EP203 Automatic Extinguisher Panel
Technical Specifications

Power Supply Specification

Mains supply voltage	230Vac, 50/60Hz
Internal power supply	24Vdc nominal
Max. output current	3A@23/27Vdc
Power rating (including charging)	1.5A cont., 3A peak
Battery type	2 x 12Vdc 7Ahr VRLA types, connected in series
Battery charge current	0.7A
Earth fault monitoring	YES
Mains supply/battery charge monitored for failure	YES
Batteries monitored for disconnection and failure	YES
Quiescent current drain on mains fail	40mA approx.

Detector Circuit Specification

Number of conventional detector circuits	3 @ 21-28Vdc
Line monitored for open and short circuit faults	YES
Max. cable length per circuit	250m
Max. no. of smoke/heat detectors per circuit	30
Max. combined no. of detectors & manual call points per circuit	32
Zone quiescent current	20mA max
End-of-line resistor value	6K8 ohm ± 5%, 0.25W

Sounder Circuit Specification

No. of conventional circuits	Two x 1st stage, one x 2nd stage
Line monitored for open and short circuit faults	YES
Sounder output rating	21-28Vdc, fused @200mA per circuit
Max. sounder cable length per circuit	25m
Max. number of nominal sounders per circuit	10 @ 20mA each
End-of-line resistor value	6K8 ohm ± 5%, 0.25W

Extinguishant release outputs

Extinguishant release output	21-28Vdc, rated at 1A for Solenoid
Extinguishant release time delay	Adjustable 0-60 seconds (1 second steps)
Extinguishant release duration	Adjustable 1-300 seconds (1 second steps)
Extinguishant release flooding time	Adjustable 60-1800 seconds (1 second steps)
Extinguishant output end of line	Terminator, circuitry EOL (Part No. EP514)

Dimensions (W x H x D)

Dimensions	Back box = 4.38mm x 278mm x 84mm approx. (metal) Lid = 467mm x 353mm x 28mm approx. (plastic)

Auxiliary outputs

No. of auxiliary outputs	6 (Fire, Local Fire, Extract Fan, 1st Stage, 2nd Stage, Fault)
Relay contact rating	30Vdc, 1A max.

Note that 5 additional relay outputs (Reset, Mode Switch, Discharged, Hold, Abort) are available on the EP212 relay expansion card.

Monitored Inputs

Number of monitored inputs and type	6 (Manual Release, Flow Switch, Low Pressure, Mode, Hold, Abort)
Thresholds	8k to 2k Ohms (normal), 1.8k to 200 Ohms (active), 100 to 0 ohms (short circuit)
End-of-line resistor value	6K8± 5%, 0.25W

Controls & Indicators

Status Display Unit	128 x 64 pixel graphic LCD unit, tri-colour backlight
LCD Access Level 1 Menus	Display Faults – Display Disablements – Zones in Test – Lamp Test – Alarm Counter
LCD Access Level 2 Menus	Display Faults – Display Disablements – Zones in Test – Lamp Test – Alarm Counter – Set Time/Date – Event Log – Device Control – Disablements
LCD Access Level 3 Menus	Display Faults – Display Disablements – Zones in use – Display RSU's – Disablements – Synchronisation
Controls (2 x keyswitches)	Access Level – Manual Only or Manual & Automatic
Controls (push buttons)	Menu – Silence Internal Sounder – Output Done Head – Silence/Resound Sounders – Scroll up – Scroll down – Escape – Accept – Extinguisher Release (housed in yellow cover)
Indications (LEDs)	General Fire – Fire Zones (x3) – General Disablement – Zone Fault/Disabled/Test (x3) – Hold – First Stage Output – Second Stage Output – Extinguishant Released – Abort – Disablements (Extinguishant Release, Manual Release, Outputs, Second Stage Output, Sounder) – Manual Only – Manual & Automatic – Supply Present – PSU Fault – Auto on – Test – General Fault – System Fault – Delays – Sounder Fault – Flooding Zone Fault – Low Press Fault
Internal control (push button)	Access Level 3 Switch (located on Main Control PCB)

Specifications are subject to change without prior notice.

A plethora of features

▸ One of the most powerful extinguisher panels of its class on the market with easy to program capability.

▸ Includes three conventional detector circuits & sounder circuits (2 x 1st stage and 1 x 2nd stage) which are all line monitored for open and short circuit faults.

▸ Able to program any combination of activated detector zones to automatically activate the extinguishant release sequence, which can be set to operate with or without a delay.

▸ Minimum six monitored inputs are provided, including Hold and Abort for suspending or cancelling the release sequence at anytime.

▸ Adjustable flood times.

▸ Alarm counter to record the number of occasions the panel has been in alarm.

▸ Time-stamped log.

▸ Support for an optional relay expansion board to provide reset, mode, discharged, hold and abort outputs.

▸ Support for up to two Solenoids or multiple Metrons type actuators and volt-free changeover relay contacts for fire, local fire, 1st stage active, 2nd stage active, extract fan and fault.

System expansion for extra flexibility

▸ Can be connected to the EP203 via a monitored RS485 bus to include up to eight flush or surface remote status units, each with their own displays, manual release mechanisms and mode switches.

▸ Single gang economy status units without displays (8 per system).

▸ A host of other ancillary devices including system line terminators and hold off/abort buttons.

Context Plus
EP range

3 ZONE EN 12094-1 automatic extinguisher control panel

Ideal for use in computer rooms, telecommunication centres, archive storage areas, chemical plants, generator rooms, museums and more.

Authorized Distributor for Asia Pacific

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GLOBAL | UKAS MANAGEMENT SYSTEMS ISO 9001 : 2008
Registration No.K24149

Quality without Compromise

COMMISSIONING & ENGINEERING FUNCTIONS

With the growing emphasis on safeguarding property as well as people, the market for automatic fire suppression systems is booming. The EP203 three zone automatic extinguisher panel from Context Plus has been specifically designed to meet this demand.

Fully compliant with **EN 12094 part 1** (the European standard for Fixed Firefighting Systems - Components for Gas Extinguishing Systems), the panel epitomises quality, durability and reliability and is ideal for use in any area housing expensive, dangerous or irreplaceable items of equipment.

Featuring an intuitive 128 x 64 pixel two-colour graphic display that gives clear and concise feedback to the user, installer and commissioning engineer, the panel also includes six monitored inputs (including hold and abort), a time stamped log, adjustable flood times and volt-free changeover relays for fire, local fire, 1st stage active, 2nd stage active, extractor fan and fault.
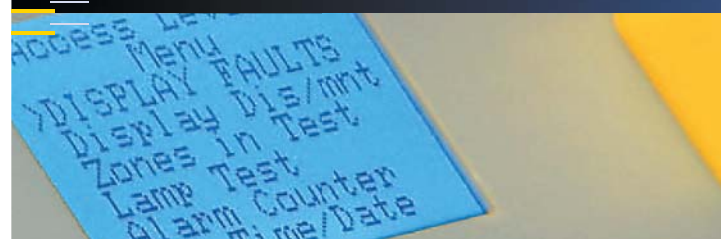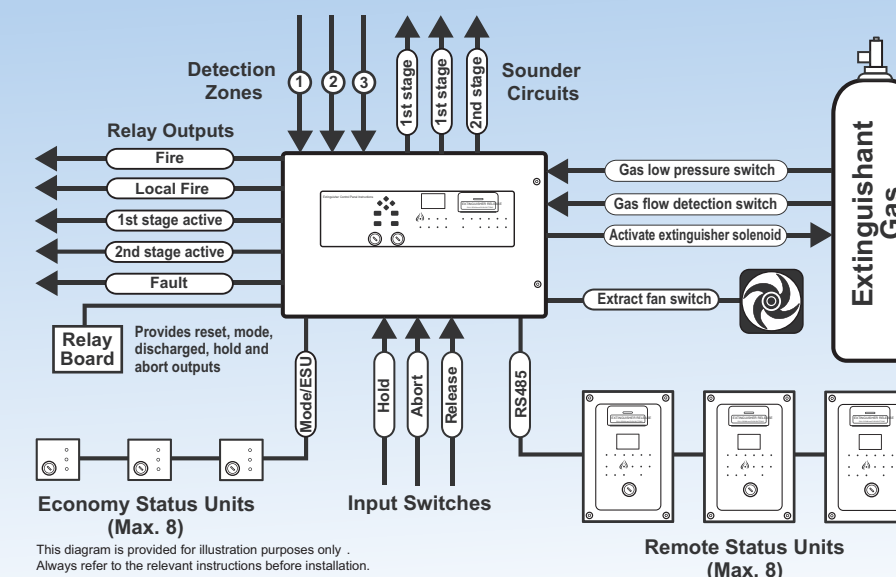
The panel is supplied in an elegantly styled, durable enclosure with all of its electronics - apart from its powerful 3A EN54-4 switch mode PSU - mounted on a detachable metal bridge plate for ease of installation. A wide range of ancillaries are also available including remote status units, hold-off and abort buttons, line terminators and output expansion relay boards.

- ▸ Fully compliant with EN 12094 part 1
- ▸ Functions as a standard three zone fire panel with additional circuitry for controlling the release of fire-suppressing gas into protected areas
- ▸ Unique 128 x 64 pixel graphical display facilitates straightforward system programming
- ▸ Any combination of activated zones can be programmed to automatically start the panel's extinguishant release sequence
- ▸ Includes a pull-down front-panel manual release button and two keyswitches for accessing the panel's functions and toggling between auto/manual mode
- ▸ Three conventional sounder circuits (two x 1st stage, one x 2nd stage)
- ▸ Powerful 3A EN54-4 compliant switch mode PSU
- ▸ Low quiescent current - less than 40mA on mains fail

- ▸ Wide range of monitored inputs and auxiliary outputs (see schematic)
- ▸ Abort and hold inputs allow the panel's release sequence to be cancelled or suspended at any time
- ▸ Time-stamped event log
- ▸ RS485 connections for up to eight flush or face remote status units with their own LCDs, manual release and mode (auto/manual) switches. Single gang economy status units (without an LCD) are also available.
- ▸ Extensive range of commissioning and engineering functions
- ▸ Optional relay expansion boards and single gang abort and hold buttons
- ▸ Ideal for use in computer rooms, telecommunication centres, archive storage areas, chemical plants, generator rooms, museums, etc..
- ▸ System line terminator included with all panels

▸ **Zone selection:**
Selects the zone combination that starts the extinguishant release sequence

▸ **Extinguishant delay:**
Sets the countdown duration before extinguishant release

▸ **Extinguishant duration:**
Sets the duration of the firing signal to the extinguishant output

▸ **Flooding time:**
Sets the duration for the release of extinguishant

▸ **Extract option:**
Enables/disables the ventilation extract option

▸ **Extract time:**
Sets the duration for the ventilation extract fan operation

▸ **Sounder delay:**
Sets the delay duration before the fire sounders are activated

▸ **Remote status unit learn:**
Finds all remote status units and updates the panel's database

▸ **Extinguishant output EOLS:**
Selects the number of extinguisher circuit terminations

▸ **Mode exceptions:**
Selects the default setting mode when the mode input is in Fault and/or Disabled

▸ **Earth fault:**
Disables/enables the panel's earth fault monitoring circuitry

▸ **Manual release mode:**
Selects either delayed or immediate release of extinguishant

▸ **Zone trigger:**
Enables a short circuit condition on the three detection zones

▸ **Clean start:**
Clears the panel's memory back to its default factory settings

▸ **Walk test:**
Puts detection zone(s) into walk test mode

▸ **Test relays:**
Tests the panel's auxiliary relay outputs

▸ **Test sounders:**
Tests the panel's sounder circuits

▸ **Monitoring:**
Applies a constant monitoring voltage

▸ **Show PSU stats:**
Displays the status of the panel's power supply & standby battery

AN OVERVIEW OF THE EP203'S INPUTS AND OUTPUTS

Detection Zones 1 2 3 / 1st stage / 1st stage / 2nd stage / Sounder Circuits

Relay Outputs
- Fire
- Local Fire
- 1st stage active
- 2nd stage active
- Fault

Gas low pressure switch
Gas flow detection switch
Activate extinguisher solenoid
Extract fan switch

Extinguishant Gas

Relay Board Provides reset, mode, discharged, hold and abort outputs

Mode/ESU / Hold / Abort / Release / RS485

Economy Status Units (Max. 8)

Input Switches

Remote Status Units (Max. 8)

This diagram is provided for illustration purposes only. Always refer to the relevant instructions before installation.

EP203
3 Zone Automatic Extinguisher Panel
Includes all of the circuitry for controlling the extinguishant release, a pull-down manual release button, a 128x64 pixel LCD display plus all of the features listed left.
W467 x H293 x D100 mm

Ep212
Output Expansion Relay Board
Mounts inside the EP203 panel to provide volt-free changeover relay contacts for reset, mode, discharged, hold and abort. Max. 1 per EP203.
W162 x H70 x D20 mm

Extinguishant Hold Off/Abort Button
A button that can be used to delay (hold off) or cancel (abort) the extinguishant release sequence depending on how it is connected. Also available in IP66 rating.
See individual product literature for more details

Extinguishant Release Call Point/Key Switch
A surface mounting manual call point that can be used to remotely trigger the EP203's extinguishant release sequence.
See individual product literature for more details

24V 7.0AHr VRLA Battery Pack
2 x 12V 7.0AHr valve regulated lead acid batteries and a link wire for use as the EP203's standby battery supply.
See individual product literature for more details