Product Data

PS1730.1

ZC3

Conventional Panel

- **2, 4, 8, 16 and 32 zone versions**
- **4 alarm circuits (4 zones and above)**
- **Up to 5 repeaters on a serial link connection**
- **Class change, remote input facility**
- **Selectable non latching zones**
- **One man walk test on both detector and sounder circuits**
- **Programmable delay modes**
- **Sounder pulsing in non latching zones**

The ZC3 range of conventional panels features control and indication facilities for 2, 4, 8, 16 and 32 zone systems. Up to a maximum of 32 automatic detectors and/or manual call points can be connected to each zone.

Complying with the requirements of EN54 Parts 2 and 4, the ZC3 range is approved by several certification bodies including the Loss Prevention Certification Board (LPCB) and is ideal for systems designed to meet a variety of local codes.

All units are housed in robust yet attractive metal enclosures, incorporating a door mounted display panel, providing user controls and indications. ZC3 panels are compatible with all ZC conventional detection devices. Zone wiring is fully monitored for open, short circuit and detector removal, with head out continuity.

Panels are provided with four monitored alarm circuits (two only for the two zone version), with an output of 0.5A each for the two and four zone models and 1.0A for the larger sizes. All sounder circuit wiring is fully monitored for open and short circuit faults. A common 24Vdc auxiliary supply is included, together with common outputs for both fire and fault.

Standard facilities include class change, non latching zones (configurable on any zones), one man walk test for both detector and sounder circuits, a configuration programme including various delay modes and alert sounder pulsing in non alarm zones. A lamp and panel buzzer test facility is also included on all panels.

Access to operator level is via a control enable key, located on the front of the panel. A second separate key is required to open the panel enclosure for access to the engineering level.

Up to five matching 2 to 8, 16 and 32 zone repeat panels can be connected to each appropriate sized main panel via the panel auxiliary supply, repeater interface card (ordered separately) and screened, two wire, serial links. 24volt d.c. supply is by a further two core connection from the main panel.

The ZC3 panel range represents excellent value for either new or refurbished installations where conventional, cost effective equipment is specified.

Features

LPCB approved to EN54 Parts 2 and 4
The ZC3 range meets fully the requirements of the European Standard EN54 Part 2 and 4. Panels are approved to the standard by the Loss Prevention Certification Board (LPCB) and are suitable for systems designed to meet the recommendations of BS 5839 Part 1.

Extensive configuration options
In addition to a wide range of configurable input and output options, the ZC3 range offers selectable, site specific facilities – where each zone can be configured for standard, non latching, delayed (from 1 to 9 minutes) or intrinsically safe operation. Panel facilities are configured simply by selection switches available at the engineering access level.

Non latching zones
Individual zones can be configured as standard latching or non latching. The provision of the selectable non latching zone facility, enables panels to be connected together without the costly addition of reset, lock up relays.

Intrinsically safe zones
Any zone can be configured for use with intrinsically safe devices, installed in hazardous areas. Trigger devices must be wired through a suitable I.S. zener barrier or galvanic isolator and monitoring devices in detector bases and end of line units must comply with the requirements detailed in the ZC3 installation manual.

Delayed alarms
Alarms can be delayed by a one minute to a nine minute period, in steps of one minute. Different delay periods can be selected on an individual zone basis.

Wide range of panel sizes
Panels range from 2 zones up to 32 zones, making the ZC3 ideal for any small to medium size system. From small office and industrial sites to larger educational and healthcare applications, available size range and extensive specification enables the system designer to provide fire detection at a level usually associated with more complex technology.

Membrane fascia with tactile switches
Panels feature an attractively styled, membrane fascia, displaying all LED indicators and push buttons for system control. Access to operator level is via an enable keyswitch, located on the panel fascia. Access to higher levels is obtained via a security lock fitted to the hinged front door of the panel enclosure.

One man test facility
Both trigger devices and sounders can be tested by a single engineer, without the need to return to the panel between testing each device. After the first detector or callpoint in a zone is tested, the sounders give a short response and the system resets automatically, allowing the person conducting the test to proceed directly onto the next device.

In sounder test mode, devices operate for 2 seconds followed by a period of silence for 15 seconds.

Easily removable chassis
All PCBs are mounted onto an internal chassis back plate, which is easily removed, providing the installer with an empty enclosure for first fix installation.

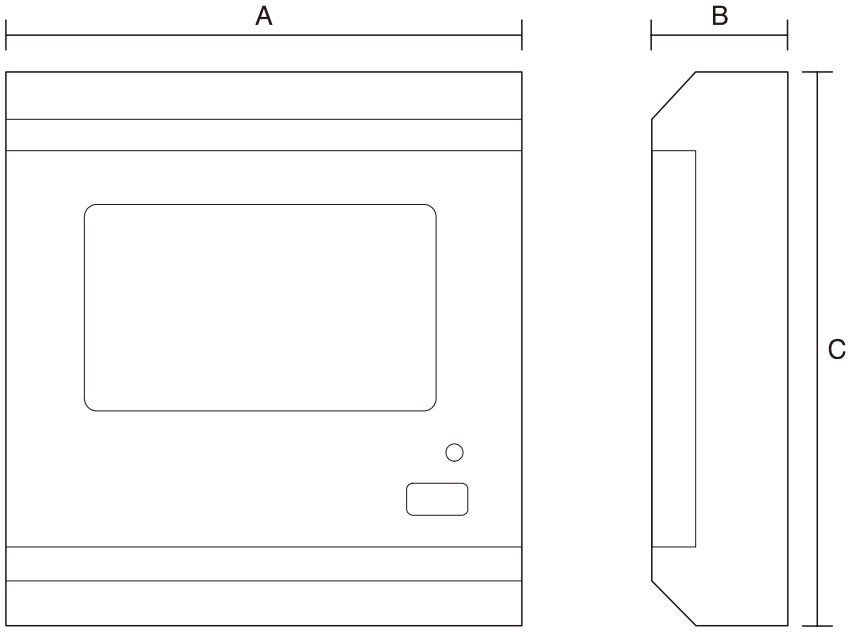
Fire and fault routing outputs
Separate, common outputs for initiating signals of system fire and/or system fault are provided. These outputs are for connection to transmission equipment for signaling to fire fighting personnel, for example a manned call centre or local fire brigade.

Repeater panels
ZC3 panels can operate up to five repeat panels connected via a screened cable, serial link. Panels require 24Vdc power which is provided either from the main panel auxiliary supply or if more convenient from a separate power supply unit. A repeater driver card is also required (ordered separately) which is installed in the main control panel. Only one card is required regardless of the number of repeaters installed.

Controls for Evacuate, Silence/Resound, Reset, Silence Buzzer, Delay On/Off Override and Test Display are provided, together with LED system status indicators.

Flush fixing
A range of fully flush and semi flush bezels is available for all ZC3 control and repeater panels.

Dimensions



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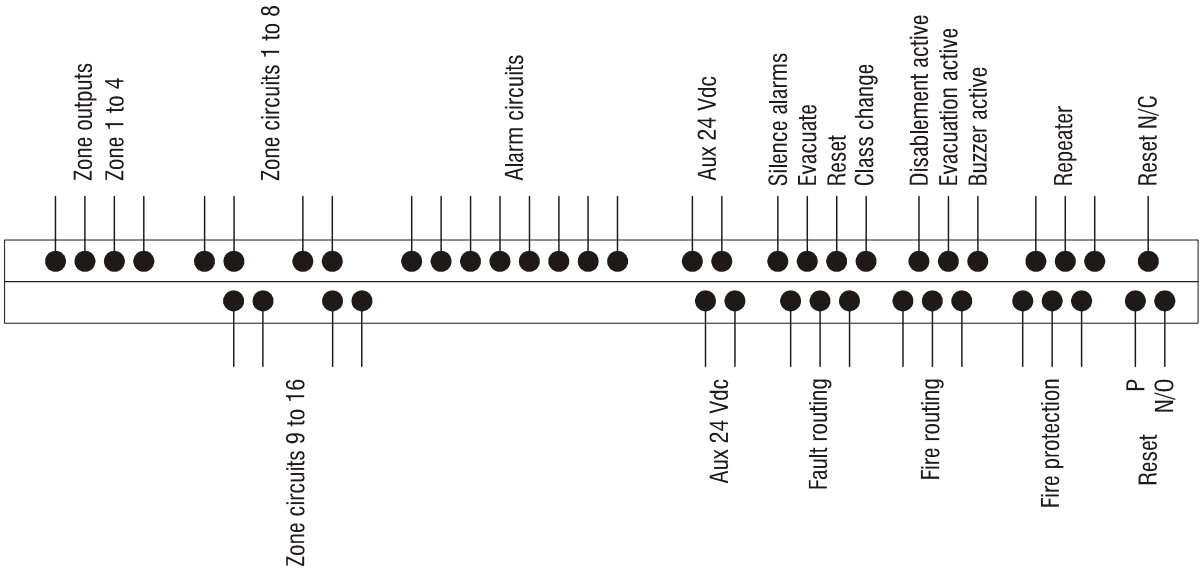
	A (mm)	B (mm)	C (mm)
2/4 Zone	325	95	340
8 Zone	325	126	370
16 Zone	325	126	370
32 Zone	399	126	443
2-8z Repeat	325	95	340
16z Repeat	325	95	340
32z Repeat	399	126	443

Wiring Diagram



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Specification

ZC3-EN-2	2 zone conventional fire alarm panel
ZC3-EN-4	4 zone conventional fire alarm panel
ZC3-EN-8	8 zone conventional fire alarm panel
ZC3-EN-16	16 zone conventional fire alarm panel
ZC3-EN-32	32 zone conventional fire alarm panel
ZC3-RDU24-8	2 to 8 zone repeater panel
ZC3-RDU24-16	16 zone repeater panel
ZC3-RDU24-32	32 zone repeater panel
ZC3AB-RDU	Repeater panel driver card
ZC3-SFB-2/4	Semi-flush bezel for 2, 4 zone main panels and repeater range
ZC3-SFB-8	Semi-flush bezel for 8 and 16 zone main panels
ZC3-SFB-32	Semi-flush bezel for 32 zone main panel
Zones	2, 4, 8, 16 and 32
Trigger devices	32 per zone
Sounders	2 separate circuits (2 and 4 zones), 4 separate circuits (8, 16, and 32 zones) extendable by 8 way sounder circuit board.
Compatibility	All ZC conventional equipment
Mounting	Surface or semi or fully flush with appropriate flushing bezel (ordered separately)
Operating voltage	
Input	230 Vac 50/60 Hz plus10% -15%
Output	24 Vdc
Wiring	All system wiring 2 core (to local codes and standards)
Monitoring	Trigger device circuits open and short circuit fault and detector removal via 22uF 35/40 volt end of line capacitor Sounder circuits open and short circuit fault with 3K9 Ohm end of line resistor
Switched outputs	
Sounder circuits (common)	ZC3-2 2 x 24 Vdc 0.5A total ZC3-4 4 x 24 Vdc 0.5A total ZC3-8, ZC3-16, ZC3-32 4 x 1.0A total
Auxiliary output (fused)	ZC3-2, ZC3-4 0.5A ZC3-8, ZC3-16, ZC3-32 1.0A
Fire routing (common)	Volt free c/o rated 1A at 30 Vdc, or EN54 mode (selectable)
Fault routing (common)	Volt free c/o rated 1A at 30 Vdc, or EN54 mode (selectable)
Fire protection (common)	Volt free c/o rated 1A at 30 Vdc, or EN54 mode (selectable)
Open collector outputs	Evacuate active, buzzer active, disablement active, zonal fire (first four zones)
Remote inputs	Class change – operates all sounders for 5 seconds Remote evacuation Silence alarms Reset
Zone configuration (all zones)	Latching/non-latching Delayed/non-delayed Standard/intrinsically safe
Repeater panel	2 to 8 zone, 16 zone, 32 zone up to 5 units per main panel by 4 core connection, (2 x comms, 2 x 24Vdc.), via repeater driver card
Indicators	Light emitting diodes (LEDs)
Standby batteries	
Control panel	2 and 4 zone – 2 x 12 V – 3Ah sealed lead acid 8 zone – 2 x 12 V – 7Ah or 12 Ah sealed lead acid 16 zone – 2 x 12 V – 12Ah sealed lead acid 32 zone – 2 x 12 V – 18Ah sealed lead acid
Repeaters	All sizes – 2 x 12 V – 3Ah sealed lead acid
Temperature range	-5^{O}C to plus 40^{O}C
Humidity range	5% to 95% (non condensing)
Environmental	IP50
Construction	Sheet steel back box and hinged front door
Dimensions	See diagram above
Colour	Grey
Weight	
Control panels (excluding batteries)	2 and 4 zone – 5.65 Kg 8 zone – 7.05 Kg 16 zone – 7.05 Kg 32 zone – 9.35 Kg
Repeaters	2 to 8 zone – 5.65 Kg 16 zone – 5.65 Kg 32 zone – 7.6 Kg

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