

FALCON EX

Extinguishing Alarm Control Panel

- 3 Monitored Conventional Detection Zones with programmable coincidence zone capability
- Each zone supports up to 32 conventional devices (optical and/or thermal detectors and manual call points)



Overview

The FALCON EX is an advanced fire detection and extinguishing control system that ensures top-notch safety and protection for commercial and industrial spaces. The control equipment is a combined fire alarm control panel and extinguishing system and has three detection zones, any or all of which can contribute to the extinguishant release decision. Each zone can accommodate up to 32 conventional devices, including optical and/or thermal detectors and manual call points.

The system offers programmable and independent end-of-line resistive and capacitive configurations, giving users flexibility in tailoring the system to their specific needs. Additionally, it includes a monitored flooding/extinguishing zone that enables swift activation of suppression systems.

The FALCON EX complies with EN12094-1 standards, featuring five monitored inputs for extinguishing monitoring (Activate, Abort/Hold, Flow, Valve monitor, Low Pressure monitor). The key switch allows manual or automatic mode selection, granting users control over the system's operation. Connectivity options such as RS485, Fiber-Optic, or TCP/IP allow the system to be connected to a repeater, enabling seamless communication and monitoring over extended distances. User-friendly features include a backlit graphical LCD display and alphanumeric keypad, simplifying system configuration and status monitoring.

Features

- 1 Monitored Flooding/Extinguishing Zone for swift activation of suppression systems
- 2 Monitored Outputs: 250mA each for fire and extinction sounders
- 4 x 2A, 30Vdc non-monitored relay outputs for Fire, Fault, and 2x Programmable actions
- 2 Auxiliary Supplies: Shared output current to a maximum of 900 mA current for additional power options or expansion modules
- 2 non-monitored configurable Inputs to trigger pre-programmed actions
- 5 inputs for extinguishing monitoring (Activate, Abort/Hold, Flow, Valve monitor, Low Pressure monitor) as per EN 12094-1 standard.
- Extinguishant delay - countdown duration before extinguishant release
- Flooding time - Sets the duration for the extinguishant release
- Key switch for manual or automatic mode selection
- Event log with storage for up to 10,000 events for thorough analysis
- CPR certification according to EN54-2, EN54-4, and EN12094-1 standards

Technical Specifications

Feature Description	Specification
Power Supply	
Mains Supply Voltage	90~264 V AC 50/60 Hz (DC input possible via AC/N(+), AC/L(-))
Internal Power Supply	28.5 V DC @ 2.4 A (65 W)
Main Fuse	4 A - Surge protected (slow blow) 20 mm HRC
Max Output Current	2.28 A @ 230 V AC
Quiescent Current	50 mA (without devices)
I Min; I Max A; I Max B	50 mA; 400 mA; 2000 mA
Internal Battery Capacity	Max 2x 12V DC 12 Ah (Sealed lead acid; Ri < 1ohm)
Battery Charging Current	500 mA (approx.)
Max Current Output From Battery	2000 mA
System Monitoring	Mains Supply/Battery Charger Failure, Batteries Monitoring, and Earth Fault Monitoring (All: Yes)
Zones	
Primary Fire Zone Detection	3x Monitored Fire Zones with programmable coincidence capability
Max Devices Per Circuit	32 (Detectors & Call Points combined)
Max Cable Length Per Circuit	500m
Zone Monitoring	Open, Short Circuits, and Faults (per EN54-2 and EN54-4)
Zone End of Line (EOL) Value	Active EOL – 10µF/50 Bipolar Capacitor
Extinguishing Control & Monitored Inputs	
Extinguishant Release Output	28 VDC, rated 900 mA max (Peak: 1 A); Protected with 1.1 A resettable fuse
Release Time Delay	Adjustable 10–60 seconds (1-second steps) per EN12094-1
Release Duration	Adjustable 10–300 seconds (1-second steps) per EN12094-1
Input Monitoring	Line Monitoring (per EN54-2, EN54-4, EN12094-1)
Monitored Inputs EOL	Active EOL – 10µF/50 Bipolar Capacitor
Monitored Inputs Action Resistor	680 Ω ±5%, 0.25 W (active)
Keyswitch	Automatic and Manual control (per EN12094-1)

Feature Description	Specification
Sounder Circuits	
Number of Sounder Circuits	2 (1x Fire Alarm, 1x Extinguishing Alarm)
Protection	1.1 A Resettable fuse
Sounders Output Rating	21 V DC to 30 V DC (4 x 250 mA per circuit)
Line Monitoring	Open, Short Circuits, and Faults (per EN54-2, EN54-4, EN12094-1)
Sounders EOL Resistor Value	10 kΩ ± 5% 0.25 W
Auxiliary Inputs & Relays	
Number of Auxiliary Outputs	1x 24 V DC + 1x 24 V DC Switched (300 mA total available); Protected with 300 mA resettable fuse
Remote Inputs	2x Non-monitored ports (Programmable: Reset, Evac/Silence, Selected I/O)
Fire Relay	1x (30 V DC @ 2A / 120 V AC @ 0.5A / 240 V AC @ 0.25A)
Fault Relay	1x (30 V DC @ 2A / 120 V AC @ 0.5A / 240 V AC @ 0.25A)
Auxiliary Outputs 1 & 2	2x Configurable (30 V DC @ 2A / 120 V AC @ 0.5A / 240 V AC @ 0.25A)
Interface & Communication	
User Interface	Graphical LCD
Communication Channels	3 Configurable Channels (Master Slave or Data Loop)
USB Port	USB Type B
Event Log	10,000 events
Physical	
Dimensions	273 (L) x 404 (H) x 142 (W) mm (Deep box)
Weight	2 kg (without batteries)
Colour	White (RAL 9003) - Standard Red (RAL 3001) - Special order Anthracite (RAL 7016) - Special order
Environmental	
Operating Temperature	-5°C to +40°C
Humidity	Max 95% RH
IP Rating	IP30 (Indoor use only) - Type A

Ordering Information

Order Code	Part No.	Description
FALCON EX	FALCON EX	Extinguishing Alarm Control Panel with LCD Display

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DOC-ZG010-00002