Locally Powered Zone Monitor

FUNCTION
The Locally Powered Zone Monitor powers and controls the operation of a zone of up to 40 Orbis®or Series 65® Apollo fire detectors.

FEATURES
The Locally Powered Zone Monitor is set to return an analogue value of 16 when all detectors on the zone are in quiescent state and 64 when a detector changes to an alarm state. The Locally Powered Zone Monitor latches in the alarm state.

An analogue value of 4 is transmitted during open-or short-circuit faults.

The Locally Powered Zone Monitor is fitted with a bi-directional short circuit isolator and will be unaffected by loop short circuits on either the loop input or loop output. For further information on isolators please refer to PIN sheet PP2090, available on request.

ELECTRICAL CONSIDERATIONS
The Locally Powered Zone Monitor requires a separate power supply of 21–28V DC. A 3kΩ end-of-line resistor is required.

PROTOCOL COMPATIBILITY
The Locally Powered Zone Monitor operates only with control panels using Apollo XP95® or Discovery® protocol. Please check with your control panel manufacturer for full compatability.

MECHANICAL CONSTRUCTION
The Locally Powered Zone Monitor is supplied with a polycarbonate backbox for surface mounting.

Locally Powerered Zone Monitor
Part Number: 55000-864

Three LEDs, one green, one red and one yellow, are visible through the front cover of the enclosure

The green LED is illuminated to indicate that local power has been applied to the unit.

The red LED is illuminated to indicate that a detector on the zone has changed to the alarm state.

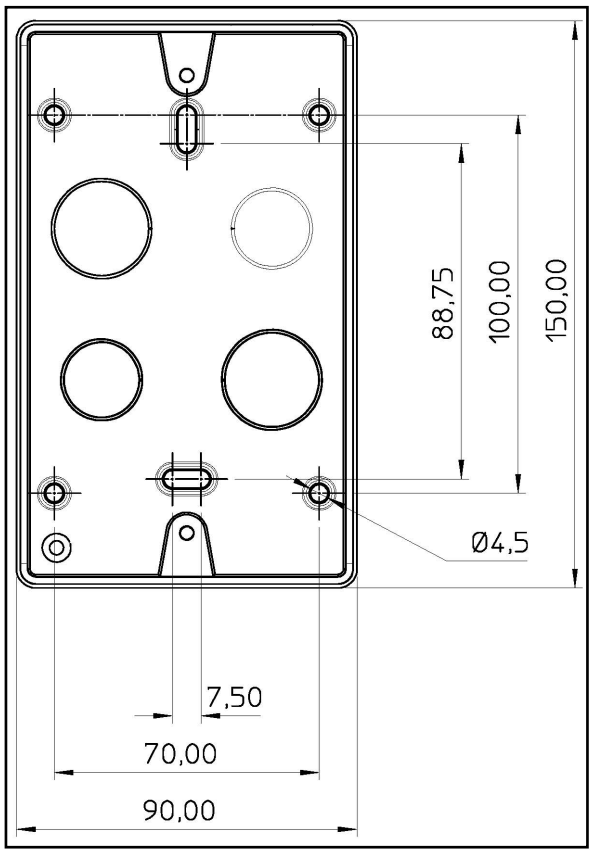
The yellow LED is illuminated whenever the isolator has sensed a short circuit loop fault.

DIMENSIONS AND WEIGHT
150mm X 90mm x 48mm 230g

36 Brookside Road, Havant,
Hampshire, PO9 1JR, UK.
Tel: +44 (0)23 9249 2412
Fax: +44 (0)23 9249 2754
Email: sales@apollo-fire.com
Web: www.apollo-fire.co.uk

Overseas offices: America China Germany

Dimensional Drawing



PROTOCOL USAGE

Output Bits	
2	No function
1	Initiate self test
0	Activate Zone reset
Interrupt	No
Analogue Value	
64	Alarm
16	Quiescent
4	Zone fault
Input Bits	
2	Reflects status of o/p bit 2
1	Self test confirmed
0	Zone reset active
Flag Setting	
XP95 Flag	Yes
Alarm Flag	Yes

Table 1

SCHEMATIC DIAGRAM AND WIRING CONNECTIONS

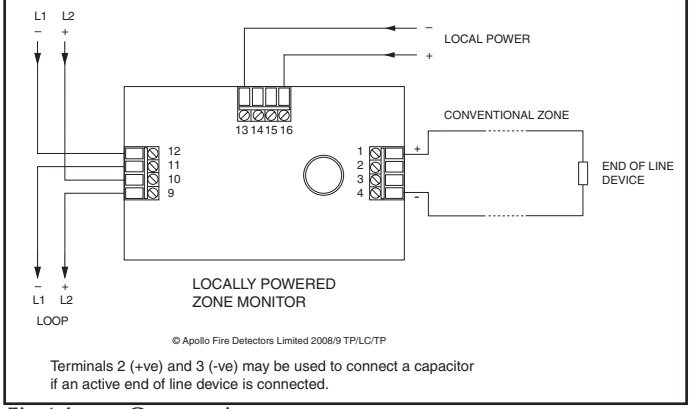


Fig.1 *Loop Connections*

TECHNICAL DATA

Loop voltage	17–28V DC
Quiescent current	2.5mA
Local Power	
Supply voltage	21–28V DC
Local quiescent current (3kΩ End of line fitted)	13mA
Zone quiescent current detector load	4mA max
Zone voltage	19 ± 1.5V DC
Zone alarm current	35mA
Zone alarm resistance - See Table 2	100Ω – 1kΩ
IP Rating	54
Operating temperature	–20°C to +70°C
Humidity	0–95% RH
Isolator Rating	5

Complies with EMC Directive 2004/108/EC
Complies with EN54-17:2005 and EN54-18:2005

EMC DIRECTIVE 2004/108/EC

The Locally Powered Zone Monitor, part no. 55000–864, 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 Locally Powered Zone Monitor with the EMC Directive does not confer compliance with the directive on any apparatus or systems connected to it.

NOTE: Failure of the local supply will prevent the device from communicating with the control panel, resulting in a device missing fault.

ANALOGUE VALUES RELATED TO CIRCUIT STATUS AND ZONE LOAD (INPUT RESISTANCE)

Status	Analogue Value	Locally Powered Zone Monitor (55000–864)
Short circuit fault	4	<47Ω
Indeterminate	4 or 64	47Ω to 100Ω
Alarm	64	100Ω to 1kΩ
Indeterminate	64 or 16	1kΩ to 2kΩ
Normal	16	2kΩ to 3k5Ω
Indeterminate	4 or 16	3k5Ω to 4kΩ
Open Circuit Fault	4	>4kΩ

Table 2

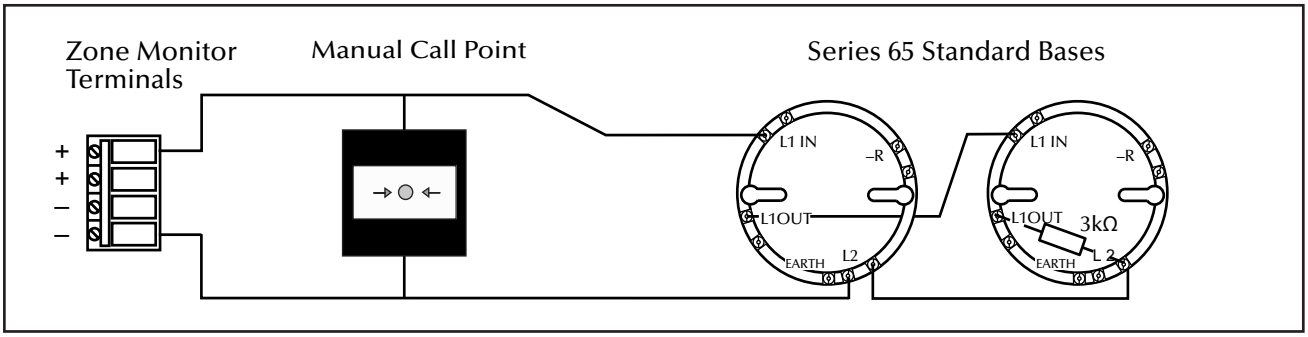


Fig.2 *Zone connection — standard bases with 3kΩ monitoring resistor at end-of-line*