

Aero-X Micro-FEP®

Fire detection & extinguishing control panel with integrated UPS



Introduction

The Aero-X Micro-FEP® is a very compact and robust, stand-alone fire detection & extinguishing control panel designed to protect various applications in numerous areas of tunnelling & mining, marine & offshore, rolling stock & rail infrastructure, automotive & transport, power generation & distribution as well as process & manufacturing industry. Typical application areas are protection of electrical cabinets, CNC machines, engine rooms, and many more in which safety of personnel and equipment is of utmost importance.

The Aero-X Micro-FEP® fire detection & extinguishing control panel has been designed to be focused on easy installation & commissioning “plug & play” and simple handling as well as operation under very harsh & heavy duty environmental conditions.

The Aero-X Micro-FEP® control panel is designed meeting the requirements of the European standard EN 54-2 “Fire Detection and Fire Alarm systems - Control and Indicating Equipment”, the EN 12094-1 for fixed firefighting systems Part 1: “Requirements and test methods for electrical automatic control” and the EN 15276-2 for aerosol fire extinguishing systems. The Aero-X Micro-FEP® is a versatile fire alarm & extinguishing control system with a high-performance level intended for small and medium size firefighting systems.



FC CE

Picture: Aero-X Micro-FEP®



Technical specification

• Dimension (l x w x h)	160 x 100 x 80mm
• Enclosure material	Aluminum
• Coating	black; EN45545
• Enclosure rating	IP 67
• Max. amount of cable glands	9 x M16; 1 x M20
• Rated voltage	6 to 28 VDC
• Maximum power use	5 W
• Maximum UPS time	4 hours
• Backup battery	LIR2477
• Max. diameter conductors	>0.5 & <1.5 mm
• Extinguish release current	1.3 - 1.6 A
• Extinguish pulse duration	50 - 55 ms
• Extinguish delay timer	dip switch, 0 - 30 sec
• Normal state	>8 & <12 kOhm
• Fire Zone alarm threshold	>0.1 & <1,2 kOhm
• Fire Zone fault threshold 1	<0.1 kOhm
• Fire Zone fault threshold 2	>1,2 & <8 kOhm
• Fire Zone fault threshold 3	<12 kOhm
• Alarm resistant	0.47 kOhm
• End of line resistant	10 kOhm
• EOL ext. release input	10 kOhm
• EOL ext. hold input	10 kOhm
• Sounder/beacon max. current	50 mA
• Sounder/beacon voltage (main)	20 - 22 VDC
• Sounder/beacon voltage (ups)	9 - 11 VDC
• Max. load Fire VFC relay	1A @ 30 Volt DC
• Max. load Fault VFC relay	1A @ 30 Volt DC
• Max. load Exting. VFC relay	1A @ 30 Volt DC
• Max. load Fan VFC relay	1A @ 30 Volt DC
• Communication port	RS485, Modbus
• Event log	10000 events
• Event log port	mini USB

CE & FCC EMC compliance

- EN 50130
- EN 61000
- EN 55016
- EN 55022
- 47 CFR 15
- ANSI 63.4
- ICES-003

Key features

- the Aero-X Micro-FEP® can be operated fully manual as well as in combination with a single- or double knock fire detection, alarm and extinguishing function
- two individual, fully monitored fire alarm input zones for the connection of conventional smoke and heat sensors, linear heat cable as well as type E heat detectors
- two individual, fully monitored input groups for the connection of external manual extinguishing release and hold function
- one fully monitored output for the connection of aerosol fire extinguishing generators or solenoid valves
- one output for the connection of visual -acoustic alarm devices
- volt free contacts for "fire alarm", "fault", "extinguishing released" and "ventilation off" as well modbus RS485 communication port
- two extinguishing release buttons to be pressed simultaneously to prevent for unwanted releases
- an extinguishing hold button to postpone releases (puts delay timer back to the start)
- test mode that allows to test the detection, signalling and controls without a release
- settable extinguishing delay time to prevent unwanted releases including option to override the extinguishing delay time at manual release
- watchdog timer will for additional safety
- historic event log memory readable from a mini USB port
- the Aero-X Micro-FEP® works on an input voltage of 6 to 28 Volt DC
- a coated (EN 45545) waterproof IP67 (EN 60529) aluminium enclosure
- EN 45545 and UL certified cable glands