DNV·GL

Certificate No:
TAE00002GZ

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Motor Starter

with type designation(s)
MS 132 / MO 132

Issued to
ABB Stotz-Kontakt GmbH
HEIDELBERG, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft
IEC 60947-2
IEC 60947-4-1

Application :

For installations inside switchboards / enclosures onboard ships and offshore units

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Rated voltage (V)	**690 AC**
Rated current (A)	**0.1 - 32**
Frequency (Hz)	**40 - 60**

Issued at **Hamburg** on **2018-02-19**
This Certificate is valid until **2023-02-18**.
DNV GL local station: **Augsburg**

Approval Engineer: **Thomas Hartmann**

for **DNV GL**

Arne Schaarmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

Motor protection circuit breaker type: MS 132 / MO 132 with the following auxiliary devices (MO 132 thermal tripping function deactivated):

Current limitor:	S803x-SCL-SR
Aux. Switch front mounting:	HKF1-11
Aux. Switch attached at right:	HK1-11, HK1-20, HK1-02
Aux. Switch attached at right with lead contacts:	HK1-20L
Signal Switch:	SK1-11, SK1-20, SK1-02
Short circuit Signal Switch:	CK1-11, CK1-20, CK1-02
Undervoltage release:	UA1
Shunt release:	AA1

Rated Voltage Ue: 690* V AC
Uimp = 6 kV
Rated frequency: 40 - 60 Hz
Utilisation category: AC3

Tripping values, rated short circuit capacity:

Type	Thermal tripping setting ranges (A)	Rated current In / conventional free air thermal current (A)	Rated short circuit instatanious short-circuit current setting (A)	Rated short circuit capacity Ics = Icu at Ue=400V (kA)	Rated short circuit capacity Ics = Icu at Ue=690V (kA)	Rated short circuit capacity with current limitor* Ics = Icu at Ue=690V (kA)
MS 132-0.16	0.1 - 0.16	0.16	1.25 - 1.87	100	100	-
MS 132-0.25	0.16 - 0.25	0.25	1.95 - 2.92	100	100	-
MS 132-0.4	0.25 - 0.4	0.4	3.12 - 4.68	100	100	-
MS 132-0.63	0.4 - 0.63	0.63	4.91 - 7.37	100	100	-
MS 132-1.0	0.63 - 1	1.0	9.20 - 13.8	100	100	-
MS 132-1.6	1 - 1.6	1.6	14.7 - 22.1	100	100	-
MS 132-2.5	1.6 - 2.5	2.5	23.0 - 34.5	100	100	-
MS 132-4.0	2.5 - 4	4.0	40.0 - 60.0	100	3	50
MS 132-6.3	4 - 6.3	6.3	63.0 - 94.5	100	3	50
MS 132-10	6.3 - 10	10	120 - 180	100	3	50
MS 132-16	10 - 16	16	192 - 288	50	3	50
MS 132-20	16 - 20	20	240 - 360	50	3	50
MS 132-25	20 - 25	25	300 - 450	50	3	50
MS 132-32	25 - 32	32	384 - 576	25	3	50

* With current limitor S803x-series

Rated voltage auxiliary contacts U_e: 600 / 690 V AC

Application/Limitation

Motor starter with thermal and magnetic release. Applicable for use in an IT-grid (ship's mains) up to 690 V.

Type Approval documentation

Tests carried out

Type tests according to IEC 60947-2: Sequence I and II and Annex H and IEC 60947-4-1 Sequence I, II, III and V.
Environmental tests in accordance with CG-0339 / IACS E10: Vibration test, Humidity, Dry heat test, Low temperature test, EMC tests (emission & imunity), High voltage test and Insulation resistance test.

Marking of product

ABB Stotz – Type designation – Voltage – Current – Breaking capacity.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.
END OF CERTIFICATE