

## ESENTO<sup>®</sup> EVOQUE

### 16 - 32 zone conventional fire alarm control panels

The Esento Evoque panel is available from 16 to 32 Conventional zones. All inputs and outputs are fully programmable and there are options to have delays to the outputs. The programming features also include 3 different modes to help reduce false alarms.

As standard, all Evoque panels provide four monitored sounder circuits, Fire & Fault VFCO relays, Fire, Fault, Reset & Disabling switched negative outputs, Class Change, Alert, Silence & Reset inputs.

A fully functional repeater panel is available via a plug in comms PCB.

Evoque panels support a large range of conventional detectors including, Apollo, Hochiki & Nittan.

The panels are supplied with a 5.0 amp internal power supply module. This module complies with the requirements of EN54-4 : 1988 and provides temperature compensated battery management charging.

Evoque panels are approved to European standards EN54-2 & 4, Fire Detection and Alarm Systems – Control & Indicating Equipment.



## Features

### Main Features

- 16 - 32 zones
- Network up to 8 control panels
- Activate controls via key switch or code entry
- Integral detector removal monitoring
- 5 Amp switch mode power supply Nom 27V DC
- 4 monitored sounder outputs
- 2 Aux C/O relays (1 x Fire) (1 x Fault). voltage free
- Class Change, Alert, Silence Alarms & Reset switched -ve inputs
- Fire, Fault, Disabling & Reset, programmable switched -ve outputs
- Program delays to outputs
- False alarm modes A, B & C
- Test mode, with or without sounders
- Disable zones, sounder O/Ps, aux O/Ps & delays
- Fire alarm routing output programmable option
- Alarm load, 4.25A shared between all sounder outputs
- All sounder circuits are fused @ 500mA with resettable fuses.

### Technical specifications

Enclosure	1.2mm Mild Steel IP30. Colour ref: MW334E Interpon powder coat
Cable Entry	Via 20mm knockouts located in the top and rear of the cabinet
Dimensions	Back box: 450mm W x 400mm H x 130mm D, Lid: 465mm W x 410mm H x 25mm D
Mains Supply	5A internal switch mode power supply, Nom 27v DC
Battery Capacity	2 x 18Ah 12v VRSLA
Detection Zones	16, 24 or 32. EOL = 4K7
Sounder Circuits	4 x monitored, fused @500mA. EOL = 4K7
Networking	Up to 8 control panels, fault tolerant RS485 communication, requires TPCA05 network card
On Board Relays	2 x programmable, 3A, 30v volt free changeover
Programmable Outputs	4 x programmable 40mA switch -ve outputs
Switch Inputs	Class change, alert (pulsing), silence alarms & reset
Event Log	40 event history
Intrinsically Safe Mode	Selectable per zone
False Alarm Management	Type A, B & C dependency modes, approved by LPCB
Delay Timer	On board programmable delay timer 1 -10 mins

### Models

XL32-16	16 zones, 4 sounder circuits
XL32-24	24 zones, 4 sounder circuits
XL32-32	32 zones, 4 sounder circuits



# Specifications

## Electrical Specification Inputs & Outputs - MAIN PCB

PSU TX/RX	Power supply data control lines.	RS232 data.
PSU Input A +/-, B +/-	28vdc supply input. Diode protected for reversal and independent short circuit. Max current 5 amps.	Max input current 5 amps. Input voltage 19.8vdc to 29.7vdc.
28v+, 0v- power output 1 & 2	28vdc supply output for fire alarm accessory relays etc. Max continuous use = 400mA.	Fused @ 500mA. Fuse = 500mA resettable fuse.
Common fire relay	Fire relay contact. Clean C/O. Max 3A @ 30vdc.	Un-fused
Common fault relay	Maintained fault relay contact. Clean C/O Max 3A @ 30vdc.	Un-fused
Outputs: FR (fire), FLT (fault), RS (reset), GD (general disablement)	Switched -ve voltage outputs for relay control.	Overload voltage protected to 52vdc. Current limited 680R. Max load = 40mA
Inputs: CC, PUL, SA, RS	Switched -ve inputs, connect to 0v to trigger. Max input voltage = 28vdc. Non latching, max resistance 100R.	Protected via 10K Ohm impedance, 3v6 zener diode.
SNDR 1 - 4	28vdc polarity reversal monitored sounder outputs to fire alarm devices. 4K7 Ohm 5% 0.25W EOL resistor.	Monitoring current limit 28mA, fused @ 500mA. Typical max load 22 devices @ 18mA each per circuit. Ensure 5A is not exceeded.
Zone 1 - 32	Fire alarm zone circuits. Conventionally wired detection circuit. 4K7 Ohm 5% 0.25W EOL resistor.	Monitoring current limit 50mA. Max 30 devices per zone. Total 512 devices shared between 32 zones. Typically 16 per zone.
Fire alarm routing output (optional)	28vdc polarity reversal monitored output to fire alarm routing equipment. 4K7 Ohm 5% 0.25W EOL resistor.	Monitoring current limit 28mA, fused @ 500mA.

## Power Supply Specification

Mains supply	230vac +10% / -15% 50Hz max current 1.9A	
Mains supply fuse	3.15 Amp (F3.15A 250V)	Not accessible for servicing. Internal to switch mode power unit
Internal power supply rating	5.0 Amps total including battery charging	Maximum load shared between outputs = 5A
Power supply output voltage	19.8 - 29.7vdc	Tolerance +/- 0.1%
Maximum continuous load for battery standby (ImaxA)	ImaxA = 1.26A	ImaxB not specified
Minimum current drawn by panel	16 Zone = 205mA	32 Zone = 320mA
Maximum ripple	150 mV p-p	Supply and charger fault monitored
Min/max battery size and type	2 x 18.0Ah 12volt VRLA. Use Yuasa NP range batteries, NP18-12B (17.2Ahrs) for LPCB approved panels	Other equivalent batteries may be used but have not been tested for the purposes of EN54 approval.
Battery charging voltage	27.3 vdc nominal at 20 deg C	Temperature compensated
Battery charging output current	5.0A PSU 2A Current limited 2 Amps	
Battery high impedance fault (Batt Hi Z)	Resistance > 1 Ohm	1 hour reporting time
Max current drawn from batteries	7.5 Amps with main power source disconnected. Battery fuse 7.5A ATO	
Min current supplied by PSU Imin	40mA	

## Quiescent and Alarm Current Details for Standby Battery Calculations

Models	Standby Current	Alarm Current
XL32-16	205mA	300mA
XL32-24	270mA	365mA
XL32-32	320mA	415mA