

DIN-RAIL ZONE MONITOR

FUNCTION

The DIN–Rail Zone Monitor powers and controls the operation of a zone of up to 20 conventional fire detectors from a loop of XP95 addressable detectors and ancillary devices.

FEATURES

The DIN–Rail Zone Monitor is factory preset to return an analogue value of 16 when all detectors on the zone are in the quiescent state and 64 when a detector changes to the alarm state. The unit latches in the alarm state.

A 6.2k Ω end-of-line resistor is used to monitor cables for open and short-circuit faults. Alternatively, an active end-of-line monitor may be used in conjunction with diode bases and a capacitor of up to 50 μ F fitted at the unit wiring terminals.

In either case an analogue value of 4 is transmitted during open or short-circuit faults.

The DIN–Rail Zone Monitor is fitted with a bi-directional short-circuit isolator and will be unaffected by loop short-circuits on either loop input or output.

ELECTRICAL CONSIDERATIONS

The DIN–Rail Zone Monitor is loop powered and operates at 17–28V DC with protocol pulses of 5–9V.

PROTOCOL COMPATIBILITY

The DIN–Rail Zone Monitor will operate only with control equipment using the Apollo XP95 or Discovery protocol.



Part no. 55000-812

Dimensions and weight of DIN-Rail Zone Monitor: 110 x 107 x 20mm 95q

Two DIN-Rail enclosures are available: 4 way 29600-239 10 way 29600-240









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MECHANICAL CONSTRUCTION

The DIN–Rail Zone Monitor is supplied in a standard housing which is clipped onto a standard 35mm DIN rail (DIN 46277) or fixed directly to the enclosure using two 4mm screws.

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 illuminates in the event of an alarm condition being detected.

The yellow LED is illuminated whenever the built in isolator has sensed a short-circuit loop fault.

EMC DIRECTIVE 89/336/EEC

The DIN–Rail Zone Monitor, Part No. 55000-812 complies with the essential requirements of the EMC directive 89/336/EEC, 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 DIN–Rail Zone Monitor with the EMC directive does not confer compliance with the directive on any apparatus or systems connected to it.

Technical Data

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Loop voltage	17-28V DC
Zone voltage	
(Loop voltage > 22V)	19V ±1V
(Loop voltage < 22V)	loop voltage –1.5V
Maximum current consumption at 24V	
switch-on surge, max 150	
	4mA + detector load
quiescent	
alarm	11mA
short-circuit	11mA
Maximum quiescent detector	load 2mA
Maximum current through isolator	
	1A continuous 3A peak
Isolating voltage	14V
End-of-line resistor value	$6.2k\Omega + 5\% 1/3W$
Stabilisation time on power-u	p 4 seconds
Maximum capacitor on zone	terminals 50µF
Operating temperature	−20° C to + 70° C
Humidity (no condensation)	0% - 95%
Shock, Vibration and Impact	EFSG/F/95/007
IP rating	20
	nissions BS EN 50081–1 1992
	munity BS EN 50130-4 1996
	11101111 03 EN 30 130-4 1990

For further technical information please refer to PP2049-T, available on request.

Dimensional Drawing (mm)

