



Marine & Offshore

Certificate number: 65777/A0 BV

File number: MPA2101730

Product code: 2634I

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 Electrification Sweden AB

Västerås - SWEDEN

for the type of product

CONTACTORS (LOW VOLTAGE)

GF875-20, GF1050-20 and GF1325-20

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships and Offshore Units.
IEC 60947-4-1 (2018)

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: 10 Mar 2027

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 10 Mar 2022,

Torbjorn Ygesjo



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.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=qyahksqly>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

GF875-20, GF1050-20 and GF1325-20 are contactors for DC switching.

Specification/Type		GF875-20	GF1050-20	GF1325-20
Maximum rated operational current (at 40°C)	Ie	875A	1050A	1325A
Maximum rated operational voltage	Ue max	1500V DC		
Rated insulation voltage	Ui	1500V		
Rated Operational Frequency	/	50/60 Hz		
No. of poles		2		
Rated Impulse Withstand voltage (main contacts)	Uimp	8 kV		
Utilization Category:	DC-1	210A		
	DC-PV3	875A	1050A	/
Rated control circuit voltage	Uc	24 to 250 V DC 24 to 250 V AC		
Rated short-time withstand current (in DC)	Icw - 1s	6218A	7600A	9500A
	Icw - 10s	5184A	6336A	7920A
	Icw - 30s	4150A	5207A	6340A
	Icw - 1min	3109A	3800A	4750A
	Icw - 15min	1139A	1392A	1740A

2. DOCUMENTS AND DRAWINGS:

Catalog N° 1SBC100218BO202, dated Dec 2020.

3. TEST REPORTS:

Intertek Semko AB:

- Test report N° 1818103STO-001, Ed.2, dated 08 Oct 2019.
- IECEE CB Scheme N° SE-96220, dated 21 Nov 2019.
- IECEE test report N° 1905129VAS-001, dated 21 Nov 2019.
- IECEE CB Scheme N° SE-96221, dated 21 Nov 2019.
- IECEE test report N° 1905129VAS-002, dated 21 Nov 2019.

FORCE Technology:

- Test report N° 121-24094-2, dated 15 Oct 2021.

DELTA:

- Test report N° 619-20158-10-R0, dated 21 May 2019.
- Test report N° 619-20085-11-R0, dated 14 Feb 2020.
- Test reports N° 620-20237-11-R0 and 620-20237-12-R0, dated 20 Oct 2020.

4. APPLICATION / LIMITATION:

- 4.1 - BV Rules for the Classification of Steel Ships and Offshore Units.
- 4.2 - BUREAU VERITAS Environmental Category, **EC Code: 31**
- 4.3 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev7.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **ABB Electrification Sweden AB** 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 Electrification Sweden AB** 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 Electrification Sweden AB** has declared to Bureau Veritas the following production site:

ABB Electrification Sweden AB
Motorgränd 20
Västerås
SE-721 32 Västerås
SWEDEN

6. MARKING OF PRODUCT:

According to IEC 60947 specifications.

7. OTHERS:

It is **ABB Electrification Sweden AB**'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.

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