



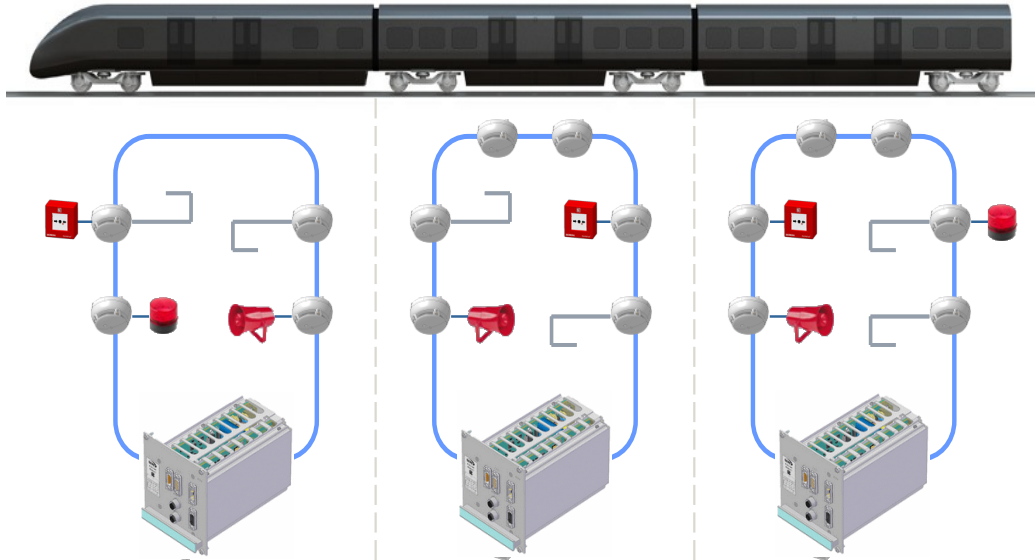
FC801-AA Fire control panel for Railway

- Centralize Fire Information and Manage Fire Devices and Fire Protection of the Train
- Approved Safety Integrity Level 2
- Ethernet and/or dry contact interface to the train management system (TCMS)
- Ethernet interface to the Configuration Management Tool (CMT)
- Microprocessor-controlled panel for the connection of one loop of up to 32 FDOOT801 Multi-sensor Fire Detectors.
- Railway compact, rack mountable equipment (3U, 24TE)
- Configurable Fire Panel with auto-addressable loop
- Configuration with up to 8 fire detection zones and up to 16 protection zones
- Centralized System with simplified cabling (daisy chain loop).
- Flexible and easy system configuration with enhanced combination for train platforms flexibility
- Rearmament, Protection Inhibition, Test functions controlled through train lines inputs
- Power supply output for one complete loop of 32 FDOOT801
- 4x Inputs for Linear Heat Detector, or Manual Call Point
- 3x Safety Fire Detection Dry Contacts outputs (Warning, Alarm, Fault,)
- 1x Safety Fire Protection Dry Contacts output

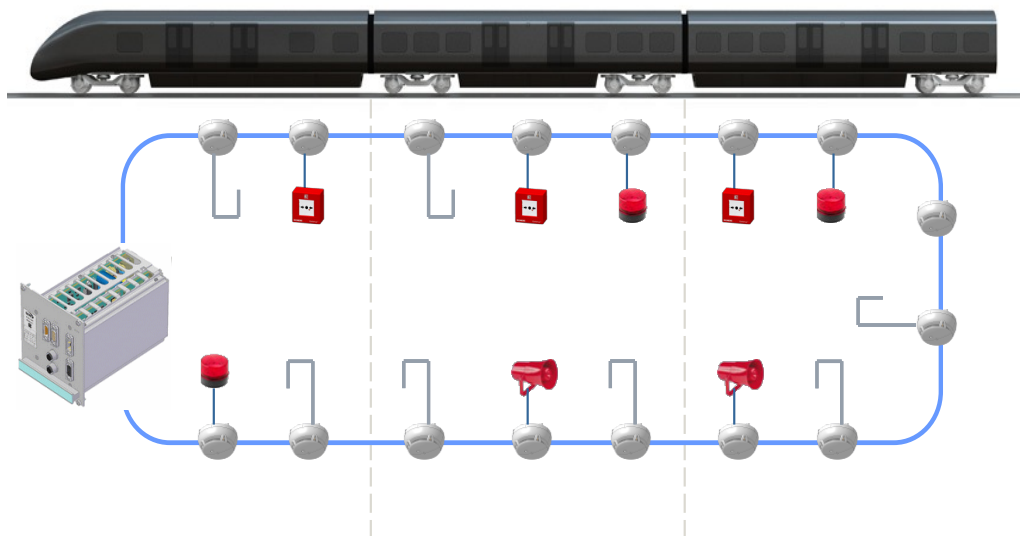
System overview

The FC801 control panel can be configured to fit one of the two following train architectures:

1 Trailer architecture (one System per car)



2 Consist Architecture (one System for several cars)



Configurable System size

- Up to 32 FDOOT801 devices (smoke or T° detector)
- Up to 68 Fire Peripherals inputs (LHD, HD, Manual Call Point,..)
- Up to 33 Fire Protection Outputs (lights, sounders, extinguishing devices ...)
- Up to 32 Fire protection zone Inputs monitoring / inhibition
- Up to 8 Fire Detection Zones
- Up to 16 Fire Protection Zones

The Configuration Management Tool FXS8002 permits the system to be adapted to specific customers' requirements. It allows to mainly configure the links between:

- detection inputs with detection zones,
- protection outputs with protection zones,
- detection zones with protection zones,
- the alarm detection strategy of each detection zone (direct or confirmed)

During commissioning and/or maintenance operations, FXS8002 provides general and detailed diagnostic information.

Characteristics

- FC801 is a compact fire control panel that can process signals from FDOOT801 devices and from its own inputs.
- It provides 4 monitored inputs for connection of LHD (Linear Heat Detector), or Manual Call Point (MCP).
- It centralizes Fire Events with synthetic safety I/O indications:
 - System Fire Alarm:
 - 1 ALARM dry contact for Fire Alarm Indication (safety output)
 - 8 dry contacts for Fire Alarm Zones Indication
 - System Monitoring:
 - 1 FAULT dry contact for System Failure Indication (Inoperative System)
 - 1 WARNING dry contact for Component Failure Indication (Degraded performance mode)
- It provides Fire protection with a safety Fire Protection Output in order to manage protection devices (light, sounder, extinguishing equipment...)
- It centralizes Fire Events with detailed information on communication bus:
 - System Status Detailed Information:
 - Alarm information at component level (device identification, fire detection location, fire protection activation, event logs...)
 - Failure information at component level (device failure identification, troubleshooting data code...)
 - Preventive Maintenance Information:
 - Degraded Modes management (FDOOT801, cabling failures)
- It records Fire Events with detailed information in an Historical memory:
 - Fire events recording with Timestamp (relative time)
 - Failure events recording with failure identification, origin and troubleshooting data
- It can be used as a stand-alone unit with its own inputs.
- It can be connected to a Train Communication System
- Using the user-friendly Configuration Management Tool, FC801 can be configured for a customized Fire Safety solution
- Support nominal train voltage: DC 72V to DC 110 V

Functional elements

3 visible leds from outside can display the following indications:
Power ON/ OFF, Ready, Alarm, Fault, Warning..

Connectors Located on front panel:

- FDOOT801 devices CAN Loop (2 x SUBD-9)
- TCS Ethernet (M12)
- CMT Ethernet (M12)

Connectors Located on rear panel

2 x F48 railway connectors provided for:

- Power Supply (DC 72V to DC 110 V)
- Safety Dry Contacts Outputs (WARNING, ALARM, FAULT)
- Safety Dry Contacts Output for managing protection devices (lights, sounders, extinguishing equipment...)
- Fire Peripherals Inputs for managing fire detectors peripheral (LHD, HD or MCP)
- Discrete Inputs (TEST, INHIBIT, REARM)

Technical data

Main voltage	DC 72 V to DC 110 V
Power supply voltage for FDOOT801	24V – 2A max compliant with EN 50155
Connectable detector series	S54339-F100-A1: FDOOT801
Number of lines	
– Can bus loop	1
– Configuration and Maintenance	1
– Train communication	1
Number of looped addressing devices	max. 32
Integrated inputs/outputs	
– Fire Safety Relay Output	
– Alarm	1
– Fault	1
– Warning	1
– Fire Safety Protection Relay Output	1
– Monitored Inputs (LHD, HD or MCP inputs)	4 (EOL required)
– Zones indication discrete Outputs	8
– Train line discrete Inputs	
– INH (Inhibition)	1
– Rearm (Rearmament)	1
– Test	1
Man interface unit	3x LEDs
Operating temperature	-25 °C to +70 °C
Storage temperature	-40 °C to + 85 °C
Dimensions (W x H x D)	122 mm x 128 mm x 190 mm (3U x 24TE)
Weight	1700 g
Color	colorless anodized aluminum
Compliance to protection category	IP31 (Front) / IP20 (Housing) according to IEC 60529
Compliance to standards	
- General Railways standard	EN 50155
- Railway development standards	EN 50126, EN 50128, EN 50129
- Railway Fire protection standards	EN 45545-2
Approvals	
- Certifier : Safety Integrity Level (SIL)	SIL2 System SIL 2 with FDOOT801 devices

Details for ordering

Type	Part no	Designation
FC801-AA	S54449-C101-A1	Fire control panel (72-110 V)

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