



Marine & Offshore

Certificate number: 24037/B1 BV

File number: ACE2/17/15

Product code: 2671H

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 STOTZ-KONTAKT GmbH

Heidelberg - GERMANY

for the type of product

ELECTRICAL MOTOR STARTERS

Manual Motor Starter

MS132, MS132-K, MO132 series

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 31

IEC 60947-4-1:2018

IEC 60947-2:2016

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: 05 Feb 2023

For Bureau Veritas Marine & Offshore,

At BV HAMBURG, on 12 Aug 2020,

Dirk Hoefner



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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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The manual motor starter **MS132**, **MS132-K** and **MO132** series are electromechanical protection devices.

Range of application:

- Number of poles: 3
- Rated insulation voltage (Ui): 690 V
- Rated impulse withstand voltage (Uimp): 6 kV
- Rated Voltage (Ue): 230V/400V/440V/500V/690V
- Degree of protection: IP20

- **MS132-xxx** (screw terminals) and **MS132-xxxK** (spring terminals) with short-circuit and overload protection.

Type	Operational current range I _e [A]	230V AC		400V AC		440V AC		500V AC		690V AC	
		ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]
-0.16	0.10...0.16	100	100	100	100	100	100	100	100	100	100
-0.25	0.16...0.25	100	100	100	100	100	100	100	100	100	100
-0.4	0.25...0.40	100	100	100	100	100	100	100	100	100	100
-0.63	0.40...0.63	100	100	100	100	100	100	100	100	100	100
-1.0	0.63...1.00	100	100	100	100	100	100	100	100	100	100
-1.6	1.00...1.60	100	100	100	100	100	100	100	100	100	100
-2.5	1.60...2.50	100	100	100	100	100	100	100	100	100	100
-4.0	2.50...4.00	100	100	100	100	20	20	20	20	3	3
-6.3	4.00...6.30	100	100	100	100	20	20	20	20	3	3
-10	6.30...10.0	100	100	100	100	20	20	20	20	3	3
-12	8.00...12.0	100	100	100	100	20	20	20	20	3	3
-16	10.0...16.0	100	100	100	100	20	20	20	20	3	3
-20	16.0...20.0	100	100	100	100	20	20	20	20	3	3
-25	20.0...25.0	50	50	50	50	20	20	10	10	3	3
-32	25.0...32.0	25	25	25	50	20	20	10	10	3	3

- **MO132-xxx** with short-circuit protection.

Type	Rated instantaneous short-circuit current setting I _i [A]	230V AC		400V AC		440V AC		500V AC		690V AC	
		ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]	ICS [kA]	ICU [kA]
-0.16	1.56	100	100	100	100	100	100	100	100	100	100
-0.25	2.44	100	100	100	100	100	100	100	100	100	100
-0.4	3.90	100	100	100	100	100	100	100	100	100	100
-0.63	6.14	100	100	100	100	100	100	100	100	100	100
-1.0	11.50	100	100	100	100	100	100	100	100	100	100
-1.6	18.40	100	100	100	100	100	100	100	100	100	100
-2.5	28.75	100	100	100	100	100	100	100	100	100	100
-4.0	50.00	50	50	50	50	20	20	20	20	3	3
-6.3	78.75	50	50	50	50	20	20	20	20	3	3
-10	125	50	50	50	50	20	20	20	20	3	3
-12	150	50	50	50	50	20	20	20	20	3	3
-16	200	50	50	50	50	20	20	20	20	3	3
-20	250	50	50	50	50	20	20	20	20	3	3
-25	313	50	50	50	50	20	20	10	10	3	3
-32	400	25	50	25	50	20	20	10	10	3	3

2. DOCUMENTS AND DRAWINGS:

- 1SAM301101 Rev. a dated 26.06.07; 1SAM300403 rev. a dated 28.08.08;
- 1SAM301102 Rev. b1 dated 30.01.09; 1SAM300404 Rev. a dated 28.08.08; 1SAM300811 Rev. c1 dated 09.03.09
- 1SAD938505-0125 dated November 25, 2011, 1SAD938501-0183 dated November 25, 2011

For B0 version:

- 2CDC131021D0202 dated 04.2016; 2CDC131035D0202 dated 04.2016

For B1 version:

- Extract from catalogue 2CDC131135C0201; 1SAM300102 sheet 1 to 6 dated 2017-08-04

3. TEST REPORTS:

- D2009039 Rev. 1.9 dated 28.07.2009
- KEMA: 2122927.52 and 2122927.53 dated 20-07-2009
- Paconsult: 09-2475A dated 03 July 2009
- SGS CEBEC: 58495801/00 to /15 and 58495802/00 to /12 dated 13.07.2009

For B0 version:

- CQC and STIEE: CN42365 dated Jan.12,2018 and 00901-CB2017CQC-077432-1 dated 2017-12-29

For B1 version:

- Paconsult: 18-10034 dated June 21, 2018
- CQC and STIEE: 00901-CB2017CQC-077432-2 dated 2017-12-29
- CQC: 00901- CB2019CQC-085478-1 dated 2019-11-08; 00901-CB2019CQC-085478-2 dated 2019-11-08

4. APPLICATION / LIMITATION:

- 4.1 - Bureau Veritas Rules and Regulations for the Classification of Steel Ships.
- 4.2 - Bureau Veritas Environmental Category, **EC Code: 31**
- 4.3 - Each equipment is to be supplied with manual(s) for installation, use and maintenance.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The manual motor starters are to be supplied by **ABB STOTZ KONTAKT GmbH** 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 STOTZ KONTAKT GmbH** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

ABB STOTZ KONTAKT GmbH
Eppenheimer Straße 82
69123 Heidelberg,
GERMANY

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

6. MARKING OF PRODUCT:

According to IEC 60947 specification.

7. OTHERS:

- 7.1 - It is the responsibility of **ABB STOTZ KONTAKT GmbH** 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° 24037/B0 BV issued on 05 Feb 2018 by the Society.

*** END OF CERTIFICATE ***