



Certificate of Compliance

FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

AutroSafe Integrated Fire and Gas Alarm Control System 4 consists of either a single control panel or networked configuration from a selection of five different panels. A single BS-420, BS-420M, BS-420G, or BS-420G2 Fire Alarm Control using software designated 4.4.X requires a power supply, either a BP-405 Power Cabinet, or a BPS-405 or BPS-410 alternatively BSS-103A.. It can accommodate a maximum of 12 modules. See page 2 for the listing.

Approval Guide Listing: Category:

Electrical Signaling, Signaling Systems (Fire), Local Protective Signaling, Local Protective Signaling
Electrical Signaling, Signaling Systems (Fire), Automatic Releases for Extinguishing Systems and Other Fire Protection Equipment

Autronica Fire and Security AS
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This certifies that the equipment described has been found to comply with the applicable requirements, as stated in the Approval Report(s), of the following FM Approval Standards and other documents:

| <i>Approval Standards</i> | <i>Date</i> | <i>Other Standards</i> | <i>Date</i> |
|---------------------------|----------------|----------------------------------|----------------|
| <i>Class Number</i> | | <i>Organization, Designation</i> | |
| 3010 | September 2003 | ANSI/ NFPA 72 | 2002 |
| | | ANSI/NEMA 864 | September 2003 |

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AutoSafe Integrated Fire and Gas Alarm Control System 4 consists of either a single control panel or networked configuration from a selection of five different panels. A single BS-420, BS-420M, BS-420G, or BS-420G2 Fire Alarm Control using software designated 4.4.X requires a power supply, either a BP-405 Power Cabinet, or a BPS-405 or BPS-410 alternatively BSS-103A. It can accommodate a maximum of 12 modules. Controls are limited to six loops and a total of 512 devices, all panels contain BSL-310 and BSS310A as standard. Loops can contain initiating devices or notification appliances. System power from the BP-405 is a supervised 5.0 A at 24 Vdc from 115/230 Vac or a 24 Vdc from a two 18 Ah battery bank provided internally to the BP-405. Optional battery banks of up to 115 Ah are available for a multi-panel AutoSafe Fire Alarm Control System that may include a BC-420, BC-420G2, BC-440, or BC-440G2. Control panel using the same software and power as the BS-420 and optional panels: BS-430 or BS-430G2 Operator Panel, BU-BV-420 or BU-BV-420G2 Repeater Panel. BX-4XX controls are suitable for operation in ambient temperatures from 32° to 140°F (0° to 60°C), the BD series heat detectors operate from -4° to 125°F (-20° to 52°C); all other peripheral devices are rated at -4° to 158°F (-20° to 70°C). Inter-panel communication, Class A, in accordance with the requirements of NFPA72 2010 edition requires use of the appropriate Ethernet switches, and at least two fiber optic communication lines between the panels from among the following:

| Switch Type | Description | Autronica part number |
|-------------------------|---|-----------------------|
| FL SWITCH SFNT 5TX | 5 RJ45 ports | 116-5151-030.2127 |
| FL SWITCH SFNT 4TX/FX | 4 RJ45 ports, 1 fiber optic multi-mode port (SC) | 116-5151-030.2128 |
| FL SWITCH SFNT 8TX | 8 RJ45 ports | 116-5151-030.2129 |
| FL SWITCH SFNT 7TX/FX | 7 RJ45 ports, 1 fiber optic multi-mode port (SC) | 116-5151-030.2130 |
| FL SWITCH LM 5TX | 5 RJ45 ports | 116-5151-030.2131 |
| FL SWITCH LM 4TX/FX | 4 RJ45 ports, 1 fiber optic multi-mode port (SC) | 116-5151-030.2132 |
| FL SWITCH LM 4TX/2FX | 4 RJ45 ports, 2 fiber optic multi-mode port (SC) | 116-5151-030.2133 |
| FL SWITCH LM 4TX/FX SM | 4 RJ45 ports, 1 fiber optic single-mode port (SC) | 116-5151-030.2134 |
| FL SWITCH LM 4TX/2FX SM | 4 RJ45 ports, 2 fiber optic single-mode port (SC) | 116-5151-030.2135 |

The optional modules are: BSJ-310 output module, each of which allows for 8 programmable open collector, non-monitored 100 mA outputs; BSD-310/311 detector loop module, each of which allows for connection of one AL Com loop of 127 devices, which can be configured for Class X or Class B signaling line circuit performance; panels are limited to six loops and a total of 512 devices, loops can be initiating or notification; BSB-310 alarm output module, each of which allows for connection of 4 alarm outputs having Class B notification appliance circuit performance; BSE-310/320 input modules allowing for connecting 4 monitored or 8 non monitored inputs respectively. AL Com addressable initiating devices include the Models BD-200, BD-300, BD-500, and BD-501 heat detectors rated 130°F (56°C) with RTI classification for detector set to rate compensated is V2Fast with a 10.6m x 10.6 m spacing (35x35 ft). RTI classification for detector set to fixed is Quick with a 6m x 6 m spacing (20x20 ft). Models BH-200, BH-300 and BH-500, BH-500/S and BH-500/N) photoelectric type smoke detectors BH-220, BH-320 and BH-520 photoelectric type smoke detectors with thermistor heat detection, Model BG-201 Flame Detector with or without the optional independent alarm outputs for each detector can be provided by BN-304 I/O units, and Models BF-300, BF-300M manual fire alarm stations. The addressable interface BN-300 works as a switch monitoring unit, and the BN-310 provides a relay output from the AL Com detector loop. The BNB-331 allows connection of conventional initiating devices such as the BG-21 Flame detector. The BN-201 allows the connection of supervisory devices to the AI Com. Relay output equipment can be connected to the loop with a BN-320 I/O unit. BN-320/02 is specifically for door control. BN-320/04 is the standard control unit and the BN-320/05 is for sprinkler system monitoring. The BNB-300/01 module provides the electronic circuitry for the manual call points An addressable notification device, the BBR-200 addressable sounder is available to be connected to a BSD-31X loop as an alarm notification device. The addressable BBR-110 mounts under the base of a BD or BH series detector. An AutoFieldBus driver in the panel will establish an AutoFieldBus to communicate with BSD-321 RS485 converter unit, a BSD-340 PowerLoop driver to connect to X33AF PL Flame detector and BN-342/1, 342/2 PowerLoop 4-20 mA input. The AutoFieldbus may be expanded using a BSL-321 or BSL-322 fiber optic converter or a BSL-325 booster in order to extend the length of the cables between units on the AutoFieldbus. See also: Automatic Releases for Extinguishing Systems and Other Fire Protection Equipment listing.



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