



**U. S. Department of Homeland Security
United States Coast Guard
Certificate of Approval**

Coast Guard Approval Number: 161.002/57/0

Expires: 22 July 2021

FIRE PROTECTIVE SYSTEM

AUTRONICA FIRE AND SECURITY AS
7483 TRONDHEIM
NORWAY

AutroSafe4 Interactive Fire Alarm System.

Consisting of control panel, initiating devices, notification devices, and accessories identified in the USCG Approved Component List specified below.

Identifying data: Installation Handbook, AutroSafe Interactive Fire Detection System, Release 4, Document 116-P-ASAFE-INSTALL/DGB Rev. G, 2011-12-06; and USCG Approved Component List dated 11 April 2017.

Test reports: FM Project № 0003040438 dated 14 June 2012; FM Project № 3023568 dated 10 April 2006; FM Project № 0003046915 dated 8 August 2014; DNV Report № 2002-3146 Rev. 3, dated 2014-03-28; DNV Report № 2005-3105 Rev 5 dated 2013-08-07; DNV Report № 2009-3961 Rev 6 dated 21.09.2012; DNV Report № 2012-3360 Rev 0 dated 2012-09-21; DNV Report № 2003-3169 Rev 02 dated 2004-05-11; DNV Report № 2004-3541 Rev 01 not dated; and Nemko Report № E12211.01 dated 2012-11-16; and USCG letter dated April 11, 2017.

The system must be installed and configured in accordance with Subpart 161.002 and Subchapter J of Title 46 of the U.S. Code of Federal Regulations, and with the 1993 or later version of NFPA 72. This is in addition to any other requirements specific to the vessel and its route. Only those components listed on the approved component list may be used.

Supersedes and extends Certificate № 161.002/57/0 dated 27 March 2015 for modifications to the approved component list.

*** End ***

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.



GIVEN UNDER MY HAND THIS 11th DAY OF
APRIL 2017, AT WASHINGTON D.C.

B. A. BALDWIN
Chief, Lifesaving and Fire Safety Division
BY DIRECTION OF THE COMMANDANT

TERMS: The approval of the item described on the face of the Certificate has been based upon the submittal of satisfactory evidence that the item complies with the applicable provisions of the navigation and shipping laws and the applicable regulations in Title 33 and/or Title 46 of the Code of Federal Regulations. The approval is subject to any conditions noted on this Certificate and in the applicable laws and regulations governing the use of the item on vessels subject to Coast Guard inspection or on other vessels and boats.

Consideration will be given to an extension of this approval provided application is made 3 months prior to the expiration date of this Certificate.

The approval holder is responsible for making sure that the required inspections or tests of materials or devices covered by this approval are carried out during production as prescribed in the applicable regulations.

The approval of the item covered by this certificate is valid only so long as the item is manufactured in conformance with the details of the approved drawings, specifications, or other data referred to. No modification in the approved design, construction, or materials is to be adopted until the modification has been presented for consideration by the Commandant and confirmation received that the proposed alteration is acceptable.

NOTICE: Where a manufacturer of safety-at-sea equipment is offering for sale to the maritime industry, directly or indirectly, equipment represented to be approved, which fails to conform with either the design details or material specifications, or both, as approved by the Coast Guard, immediate action may be taken to invoke the various penalties and sanctions provided by law including prosecution under 46 U.S.C. 3318, which provides:

"A person that knowingly manufactures, sells, offers for sale, or possesses with intent to sell, any equipment subject to this part (*Part B. of Subtitle II of Title 46 U.S.C.*) and the equipment is so defective as to be insufficient to accomplish the purpose for which it is intended, shall be fined not more than \$10,000, imprisoned for not more than 5 years or both."

**USCG Approved Component List dated 11 April 2017
for fire alarm system type AutoSafe4**

No.	Designation	Description	Product specification	Suitable for areas requiring extra protection (See note 1)	Conditions on installation
1.	BS-420M	Fire alarm control panel	116-P-BS420/CGB Rev. D, 2011-09-14	-	Note 2
2.	BS-420G	Fire alarm control panel	116-P-BS420/CGB Rev. D, 2011-09-14	-	Note 2
3.	BS-420G2	Fire alarm control panel – SIL2 Approved	116-P-BS420/CGB Rev. D, 2011-09-14	-	Note 2
4.	BS-430	Operator panel	116-P-BS430/CGB Rev. E, 2011-09-14	-	Note 2
5.	BS-430G2	Operator panel - SIL2 Approved	116-P-BS430/CGB Rev. E, 2011-09-14	-	Note 2
6.	BC-420	Controller	116-P-BC420/CGB Rev. C, 2011-09-14	-	Note 2
7.	BC-420G2	Controller – SIL2 Approved	116-P-BC420/CGB Rev. C, 2011-09-14	-	Note 2
8.	BC-440	Controller	116-P-BC440/CGB 2010-11-23	-	Note 2
9.	BC-440G2	Controller – SIL2 Approved	116-P-BC440/CGB 2010-11-23	-	Note 2
10.	BU-BV-420	Repeater panel	116-P-BU-BV420/CGB Rev.C, 2011-09-14	-	Note 2
11.	BU-BV-420G2	Repeater panel – SIL2 Approved	116-P-BU-BV420/CGB Rev.C, 2011-09-14	-	Note 2
12.	BU-110	Fire Brigade Loop Panel	116-P-BU110/CGB, Rev. A, 2015-08-14	-	
13.	BV-110	Information Loop Panel	116-P-BV110/CGB, Rev. A, 2015-08-14	-	
14.	BP-405	Power Cabinet	116-P-BP405/CGB Rev. B, 2010-02-01	-	
15.	BPS-405	Power Supply Unit	116-P-BPS405/CGB, Rev. A, 2011-07-08	-	
16.	BPS-410	Power Supply Unit	116-P-BPS410/CGB, Rev. B, 2011-07-08	-	
17.	BPS-410/115	Power Supply Unit	116-P-BPS410/CGB, Rev. B, 2011-07-08	-	
18.	116-5151-030.2127	Ethernet switch SFNT 5TX	ItemDetail_2891003	-	
19.	116-5151-030.2128	Ethernet switch SFNT 4TX/FX	ItemDetail_2891004	-	
20.	116-5151-030.2129	Ethernet switch SFNT 8TX	ItemDetail_2891005	-	
21.	116-5151-030.2130	Ethernet switch SFNT 7TX/FX	ItemDetail_2891006	-	
22.	116-5151-030.2131	Ethernet switch LM 5TX	ItemDetail_2989527	-	
23.	116-5151-030.2132	Ethernet switch LM 4TX/FX	ItemDetail_2989624	-	

APPROVED
Subject to conditions in
Commandant (CG-ENG-4) approval certificate
No 161.002/57/0
dated April 11, 2017
Chief, Lifesaving and Fire Safety Division
By direction of the Commandant, USCG

Note 1. Components suitable for installation in locations requiring an exceptional degree of protection satisfy the requirement of 46 CFR 161.002-4(b)(4). These locations are exposed to weather, seas, splashing, pressure-directed liquids, or similar moisture conditions. These locations include--

- (1) On deck;
- (2) A machinery space;
- (3) A cargo space;
- (4) A location within a galley or pantry area, laundry, or water closet which contains a shower or bath; and
- (5) Other spaces with similar environmental conditions.

Note 2: Must draw power from BPS-405 or BPS-410 power supplies.

**USCG Approved Component List dated 11 April 2017
for fire alarm system type AutoSafe4**

No.	Designation	Description	Product specification	Suitable for areas requiring extra protection (See note 1)	Conditions on installation
24.	116-5151-030.2133	Ethernet switch LM 4TX/2FX	ItemDetail_2832658	-	
25.	116-5151-030.2134	Ethernet switch LM 4TX/FX SM	ItemDetail_2989637	-	
26.	116-5151-030.2135	Ethernet switch LM 4TX/2FX SM	ItemDetail_2891916	-	
27.	BSS-310A	Power Supply Module	116-P-BSS310A/CGB, Rev. A, 2011-06-07	-	Note 2
28.	BSL-310	Communication Module	116-P-BSL310/CGB, Rev. D, 2011-06-07	-	Note 2
29.	BSD-310/-311	Loop Driver Module	116-P-BSD310/CGB, Rev. H, 2011-06-07	-	Note 2
30.	BSB-310A	Output Module, monitored	116-P-BSB310A/CGB, Rev. B, 2015-02-01	<p align="center">-APPROVED Subject to conditions in Commandant (CG-ENG-4) approval certificate № 161.00257/0 Note 2 dated April 11, 2017</p>	
31.	BSJ-310	Output Module	116-P-BSJ310/CGB, Rev. E, 2011-06-07		
32.	BSE-310	Input Module, Monitored	116-P-BSE310/CGB, Rev. D, 2011-03-30		
33.	BSE-320	Input Module	116-P-BSE320/CGB, Rev. E, 2011-06-14		
34.	BD-200	Heat detector	116-P-BD200/CGB, Rev. D, 2009-06-23	Chief, Lifesaving and Fire Safety Division By direction of the Commandant, USCG	
35.	BD-200M	Heat detector	116-P-BD200M/CGB, Rev. B, 2010-03-09		
36.	BD-300	Heat detector	116-P-BD300/CGB, Rev. E, 2009-06-23	yes	
37.	BD-500	Heat detector	116-P-BD500/CGB, Rev. I, 2009-06-23	yes	
38.	BD-500/Ex	EX-variant, Zone 0 and 1	116-P-BD500EX/CGB, Rev. G, 2011-04-05	yes	
39.	BD-500/N	EX-variant, Zone 2	116-P-BD500/CGB, Rev. I, 2009-06-23	yes	
40.	BD-501	Heat detector, IP 56	116-P-BD501/CGB, Rev. D, 2010-03-09	yes	
41.	BD-501/EX	EX-variant, Zone 0 and 1	116-P-BD501EX/CGB, Rev. E, 2011-04-05	yes	
42.	BD-501/N	EX-variant, Zone 2	116-P-BD501N/CGB, Rev. A, 2012-02-15	yes	
43.	BH-200	Optical smoke det.	116-P-BH200/CGB, Rev. C, 2009-06-24	-	
44.	BH-300	Optical smoke det. w/SelfVerify	116-P-BH300/CGB, Rev. C, 2009-06-25	yes	
45.	BH-500	Optical smoke det., environm. prot.	116-P-BH500/CGB, Rev. G, 2009-06-25	yes	
46.	BH-500/EX	EX-variant, Zone 0 and 1	116-P-BH500EX/CGB, Rev. E, 2011-04-14	yes	
47.	BH-500/S	High sensitive variant	116-P-BH500S/CGB, Rev. E, 2009-11-25	-	
48.	BH-500/N	EX-variant, Zone 2	116-P-BH500N/CGB, Rev. A, 2012-02-15	yes	

Note 1. Components suitable for installation in locations requiring an exceptional degree of protection satisfy the requirement of 46 CFR 161.002-4(b)(4). These locations are exposed to weather, seas, splashing, pressure-directed liquids, or similar moisture conditions. These locations include--

- (1) On deck;
- (2) A machinery space;
- (3) A cargo space;
- (4) A location within a galley or pantry area, laundry, or water closet which contains a shower or bath; and
- (5) Other spaces with similar environmental conditions.

Note 2: Must draw power from BPS-405 or BPS-410 power supplies.

**USCG Approved Component List dated 11 April 2017
for fire alarm system type AutoSafe4**

No.	Designation	Description	Product specification	Suitable for areas requiring extra protection (See note 1)	Conditions on installation
49.	BH-220	Multisensor	116-P-BH220/CGB, Rev. D, 2010-02-24	yes	
50.	BH-320	Multisensor w/SelfVerify	116-P-BH320/CGB, Rev. D, 2009-06-24	yes	
51.	BH-520	Multisensor, environm. Protection	116-P-BH520/CGB, Rev. F, 2009-06-24	yes	
52.	BH-520/EX	EX-variant, Zone 0 and 1	116-P-BH520EX/CGB, Rev. H, 2011-04-15	yes	
53.	BH-520/N	EX-variant, Zone 2	116-P-BH520N/CGB, Rev. A, 2012-02-15	yes	
54.	BF-300	Manual Call Point w/SelfVerify	116-P-BF300/CGB, Rev. H, 2009-07-16	yes	
55.	BF-500/N	EX-variant, Zone 2	116-P-BF300/CGB, Rev. H, 2009-07-16	yes	
56.	BF-300V2	Manual Call Point w/SelfVerify	116-P-BF300V2/CGB, Rev. A, 2010-06-23	yes	
57.	BF-300M	Metal encapsulation, cable glands	116-P-BF300M/CGB, Rev. E, 2009-06-29	yes	
58.	BF-300M/N	EX-variant, Zone 2	116-P-BF300M/CGB, Rev. E, 2009-06-29	yes	
59.	BF-510WP-H	Manual Call Point w/SelfVerify	116-P-BF510WPH/CGB, Rev. B, 2011-09-29	yes	
60.	BF-500/EX	EX-variant, Zone 0 and 1	116-P-BF500EX/CGB, Rev. D, 2010-06-01	yes	
61.	BF-500V2/EX	Manual Call Point w/SelfVerify	116-P-BF500V2EX/CGB, Rev. A, 2011-04-06	yes	
62.	BF-501	Manual Call Point, IP 66	116-P-BF501/CGB, Rev. C, 2009-06-30	-	
63.	BF-501/EX	EX-variant, Zone 0 and 1	116-P-BF501EX/CGB, Rev. D, 2011-04-11	-	
64.	BF-501/N	EX-variant, Zone 2	116-P-BF501/CGB, Rev. C, 2009-06-30	-	
65.	BF-502	Manual Call Point, IP 66	116-P-BF502/CGB, Rev. B, 2009-06-30	yes	
66.	BF-502/EX	EX-variant, Zone 0 and 1	116-P-BF502EX/CGB, Rev. D, 2011-04-12	yes	
67.	BF-502/N	EX-variant, Zone 2	116-P-BF502/CGB, Rev. B, 2009-06-30	yes	
68.	BZ-500	EX-barrier unit	116-P-BZ500/CGB, Rev. H, 2011-04-05	-	
69.	BBR-200	Addressable sounder	116-P-BBR200/CGB, Rev.F, 2011-09-29	yes	
70.	CCH ETH 2416	Horn, Cooper Crouse Hinds - Uses CCH EAJC26 conduit outlet box with cover, 3/4 NPT hub size.		-	For use in gas applications only.
71.	BW-201	Disable input unit	116-P-BW201/CGB, Rev. D, 2009-07-09	yes	

APPROVED
Subject to conditions in
Commandant (CG-ENG-4) approval certificate
No. 161.002/57/0
dated April 11, 2017
Chief, Lifesaving and Fire Safety Division
By direction of the Commandant, USCG

Note 1. Components suitable for installation in locations requiring an exceptional degree of protection satisfy the requirement of 46 CFR 161.002-4(b)(4). These locations are exposed to weather, seas, splashing, pressure-directed liquids, or similar moisture conditions. These locations include--

- (1) On deck;
- (2) A machinery space;
- (3) A cargo space;
- (4) A location within a galley or pantry area, laundry, or water closet which contains a shower or bath; and
- (5) Other spaces with similar environmental conditions.

Note 2: Must draw power from BPS-405 or BPS-410 power supplies.

**USCG Approved Component List dated 11 April 2017
for fire alarm system type AutoSafe4**

No.	Designation	Description	Product specification	Suitable for areas requiring extra protection (See note 1)	Conditions on installation
72.	BN-201	Monitoring input unit	116-P-BN201/CGB, Rev. B, 2009-06-25	-	
73.	BN-300	Input unit with SelfVerify	116-P-BN300/CGB, Rev. I, 2009-11-03	yes	
74.	BN-310	Single relay output unit	116-P-BN310/CGB, Rev. B, 2009-06-25	yes	
75.	BN-320	Interface unit with SelfVerify	116-P-BN320/CGB, Rev. B, 2009-06-25	yes	
76.	BN-320/2	Door Control Unit	116-P-BN320/2/CGB, Rev. D, 2009-11-09	yes	
77.	BN-320/4	Monitoring and control unit	116-P-BN320-4/CGB, Rev. C, 2009-07-21	yes	
78.	BN-320/5	Sprinkler control unit	116-P-BN320-5/CGB, Rev. F, 2009-12-07	yes	
79.	BWA-100	Detector base		-	
80.	BWP-100/20	Conduit box M20 for BWA-100	116-P-BWP100/CGB, Rev. A, 2009-06-30	-	
81.	MT-12/24-R	Fenwal Horn		-	
82.	MTWP-2475W-FR	Fenwal Horn/Strobe		-	
83.	BNB-331	Conventional Loop Interface	116-P-BNB331/CGB, Rev. B, 2012-02-02	yes	Note 2
84.	BSD-321	Autofieldbus Protocol Converter	P-BSD321/CE Rev. B, 041222	-	
85.	BSD-340	PowerLoop Driver	P-BSD340/1/CE Rev. B, 041019	-	Note 2
86.	BN-342/1	PowerLoop 4-20 mA Input Unit	P-BN342/1/CE 040528	-	
87.	BN-342/2	PowerLoop 4-20 mA Input Unit	P-BN342/2/CE, 040528	-	
88.	Autroflame X33/1	Flame detector	116-P-X33AF/CGB, Rev. C, 2010-10-20	yes	
89.	Autroflame X33AF	Flame detector	116-P-X33AF/CGB, Rev. C, 2010-10-20	yes	
90.	Autroflame X33AFPL	Flame detector	116-P-X33AF/PL/CE, Rev. A, 2006-02-06	yes	
91.	BN-221/01	Extinguishing control unit	116-P-BN221-01/CGB, Rev. C, 2012-10-16	-	
92.	BN-221/02	Monitored output unit	116-P-BN221-02/CGB, Rev. C, 2012-10-16	-	
93.	HC-300PL	IR Hydrocarbon gas detector	116-P-HC300PL/CGB, Rev. B, 2012-10-10	-	
94.	BG-201	Flame detector	116-P-BG201/CGB 2012-10-10	yes	

- **APPROVED**
Subject to conditions in
Commandant (CG-ENG-4) approval certificate
- № 161.002/57/0
dated April 11, 2017
yes
Chief, Lifesaving and Fire Safety Division
By direction of the Commandant, USCG

Note 1. Components suitable for installation in locations requiring an exceptional degree of protection satisfy the requirement of 46 CFR 161.002-4(b)(4). These locations are exposed to weather, seas, splashing, pressure-directed liquids, or similar moisture conditions. These locations include--

- (1) On deck;
- (2) A machinery space;
- (3) A cargo space;
- (4) A location within a galley or pantry area, laundry, or water closet which contains a shower or bath; and
- (5) Other spaces with similar environmental conditions.

Note 2: Must draw power from BPS-405 or BPS-410 power supplies.