FIRE ALARM CONTROL PANEL BS-420

AutroSafe Interactive Fire Detection System
Product Datasheet

Features

- SelfVerify function for automatic testing of detectors
- Automatic addressing of detectors
- AutroFieldBus
- Accommodates up to a maximum of 12 modules, of which maximum 6 can be Loop Driver Modules
- User-friendly display and operator controls
- Backlit operational buttons. Text display suitable for full darkness operation
- Surface mounting on wall
- Rack mounting in standard 19'' cabinets
- Conforms to applicable EU directives and regulations
- SIL2 capable according to IEC 61508
- Approved according to CEN Standards EN 54-2, EN 54-4 and EN 54-13, FM regulations (Factory Mutual) and maritime regulations (IMO/SOLAS and USCG)

Description / Application

BS-420 is a complete fire alarm control panel with full operation capabilities. The panel serves as an operating panel for one or several defined operation zones. All alarm handling and system features can be controlled and monitored from the panel.

The panel can accommodate up to a maximum of 12 modules. The system offers Loop Driver Modules for detection loops and several types of I/O modules (see Optional Modules below).

There can be a maximum of 6 Loop Driver Modules in each panel. All modules are easily plugged onto each other on a standard mounting rail inside the unit.
The panel provides connections for 2 Ethernet ports and 2 USB host ports.

The panel is menu operated on a 16-line display, with 40 characters per line. A printer is available as an option. The panel communicates with other system units on the Ethernet-based local area network, AutroNet.

Optional Modules

- Loop Driver Module (BSD-310/311) for connection of detection loops
- Output Module (BSB-310) with 4 monitored outputs
- Output Module (BSJ-310) with 8 open collector non-monitored outputs
- Input Module (BSE-310) with 4 monitored inputs
- Input Module (BSE-320) with 8 non-monitored inputs (galvanically isolated)

Indicators

- 16 x 40-character alphanumeric display
- Fire, More Events, Fire Brig. Signaled, Fault, Function Disabled, Testing, System Fault, Power, Function Delayed, Alarms Fault, Fire Brig. Fault, Alarms Disabled, Fire Brig. Disabled, Detector Inhibit, Extinguishing Activated, Extinguishing Isolated, Local Mode, Dual Safety Stdby, MultiS SmokeDis.
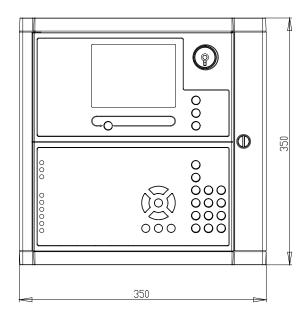- Internal buzzer
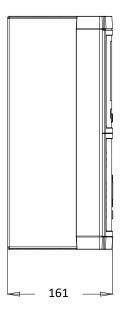
$\mathsf{C}\mathsf{E}$

Operator Controls

- More Events, Mute Panel, Silence Alarms, Reset System, Menu, Close Window
- Keyboard with alphanumeric characters and scroll function
- Separate buttons for menu operation
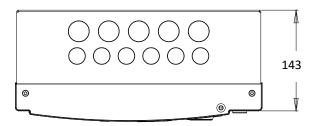- Backlit buttons and text

Capacity

- 64 system units (panels) on the local area network; AutroNet
- 15000 loop units per system
- 12 modules per fire alarm control panel, of which 6 can be Loop Driver Modules
- 512 detectors and manual call points can be connected to each Fire Alarm Control Panel (EN 54)
- 31 AutroFieldBus units connected to AutroFieldBus
- 127 loop units connected to one detection loop
- 40 socket/loop sounders connected to one detection loop
- 15 loop units connected to one Powerloop

Dimensions (mm)

CE

Product Name	Part number	Description
BS-420	116-BS-420	Fire alarm control panel

Technical specifications	
Dimensions (mm)	350 x 350 x 161
Cut-Out Dimensions (mm)	320 x 330 x 140
Weight (kg)	8,5 kg
Materials	Steel cabinet, ABS/PC moulded front
Mounting	Surface or flush mounting
Protection class	IEC-529 / IP32
Operating Temperature	-25°C to +70°C
Storage Temperature	-40°C to +70°C
Humidity non-condensing	Maximum 95% RH
Power supply	Nom. 27,2 VDC (18-32 VDC)
Current consumption	156 mA/27,2 VDC (idle) Max. 340 mA/27,2 VDC (lamp test)
Capacity – Loop Driver Modules and I/O Modules	Maximum 12 modules (A combination of BSD-310, BSB-310, BSE-310/320 and BSJ-310)
Capacity – Loop Driver Module	Maximum 6 BSD-310/BSD-311. The maximum number of detectors and manual call points that can be connected to these 6 modules are 512 (refer to EN 54). Maximum 127 detectors/manual call-points/electronic sounders/ I/O units on each detection loop.
Detector connection	By use of BSD-310/ BSD-311
Inputs	By use of BSE-310 and BSE-320
Outputs	By use of BSB-310 and BSJ-310
Communication	AutroNet (Ethernet-based local area network)
Communication Ports	• 2 Ethernet ports • 2 USB host ports (max. 100mA) • 1 serial port for the std. detection loop communication protocol • 1 RS-232, RS-422 or RS-485 serial port for communication with third party equipment (AutroCom /ESPA4.4.4/MODBUS/VDR) • 1 AutroFieldBus (AFB) interface • 1 RS-485 serial port for communication with the front panel • Panel Operational State Output
Ethernet Cable	CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes
Approvals	www.autronicafire.com