Connecting the Standby Batteries

**CAUTION:** There is a risk of explosion if the battery is replaced by an incorrect type. Always dispose of used batteries in accordance with the manufacturer's instructions.

For the emergency standby power supply, only use good quality, sealed VRLA batteries. Position and connect the 2x12V, 7Ah batteries, as shown in diagram (see right).

Connecting Circuits to the Main Control PCB

Terminate incoming and outgoing circuits at the Main Control PCB connectors (see Figure 2 overleaf).

**TECHNICAL SPECIFICATION**

**POWER SUPPLY**
- Mains supply: 230Vac, 50/60Hz @ 850mA max.
- Input power supply: ~240Vac
- Power rating: 
  - Max: 1.5A cont., 3A peak, battery peak current limited by 5A battery fuse
  - 1A peak, 3A battery fuse
- Battery type: 12V, 7Ah VRLA type, connected in series
- Battery charge current: 0.7A
- Max. internal battery resistance: 0.003mΩ
- Current drain on mains fails: 1mA, nominal
- Mains supply battery charger monitored for failure: Yes
- Battery monitored for disconnection and reverse: Yes
- Earth fault monitoring: Yes

**DETECTOR CIRCUITS**
- Number of conventional detector circuits: 2
- Line monitored for open and short circuit faults: Yes
- Max. cable length per circuit: 30m
- Zone regional detector current per circuit: 2mA max. @ 19.2V
- End-of-line resistor value: 6.8K ± 5%, 0.25W

**SOUNDER CIRCUITS**
- Number of conventional sounder circuits: 3 (two x 1st stage, one x 2nd stage)
- Line monitored for open and short circuit faults: Yes
- Sounder output rating: 19 - 28Vdc, fused @ 200mA per circuit
- Max. sounder cable length per circuit: 50m
- Max. number of polarised sounders per circuit: 2
- End-of-line resistor value: 6.8K ± 5%, 0.25W

**MONITORED INPUTS**
- Number of monitored inputs: 6 (Manual Release, Flow Switch, Low Pressure, Mode, Hold, Abort)
- Thresholds: 8k to 2k ohms (normal); 18k to 250 ohms (active); 150 to 0 ohms (short-circuit)
- End-of-line resistor value: 6.8K ± 5%, 0.25W

**AUXILIARY OUTPUTS (RELAYS)**
- Number of auxiliary outputs: 5 (Fire, Local Fire, Extract, 1st Stage, 2nd Stage, Fault)
- Circuit time: Adjustable 1-900 seconds (1 second steps)
- Relay contact rating: 30Vdc, 1A max. Note: DO NOT switch mains voltages using these outputs.

*Note: Five additional relay outputs (Reset, Mode, Discharged, Hold, Abort) are available on the EP212 Output Expansion Relay Board.

**REMOTE INPUTS & AUX OUTPUTS**
- Number of remote inputs: 4 (DOL, Al, F1, F2)

*Aux. output (power): 19.2Vdc, 10mA electronic fuse

**EXTINGUISHER RELEASE OUTPUTS**
- Extinguisher release output: 19.2Vdc, rated at 1A for 5 min.
- Extinguisher release time delay: Adjustable 1-900 seconds (1 second steps)
- Extinguisher release duration: Adjustable 1-300 seconds (1 second steps)
- Extinguisher release flooding time: Adjustable 0-1940 seconds (1 second steps)

**Fuses Compatible with the panel:**
- Main supply fuse (F1): 1 x 1A HRC, 20mm ceramic, Battery fuse (F2): 2A, 20mm glass, Auxiliary output fuse: 50mA electronic, End-of-line fuse: 250mA per circuit

**DIMENSIONS & WEIGHT**
- Physical size (W x H x D): 439 x 276 x 70mm approx. (metal); 467 x 293 x 29mm approx. (plastic)
- Weight: 4.2Kg (without batteries)

**ACCESSORIES SUPPLIED WITH PANEL**
- 3 Ways switchbox (20mm HRC fuse F1), 1A HRC, 20mm ceramic glass fuse (spare mains supply fuse F1), 1A HRC, 20mm ceramic glass fuse (spare battery fuse F2), 1 x set of links for PLK1 & PLK2, 1 x set of battery connection leads (red lead, black lead, green jump lead)
- 1 x Allen key (for unfastening/securing the panel lid)

**E&OE.** No responsibility can be accepted by the manufacturer or distributors of this equipment for any misinterpretation of this instruction, or for the compliance of the system as a whole. The manufacturer’s policy is one of continuous improvement and we reserve the right to make changes to product specifications at our discretion and without prior notice.

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**EP203 Automatic Extinguisher Control Panel**

**Shortform Installation Instructions**

**THIS EQUIPMENT MUST ONLY BE INSTALLED AND MAINTAINED BY A SUITABLY SKILLED AND TECHNICALLY COMPETENT PERSON.**

This document summarises key information provided in the main Installation and Maintenance Manual (Document No. DFU0002032); if in doubt, read the full instructions.

The EP203 is a three zone automatic extinguisher control panel that is compliant with EN12094-1 and EN54-4. The panel incorporates a 3A, EN54-4 compliant switch mode PSU and a 128 x 64 pixel LCD that facilitates system programming.

**INSTALLATION**

**Location**

The panel must be sited indoors on a dry, flat surface in an area that is well ventilated. Ideally the panel indicators should be at eye level and the ambient light level should allow the status of any indicators to be clearly seen.

**Fixing**

Note: The panel's base PCBs should be removed prior to first fix installation. Using the five mounting holes provided, fix the base securely onto a wall. The mounting holes are suitable for use with No.8-10, or 4-5mm countersunk screws. Assess the condition and construction of the wall and use suitable screw fixings. Any dust or swarf created during the fixing process must be kept out of the enclosure and care must be taken not to damage any wiring or components.

**Wiring and Cable Entry**

All wiring should be installed in accordance with the current edition of the IEE Wiring Regs (BS7671), or the relevant national standards.

The requirement for the mains supply to the panel is fixed wiring, using 3-core cable (no less than 1mm² and no greater than 2.5mm²), or a suitable three conductor system, fed from an isolating switched spur, fused at 3A. In order to maintain cable segregation, the incoming mains cable should be fed into the panel via the top right hand side knockouts (provided on the base unit). Knockouts should be removed with a sharp, light tap using a flat 6mm broadside screwdriver as shown in diagram (see right). Always ensure that if a knockout is removed, the hole is filled with a good quality 20mm cable gland. Any unused knockouts must be securely blanked off.

**WARNING:** DO NOT ATTEMPT TO CONNECT THE MAINS SUPPLY TO THE POWER SUPPLY PCB UNLESS ALL PCBs ARE SECURELY INSTALLED IN THE ENCLOSURE.

**Connecting Mains Supply to the Power Supply PCB**

Terminate the mains cable at the Power Supply PCB connector CONN1 (see Figure 1 below).

Figure 1 - Power Supply PCB Layout and Connection Details

**Incoming Mains Cable**

Must be segregated from other cables and only enter the panel at the top RSH knockouts.

**Hazardous Voltages Present LED**

When lit red, hazardous voltages are present on the components in the shaded area of the PCB. DO NOT TOUCH.

** PSU Earth Strap**

The PSU earth strap connects the PCB to the base earth post.

**Control Link (PLK2)**

If batteries NOT used, fit PLK1.

**Battery Input (CONN0)**

Connects to VRLA batteries.

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**EXTINGUISHER PANEL**

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**EXTINGUISHER PANEL**

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Detector Circuits 1 to 3.

Sounder Circuits. Two x 1st stage; One x 2nd stage.

MON6 Monitored Input Circuits 1 to 6.

Relay Outputs 1 to 6.

Aux 24V Output: + / -

See Technical Specification overleaf for further details

Notes:

1A    1A

ESU 1 Zone 1 Zone 2 Zone 3

2nd stage

mode

Manual

Abort

Hold

Pressure

Flow

Acceptor inputs: SIL-Silence Alarm; AL-Sound Alarm

FLT-Fault; RST-Reset.

EP203 Main Control PCB

Press & Hold to enter AL3

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