow
Relay Type	Continental Cradle Uniross U2 CGS or similar		Miniature Power Relay I.M.O.LY2
Contacts and Ratings	Two sets of 5 Amp change over		Two sets of 10 Amp change
Coil Voltages	12V dc, 24V dc, 48V dc		12V dc, 24V dc, 48V dc
Approximate Dimensions	160 x 110 x 55mm Deep	228 x 152 x 76mm Deep	228 x 228 x 101mm Deep
Input Voltage	240V ac nominal 50/60Hz		
Output Voltage	28V nominal, full wave rectified DC		

ABRIDGED FIRE DOOR CONTROL INFORMATION

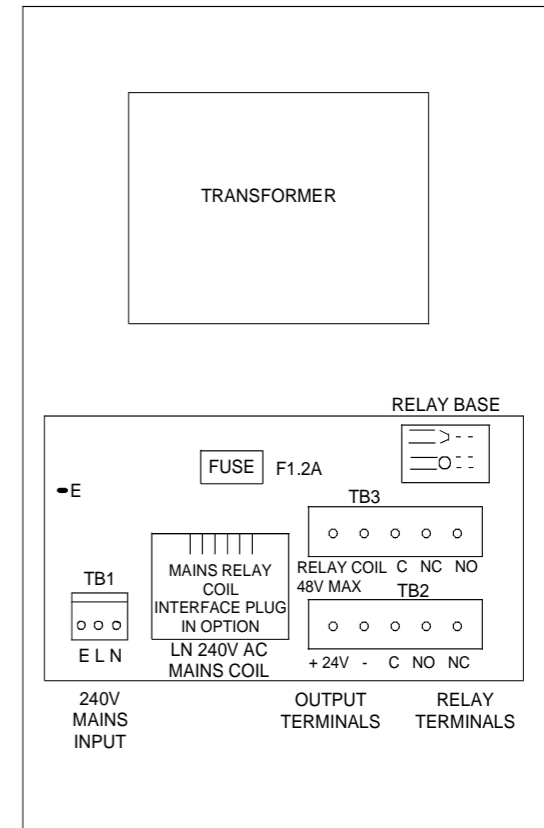
Product Code	Closer Type	Application	Approx. Current
2130B.TE	Incorporated in device	-	90mA
996	Incorporated in device	Fig. 1, 61, 66	90mA
533	Overhead Door Closers, Floor Springs.	Semi flush fixing, or surface with 533C cover, or floor mounted with 553.FMB Bracket.	50mA
503	Overhead Door Closers, Floor Springs.	Semi flush fixing, or surface with 533C cover, or floor mounted with 553.FMB Bracket.	50mA

Note: For devices other than these the relevant manufacturer should be consulted for details of voltage requirement and current consumption.

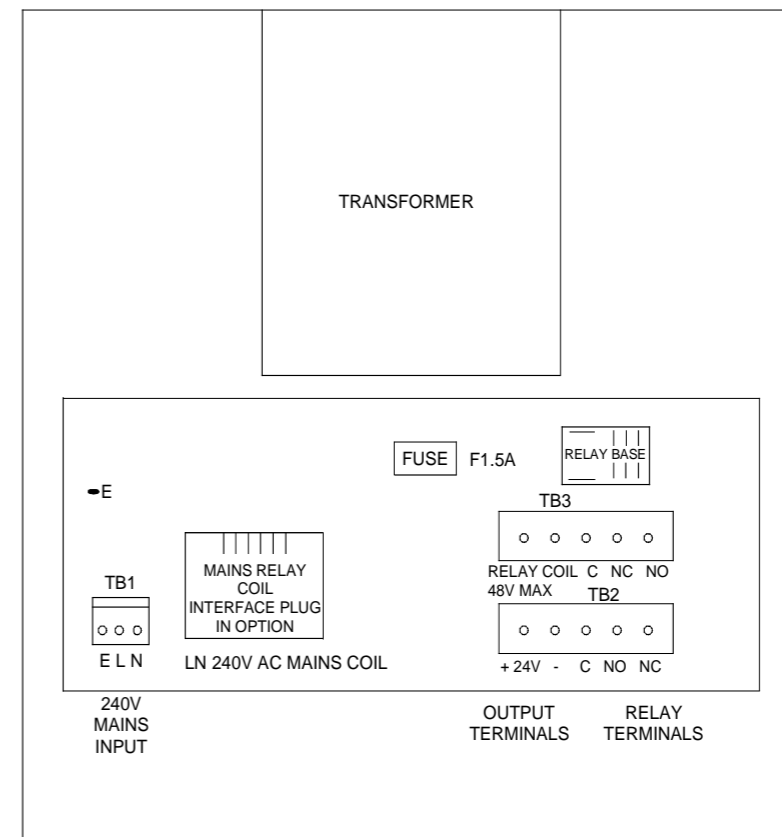
INTERNAL LAYOUT AND NOTATION OF FSR POWER SUPPLY UNITS.



FSR 4B FIG. 7



FSR 20B FIG. 8



FSR 50B FIG. 9

APPLICATIONS

(For all applications ensure that for multizone systems, doors only operate as and when required - consult your Local Fire Authority). These applications are offered as suggestions only. The final method used must be determined by qualified personnel in the light of the relevant local regulations, requirements and conditions. **Therefore this company can accept no liability for problems that may arise from the use of these suggested applications.**

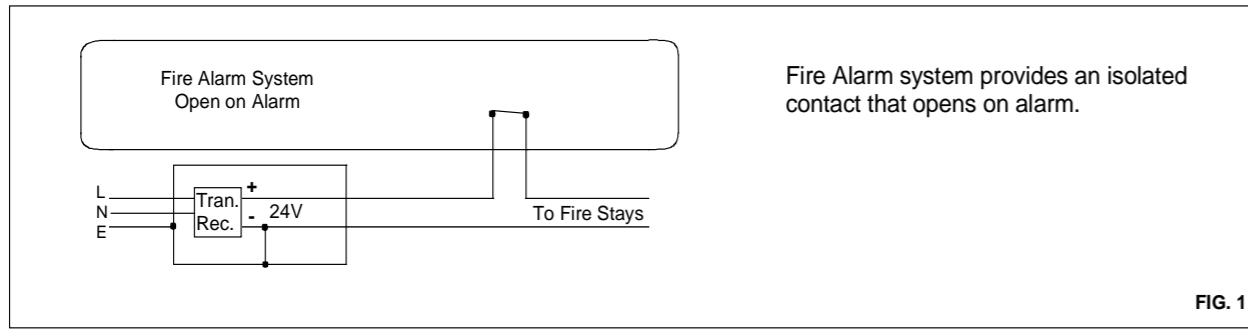


FIG. 1

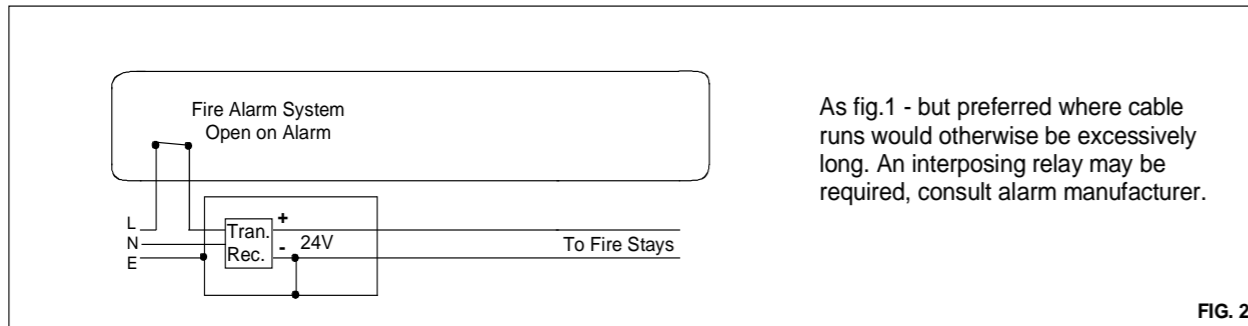


FIG. 2

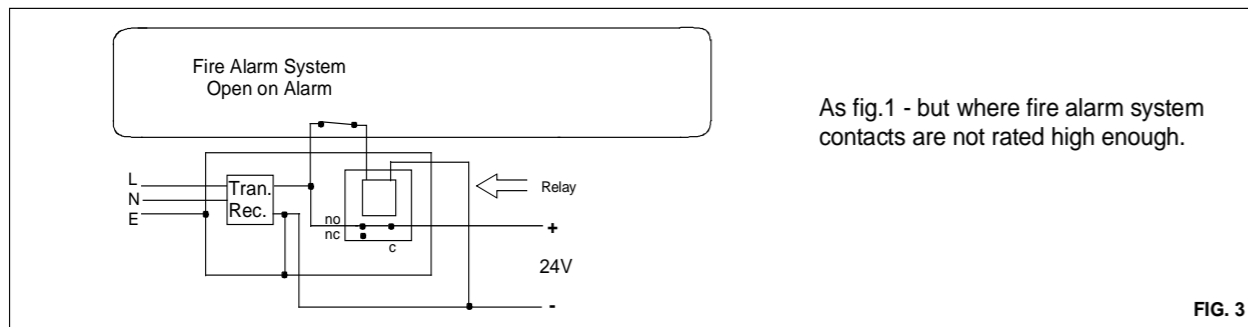


FIG. 3

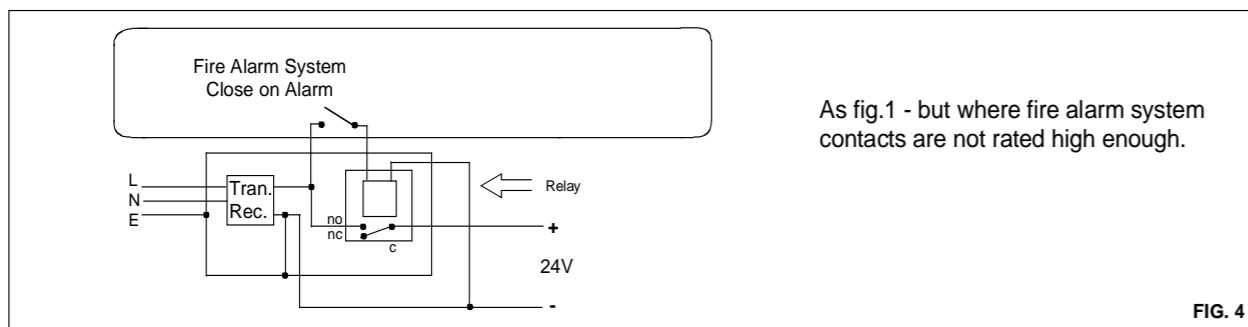


FIG. 4

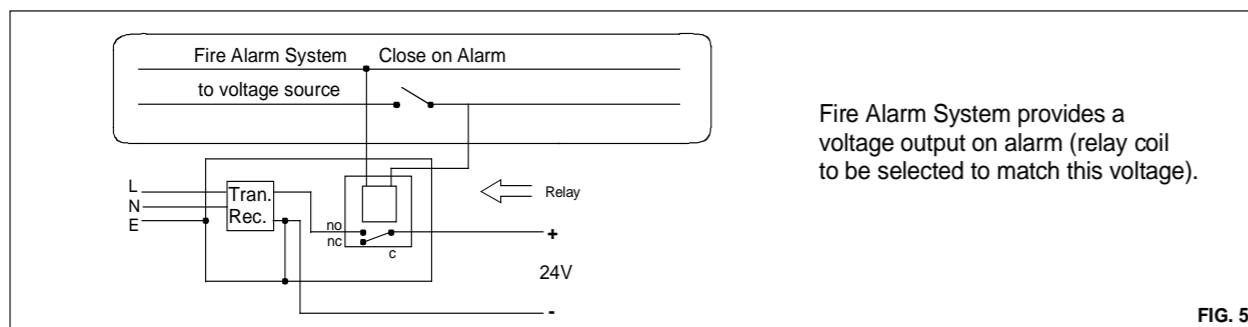


FIG. 5

COMMISSIONING SYSTEMS INCORPORATING FSR UNITS

Before applying mains power.

1. Remove the secondary fuse.
2. Measure the load resistance presented to the output of the unit and ensure that it is NOT BELOW that stated in the Summary of FSR Units.
3. Apply mains power and monitor the output current, ensuring that it is NOT GREATER than that given in the Summary of FSR Units.
4. Refit the fuse and continue commissioning the remainder of the system.

NOTE.

For the operation of relays consult the alarm manufacturer for details of polarisation and suppression of relays (these items if required must be fitted by the system installer).

ACTION TO BE TAKEN SHOULD A FUSE RUPTURE

1. Turn off mains power.
2. Carry out the details given in the "Commissioning" section.

NOTE.

DO NOT "WIRE" THE FUSE HOLDER. ALWAYS REPLACE THE RUPTURED FUSE WITH ONE OF THE CORRECT RATING.

RELAYS

The relays are optional extras. If one is required there is provision to fit one in each FSR unit, for which the base and volts-free terminals are provided. When ordering the relays please quote a) Coil voltage required b) FSR type number

NOTE.

Relay coils and terminals are independent and must be connected to supplies as required.

For 240V ac operation of the relay coil, an interface module FS3 is required, as well as a 24V dc relay for that particular FSR unit.

The module FS3 is slipped onto the connector PL: 1 and held in place using the small self tapping screw.

The 24V dc relay is plugged into the standard relay socket.

The 240V ac supply used for the relay operation is connected into the terminals "L.N. MAINS COIL". In this instance do NOT use the terminals "RELAY COIL 48 V MAX", (this is connected internally in this application).

CAUTION: NEVER connect 240V ac supplies to any terminals other than:

1. L.N MAINS COIL
2. E.L.N. MAINS

Finally NEVER allow broken or loose 240V ac leads to track onto 24V dc terminals or connections.

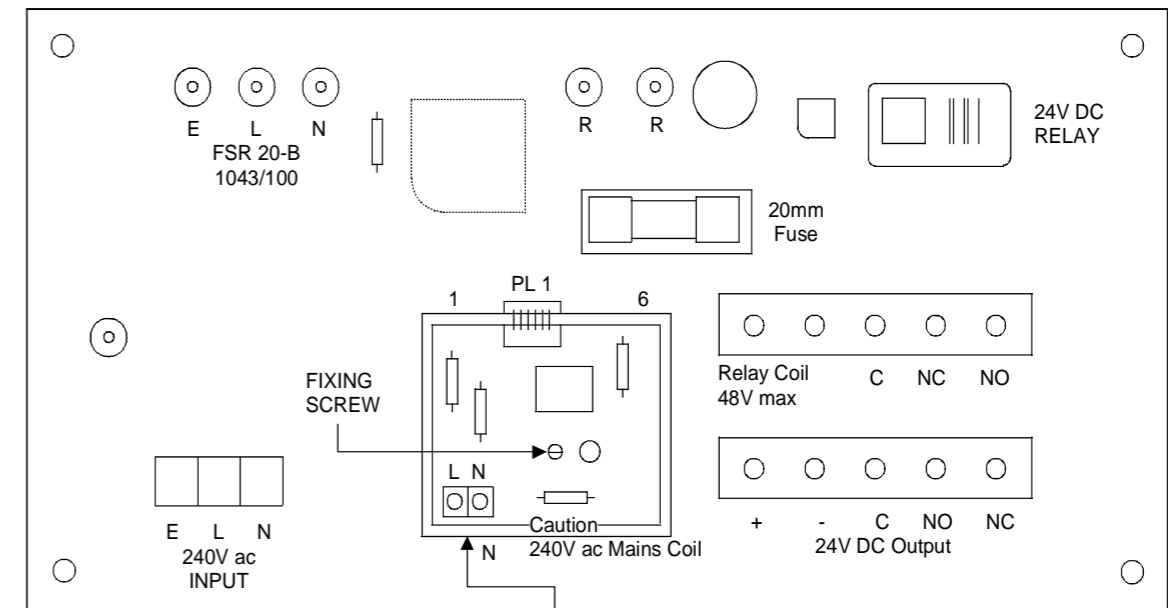


FIG. 6

NOTE: WHENEVER YOU ARE WORKING ON AN FSR UNIT ENSURE THAT MAINS FEED, AND COIL FEED ARE ISOLATED.

FS3 INTERFACE MODULE IN POSITION SECURED BY SMALL SCREW. (DO NOT OVERTIGHTEN)

240V ac COIL INPUT CONNECTIONS

This drawing is intended to show how an FS3 interface module is fitted to an FSR board. The above example is an FSR 20B.

NOTE.

Precautions to be taken when connecting into existing alarm circuits.

Always consult local authorities and the alarm manufacturers before adding any extra circuits to the existing alarm circuit, as there may be problems with Zone Controls and the termination of devices. If after full consultation, circuits are to be added, these may need to be terminated to allow full correct operation of the alarm system. As there are many variations of terminations no facilities are available within the FSR unit to fit polarising diodes, suppression diodes, etc. These must be fitted at either the terminals of the FSR unit or at the point of connection into the alarm circuit.