

# CONTROLLER BC-420

## AutoSafe Interactive Fire Detection System, Release 4 Product Datasheet

### Features

- Accommodates up to a maximum of 12 modules, of which maximum 6 can be Loop Driver Modules
- AutoFieldBus
- Indicators for fault and power
- Surface mounting on wall
- Rack mounting in standard 19" cabinets and flush mounting in consoles
- 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

The Controller, BC-420, serves as a connection unit for the detection loop, alarm sounders, controls and inputs.

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

There can be a maximum of 6 Loop Driver Modules connected to each Controller. All modules are easily plugged onto each other on a standard mounting rail inside the unit.

The Controller provides connections for 2 Ethernet ports and 2 USB host ports.

The Controller communicates with other system units on the Ethernet-based local area network, AutoNet.

### 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

- Power (green)
- Fault (yellow)

### Capacity

- 64 system units on the local area network; AutoNet
- 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 AutoFieldBus units connected to AutoFieldBus
- 127 loop units connected to one detection loop
- 40 socket/loop sounders connected to one detection loop
- 15 loop units connected to one Powerloop

| Technical specifications                       |                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions (mm)                                | 350 x 350 x 161                                                                                                                                                                                                                                                                                                                                                                                              |
| Cut-Out Dimensions (mm)                        | 320x330x140                                                                                                                                                                                                                                                                                                                                                                                                  |
| Weight (kg)                                    | 8,5 kg                                                                                                                                                                                                                                                                                                                                                                                                       |
| Materials                                      | Steel cabinet, ABS/PC-moulded front                                                                                                                                                                                                                                                                                                                                                                          |
| Mounting                                       | Surface or flush mounting                                                                                                                                                                                                                                                                                                                                                                                    |
| Protection class                               | IEC-529 / IP32                                                                                                                                                                                                                                                                                                                                                                                               |
| Operating Temperature                          | -15°C to +70°C                                                                                                                                                                                                                                                                                                                                                                                               |
| Storage Temperature                            | -40°C to +70°C                                                                                                                                                                                                                                                                                                                                                                                               |
| Humidity non-condensing                        | Maximum 95% RH                                                                                                                                                                                                                                                                                                                                                                                               |
| Power supply                                   | Nom. 27,2V DC (18-32V DC)                                                                                                                                                                                                                                                                                                                                                                                    |
| Current consumption                            | 156mA/27,2VDC (idle)<br>Max. 340mA/27,2VDC (lamp test)                                                                                                                                                                                                                                                                                                                                                       |
| Capacity – Loop Driver Modules and I/O Modules | Maximum 12 modules<br>(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                            | <ul style="list-style-type: none"> <li>• 2 Ethernet ports</li> <li>• 2 USB host ports (max. 100mA)</li> <li>• 1 serial port for the std. detection loop communication protocol</li> <li>• 1 RS-232, RS-422 or RS-485 serial port for communication with third party equipment (AutroCom /ESPA4.4/MODBUS/VDR)</li> <li>• 1 AutroFieldBus (AFB) interface</li> <li>• Panel Operational State Output</li> </ul> |
| Ethernet Cable                                 | CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes                                                                                                                                                                                                                                                                                                         |

| Product Name | Description |
|--------------|-------------|
| BC-420       | Controller  |

### Dimensions (mm)

