

DIN-Rail Sounder Controller (5 Amperes)



Product Overview

Product Type	DIN-Rail Sounder Controller (5A)
Part No.	55000-182

Product Information

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.

The Sounder Controller enables sounders to be operated continuously or be pulsed, one second on, one 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. In the event of an open or short-circuit fault or 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 28 V dc. It requires a local power supply of 12 - 35 V 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 quick acting fuse rated at 5A.

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.

Technical data

Supply Voltage	17V-28 V dc
Current consumption, loop, at 24V:	
Switch-on surge, 150 ms max	max 3.5 mA
Quiescent, 10 kΩ EOL fitted	1.9 mA
Sounders operated	max 1.7 mA
Fault (yellow LED on)	3.6 mA
Sounder line short circuit	
Yellow LED enabled	4.5 mA
Yellow LED disabled	2.7 mA
Current consumption, external supply	
Relay off	1 mA at 12 V 3 mA at 35 V
Sounders and red LED on	44 mA at 12 V (+ sounder load) 47 mA at 35 V (+sounder load)
Sounder output monitoring voltage	10 - 12 V dc (open-circuit condition)
Sounder circuit voltage	12 - 35 V dc
Sounder circuit current max	5 A at 35 V dc (resistive load)
Operating temperature	-20°C to +70°C
Humidity (no condensing or icing)	0% to 95% RH
IP Rating	IP20
Radiated emissions	to BS EN 61000-6-3:2001
Environmental	to BS EN 54 -18:2005
Dimensions	110 mm high x 107 mm wide x 20 mm deep
Weight	95 g

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 35 mm DIN-Rail (DIN 46277) using the end stops provided.

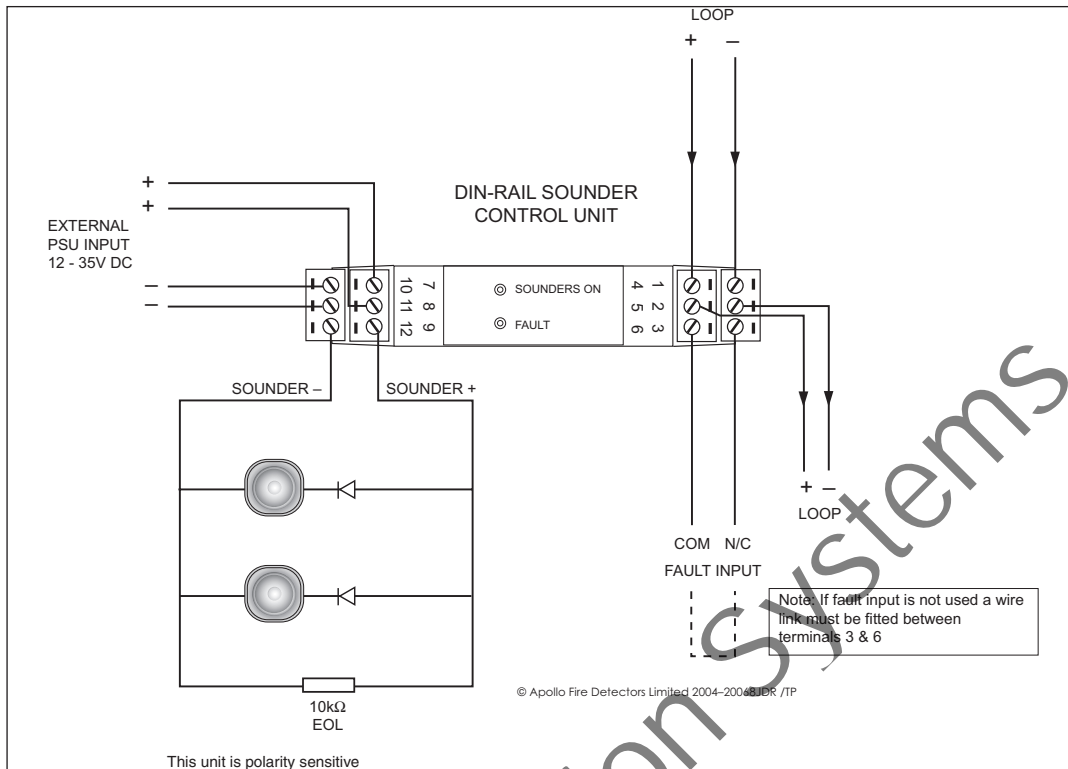
Connections are made using plug-in terminal blocks which accept wires up to 2.5 mm².

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 using the eighth segment of the DIL switch.

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Schematic diagram and wiring connections



Sounder loading table

If the Sounder Controller is installed in applications above 65°C ambient temperature then please refer to the sounder loading table below for safe operational use.

Ambient temperature °C	Load current (amps)
66 - 70	4
up to 65	5

EMC Directive 2014/30/EU

The DIN-Rail Sounder Controller (5A) complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this datasheet.

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

Conformity of the DIN-Rail Sounder Controller (5A) with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to it.

Construction Products Regulation 305/2011/EU

The DIN-Rail Sounder Controller (5A) complies with the essential requirements of the Construction Products Regulation 305/2011/EU.

A copy of the Declaration of Performance is available from Apollo upon request.