



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
BG23PTB00015

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Autronica Fire and Security AS

地址/Address

Bromstadveien 59, N-7047 Trondheim, Norway

产品名称/Product

固定式探火和失火报警系统
Fixed Fire Detection and Alarm System

附加标志/Notations

无/Nil.

认可标准/Approval Standard

- 经MSC. 311 (88)及MSC. 339 (91)修正的《国际消防安全系统规则》第9章
Chapter 9 of International Code for Fire Safety Systems, as amended by MSC.311(88) & MSC.339(91)
- 《1974年国际海上人命安全公约》及其修正案II-2章第7条
Regulations 7, Chapter II-2 of International Convention for The Safety of Life at Sea, 1974, as Amended

用于/Intended for

船舶/Ships



证书有效期至/This Certificate is valid until 2027年01月07日/Jan. 07,2027

发证机构/Issued by 中国船级社卑尔根办事处
CCS Bergen Office

签发日期/Date 2023年10月20日
Oct. 20,2023

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P023-97589719

产品明细/Product Description**固定式探火和失火报警系统 /Fixed Fire Detection and Alarm System (M0001)**

名称/Name	属性(值)/Value	单位/Unit
型号/Type	Autroprime	
额定电压/Rated voltage	见附页 Refer to additional Pages	V

固定式探火和失火报警系统 /Fixed Fire Detection and Alarm System (M0002)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	Autrosafe	
额定电压/Rated voltage	见附页 Refer to additional Pages	V

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : BG19PPP20003, BG19PPP20006

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : E18299.00
 试验报告日期/ Test Report Date : 2019-01-31
 试验单位/ Laboratory: Nemko AS
 试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : 20887 Rev.08
 试验报告日期/ Test Report Date : 2016-10-20
 试验单位/ Laboratory: Applica Test & Certification Accredited Labs
 试验单位地址/ Test Address: 7483 Trondheim, Norway

试验报告编号/ Test Report No. : 2009-3691 Rev.06
 试验报告日期/ Test Report Date : 2009-12-21
 试验单位/ Laboratory: DNV
 试验单位地址/ Test Address: Norway

试验报告编号/ Test Report No. : E13284.01
 试验报告日期/ Test Report Date : 2014-04-08
 试验单位/ Laboratory: Nemko
 试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : 99-1291/99-1491/2000-1190
 试验报告日期/ Test Report Date : 2001-10-01
 试验单位/ Laboratory: DNV
 试验单位地址/ Test Address: Norway

试验报告编号/ Test Report No. : 99-1450 Rev.04
 试验报告日期/ Test Report Date : 2001-10-01
 试验单位/ Laboratory: DNV
 试验单位地址/ Test Address: Norway

试验报告编号/ Test Report No. : 2009-3664, 2691, 3710
 试验报告日期/ Test Report Date : 2010-02-19
 试验单位/ Laboratory: DNV
 试验单位地址/ Test Address: Norway

试验报告编号/ Test Report No. : 21366
 试验报告日期/ Test Report Date : 2018-05-22
 试验单位/ Laboratory: Applica Test & Certification Accredited Labs
 试验单位地址/ Test Address: 7483 Trondheim, Norway

试验报告编号/ Test Report No. : 21439
 试验报告日期/ Test Report Date : 2018-11-12
 试验单位/ Laboratory: Applica Test & Certification Accredited Labs
 试验单位地址/ Test Address: 7483 Trondheim, Norway

试验报告编号/ Test Report No. : E07357.02

试验报告日期/ Test Report Date : 2008-02-22
试验单位/ Laboratory: Nemko AS
试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : 3010-07-0145
试验报告日期/ Test Report Date : 2007-08-23
试验单位/ Laboratory: Teknologisk Institutt AS
试验单位地址/ Test Address: Kabelgata 2, 0581 Oslo, Norway

试验报告编号/ Test Report No. : E07357.03
试验报告日期/ Test Report Date : 2011-10-12
试验单位/ Laboratory: Nemko AS
试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : E07357.05
试验报告日期/ Test Report Date : 2013-06-06
试验单位/ Laboratory: Nemko AS
试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : E18299.00
试验报告日期/ Test Report Date : 2019-01-31
试验单位/ Laboratory: Nemko AS
试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : E18106.00
试验报告日期/ Test Report Date : 2018-12-30
试验单位/ Laboratory: Nemko AS
试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

试验报告编号/ Test Report No. : E18106.00
试验报告日期/ Test Report Date : 2018-12-30
试验单位/ Laboratory: Nemko AS
试验单位地址/ Test Address: Gaustadalléen 30, P.O.Box 73 Blindern, 0314 Oslo, Norway

认可后的产品检验方式/ Method of Product Inspection after Approval

认可后的产品检验由制造厂按本社批准的产品检验计划进行，本社在文件审核合格后颁发船用产品证书。
After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society, and the Marine Product Certificate is issued by the Society upon satisfactory documents review.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后，如果产品及其重要零部件的设计、所用材料或制造方法有所改变，且影响到产品的主要特性、特征；或产品的性能指标有所更改，且超过认可的范围，则有关图纸和文件应经检验机构审批。并在检验机构认为必要时，经本社检验人员见证有关试验和进行检查，其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行，并且与认可时一致。如果质量管理体系发生改变，应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内，如果出现可能导致本社取消认可的情况，工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内，本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核，以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance

with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 如果属于获得型式认可B模式证书，采用替代发证计划时，证书获得者应接受本社每年一次的定期审核，定期审核日为认可证书期满之日对应的每一周年日，检查工作应在周年日的前后三个月内进行。

If belong to the situation of the product has type approval mode B certificate, and using the Alternative Certification Scheme, those who have obtained the certificate should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

1. 本证书由原型式认可证书 (No. BG23PTB00003) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. BG23PTB00003.

2. 本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社卑尔根办事处

CCS Bergen Office

注：本证书含有附页，共2页

Note: The certificate is attached with additional 2 page(s)

Product description

AUTROPRIME

The fire alarm control panel BS-200M supports 4 detection loops. All loop units can be mixed freely and connected at any point on the same detection loop. A maximum of 8 additional panels can be freely mixed and connected to the fire alarm control panel via the RS-485 panel bus, including repeater panels BS-211, information panels BV-210, fire brigade panels BU-210 and mimic drivers BUR-200.

Autroprime Interactive Fire Detection System consist the following units:

- BS-200M: Main control panel
- BS-210: Operator panel
- BS-211: Repeater panel
- BU-210: Fire brigade panel
- BV-210: Information panel
- BUR-200: Mimic driver
- BC-250: Controller Unit

Software version: 2. 0. x, x to be defined for each delivery.

AUTROSAFE 4

The fire alarm control panel BS-420/420M/420G supports maximum 30 modules, of which maximum 12 can be loop driver modules. Utilizing a redundant Ethernet network, AutoNet, the control panel can communicate with other system units. A maximum number of 64 system units can be connected to each AutoNet, including controller BC-420, operator panel BS-430 and BU-BV-420 configurable repeater/information panel. Power supply units BP-405, BPS-405 and BPS-410.

- BS-420M: Main control panel, network system, marine applications, release 4
- BS-420G: Main control panel, network system, offshore applications, release 4
- BS-420G2: Main control panel, network system, offshore applications, release 4, certified to SIL2
- BS-430: Operator panel with total display/service, network system, release 4
- BS-430G2: Operator panel with total display/service, network system, release 4, certified to SIL2
- BC-420: Controller without display/buttons, network system, release 4
- BC-420G2: Controller without display/buttons, network system, release 4, certified to SIL2
- BU-BV-420: Repeat/Information panel (service by dipswitch settings), release 4
- BU-BV-420G2: Repeat/Information panel (service by dipswitch settings), release 4, certified to SIL2
- BP-405: Power cabinet provides space for two 12V/18Ah batteries, release 4
- BPS-405 Decentralized power unit, mountable in a 19" rack/console, 115/230VAC 24VDC/5A, release 4
- BPS-410: Decentralized power unit, mountable in a 19" rack/console, 115/230VAC 24VDC/10A, release 4
- BC-440 Rack mount version of BC-420
- BC-440G2 Rack mount version of BC-420G2, certified to SIL2

Interface modules:

- BSB-310A: Monitored output module
- BSD-310: Loop driver module

- BSD-330: BS-100 loop interface
- BSE-310: Monitored input module
- BSE-320: Input module
- BSL-310: Communication module
- BSS-310A: Power module
- BSS-311: Power module

Software version 4.x.y, where x, y- values shall be defined for each delivery.

Limitation

The equipment is found to comply with following location/application dependent requirements:

AUTROSAFE 4 and AUTROPRIME:

- Temperature for Autroprime: TEM-B – Location (5°C-70°C) (ref. IEC 60092-504:2016 table 1 item 6-7)
- Temperature for AutoSafe 4: TEM-D – Location (-25°C-70°C) (ref. IEC 60092-504:2016 table 1 item 6-7)
- Vibration: VIB-A – For general applications (ref. IEC 60092-504:2016 table 1 item 10)
- EMC: EMC-B – Bridge and open deck zone (ref. IEC 60092-504:2016 table 1 item 13-20)
- Enclosure: ENC-A – Control room, accommodation, bridge (IP22) (ref. IEC 60092-201:1994 table 5)

NOTE:

- 1. For each designed vessel, the arrangement of detectors and relevant drawings should be approved by CCS.**
- 2. Places of production: Autronica Fire and Security AS, Bromstadvegen 59, Trondheim, Norway.**