



Marine & Offshore

Certificate number: 24900/C0 BV

File number: ACE02/14/20 Product code: 2634H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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## TYPE APPROVAL CERTIFICATE

This certificate is issued to

## ABB FRANCE

**CHASSIEU - FRANCE** 

for the type of product

# **CONTACTORS (LOW VOLTAGE)**

Auxiliary Contacts CA4-, CAL4-, CAT4-

#### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships. IEC 60947-5-1 (2016) EC Code 31/41

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 08 Oct 2026

### For Bureau Veritas Marine & Offshore,

At BV LYON, on 08 Oct 2021, Yann Kremplewicz





This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

Auxiliary contacts model CA4-, CAT4-, CAL4- for the operation of auxiliary circuits and control circuits.

CA4- : 1 or 4-pole block, front-mounted, instantaneous with N.O, N.C contacts

CAT4- : 2-pole block, front-mounted, instantaneous N.O + N.C contacts with coil connection terminal on front face

**CAL4-** : 2-pole block instantaneous N.O + N.C contacts clipped onto right and/or left side of the contactors

Specification/Type		CA
Rated operational voltage	Ue max.	24690V
Rated insulation voltage	Ui	690V
Rated frequency limits	/	25400 Hz
Rated operational current	Ie / AC-15	24-127Vac : 6A
		220-240Vac : 4A
		400-440Vac : 3A
		500Vac : 2A
		690Vac : 2A
Rated operational current	Ie / DC-13	24Vdc : 6A
		48Vdc : 2.8A
		72Vdc : 1A
		125Vdc : 0.55A
		250Vdc : 0.27A
		400Vdc: 0.15A
		500Vdc: 0.13A
		600Vdc : 0.1A
Enclosure degree of protection	IP	20
Rated Impulse Withstand voltage	Uimp	6 kV
Connection	/	Screw or spring (S) or push-in (K) terminals

### **2. DOCUMENTS AND DRAWINGS:**

- Identification folder n°20110279-5 "Product description for auxiliary contacts" dated 20/05/2011
- Catalog N° 1SBC100173C0201, dated Mar 2013.
- Catalog  $N^{\circ}$  1SBC100214C0202, dated Mar 2020.

#### 3. TEST REPORTS:

## Intertek Semko AB:

- IECEE CB Scheme N° SE-93052A1, dated 09 Dec 2019.
- CB test report  $N^{\circ}$  1917992STO-001, dated 06 Dec 2019.
- IECEE CB Scheme N° SE-93053, dated 16 Jan 2019.
- CB test report N° 1818873STO-001, dated 16 Jan 2019.

## ABB accredited laboratory:

- Vibration test report n° 20110276-A, dated 20 Jun 2011.
- Climatic tests report n° 20120293-A, dated 26 Jul 2012.
- Vibration test report n° 20180114-A, dated 14 Jun 2018.
- Climatic tests report n° 20180113-1A, dated 28 Aug 2018.

## 4. APPLICATION / LIMITATION:

- 4.1 BV Rules for the Classification of Steel Ships and IEC 60947-5-1
- 4.2 BUREAU VERITAS Environmental Category, EC Code: 31/41
- 4.3 Approval also valid for ships to be granted with the notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.
- 4.4 Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev7

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#### 5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The auxiliary contacts are to be supplied by **ABB FRANCE** in compliance with the type described in this certificate.
- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 **ABB FRANCE** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 For information, ABB FRANCE has declared to Bureau Veritas the following production sites:

ABB FRANCE 2 Rue d'Arsonval 69680 CHASSIEU FRANCE

ABB Xinhui Low Voltage Switchgear Co., Ltd.
Jingguzhou Industrial Development Zone
Xinhui District, Jiangmen City
Guangdong 529100
China
Xinhui
CHINA

### **6. MARKING OF PRODUCT:**

- According to IEC 60947 specifications.

#### 7. OTHERS:

- 7.1 It is **ABB FRANCE**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate N° 24900/B0 BV issued on 04 Apr 2018 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*