



DIN-RAIL SOUNDER CONTROLLER (5 AMPERES)

FUNCTION

The DIN-rail Sounder Controller is used to control the operation of a zone of externally powered sounders and to report their status to Apollo-compatible analogue control equipment.

FEATURES

The Sounder Controller allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off. Sounders may be operated individually or in groups and, whichever address mode has been applied, may be synchronised when in pulsed operation.

An opto-coupled input is provided to monitor the state of the external power supply.

In normal operation the Sounder Controller returns a pre-set analogue value of 16, but in the event of an open or short-circuit fault or of a fault in the external power supply, the unit returns a pre-set analogue value of 4.

ELECTRICAL CONSIDERATIONS

The DIN-rail Sounder Controller is loop powered and operates at 17–28V DC. It requires a local power supply of 12–35V DC to power the external load, which may be up to 5A.

A polarising diode is required with each alarm device, as sounders are operated by voltage reversal, provided by a double-pole change-over relay. The sounder circuit is protected by a fuse rated at 5A (quick acting).



Part no. 55000-182

PROTOCOL COMPATIBILITY

The unit will operate only with control equipment using the Apollo XP95 or Discovery protocol. The features of the Sounder Controller are available only when the unit is connected to a panel with the appropriate software.



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FAULT MONITORING

In addition to the monitoring of open and short-circuit faults on the sounder wiring, the Sounder Controller has a facility to monitor the presence and polarity of the external power supply to the sounders. This is achieved by a circuit which includes an input to monitor a volt-free, normally-open contact. A wire link must be fitted if the fault contact is not used.

MECHANICAL CONSTRUCTION

The Sounder Controller is supplied in a housing which is clipped onto a standard 35mm DIN rail (DIN 46277) using end stops provided.

Connections are made via plug-in terminal blocks which accept wires up to 2.5mm².

Two LEDs are visible through the top cover of the enclosure.

The red LED pulses or is illuminated to indicate that the sounders are, respectively, pulsed or switched on continuously.

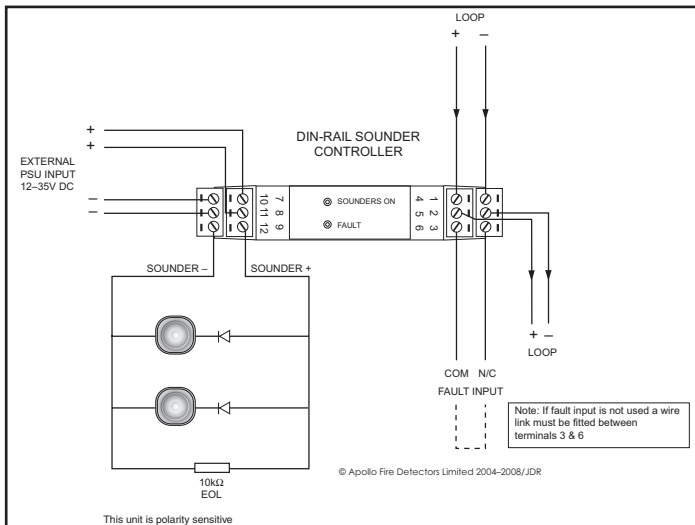
The yellow LED is illuminated whenever a fault condition has been detected.

If the fault LED is not required or the extra loop current to illuminate it is not available, it can be disabled by using the eighth segment of the DIL switch.

Dimensions and weight of Sounder Control Unit:

110 x 107 x 20mm 95g

Schematic Diagram and Wiring Connections



Technical data

| | |
|--------------------------------------|------------------------------------------------|
| Loop voltage | 17-28V DC |
| Current consumption, loop, at 24V | |
| switch-on surge, max 150ms | max 3.5mA |
| quiescent, 10kΩ EOL fitted | 1.9mA |
| sounders operated | max 1.7mA |
| fault (yellow LED on) | 3.6mA |
| sounder line short circuit | |
| yellow LED enabled | 4.5mA |
| yellow LED disabled | 2.7mA |
| Current consumption, external supply | |
| relay off | 1mA at 12V 3mA at 35V |
| sounders and red LED on | 44mA at 12V 47mA at 35V (+ sounder load) |
| Sounder output monitoring voltage | 10-12V DC (open-circuit condition) |
| Sounder circuit voltage | 12-35V DC |
| Sounder circuit current, max | 5A at 35V DC (resistive load) |
| Operating temperature | -20°C to +70°C |
| Humidity (no condensation) | 0-95% |
| IP rating | 20 |
| Radiated emissions | to BS EN 61000-6-3:2001 |
| Environmental | to BS EN 54-18:2005 |

For further technical information please refer to PP2361-T, available on request.

EMC DIRECTIVE 2004/108/EC

The DIN-rail Sounder Control Unit complies with the essential requirements of the EMC directive 2004/108/EC, provided that it is used as described in this PIN sheet.

A copy of the Declaration of Conformity is available from Apollo on request.

Conformity of the Sounder Controller with the EMC directive does not confer compliance with the directive on any apparatus or systems connected to it.

Sounder Loading Table

| Ambient Temperature (°C) | Load Current (Amps) |
|--------------------------|---------------------|
| 66-70 | 4 |
| up to 65 | 5 |

Please note: if the unit is installed in applications above 65°C ambient temperature then please refer to sounder loading table (above) for safe operational use.