



## Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>ABB AG – STOTZ-KONTAKT</b>
<b>Address</b>	Eppelheimer Str. 82, Heidelberg, 69123, Germany
<b>Place of Production</b>	ABB AG – STOTZ-KONTAKT Eppelheimer Str. 82, Heidelberg, 69123, Germany
<b>Place of Production</b>	ABB BULGARIA EOOD 1 Varna str., Petrich, 2850, Bulgaria
<b>Place of Production</b>	ABB Xinhui Low Voltage Switchgear Co., Ltd. Jinguzhou Industrial Development Zone, Xinhui Dist., Jiangmen, Guangdong, 529100, China
<b>Type</b>	Motor Starters
<b>Description</b>	Manual motor starters with additional auxiliary contacts Refer to the Appendix for further details.
<b>Trade Name</b>	MS165 and MO165
<b>Application</b>	Marine, offshore and industrial applications for use in environmental categories ENV 1, ENV 2 and ENV 3 as defined in Lloyd's Register's Type Approval System, Test Specification No. 1 - July 2015.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

**Thorsten Wolff**

Electrical & Control - Senior Specialist to  
Lloyd's Register EMEA  
A member of the Lloyd's Register group

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**Specified Standard** IEC 60947-2: 2016/AMD1:2019  
IEC 60947-4-1: 2018

<b>Ratings</b>	Operational current I <sub>e</sub> [A]	Operational power kW at 400V
MS165-16	10 – 16	7.5
MS165-20	14 – 20	7.5
MS165-25	18 – 25	11
MS165-32	23 – 32	15
MS165-42	30 – 42	22
MS165-54	40 – 54	22
MS165-65	52 – 65	30
MS165-73	62 – 73	37
MS165-80	70 – 80	45
MO165-16	16	7.5
MO165-20	20	7.5
MO165-25	25	11
MO165-32	32	15
MO165-42	42	22
MO165-54	54	22
MO165-65	65	30
MO165-73	73	37
MO165-80	80	45

Max. insulation voltage U<sub>i</sub>: 1000V  
Max. impulse voltage U<sub>imp</sub>: 8kV  
Max. operating voltage U<sub>e</sub>: 690 VAC

**Additional Tests** Low temperature test (-25°C/16h)

**Other Conditions** Ratings for application in hazardous areas are to be obtained from the applicable Ex Certificates.

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## Type Approval Certificate

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** LR22131008TA

The Design Appraisal Document TSO-26-060242/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

