

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.

Manufacturer	ABB Stotz-Kontakt GmbH
Address	Eppelheimer Str. 82, Heidelberg, 69123, Germany
Place of Production	ABB Xinhui Low Voltage Switchgear Co., Ltd. Jinguzhou Industrial Development Zone, Xinhui Dist., Jiangmen, 529100, China
Type	Motor Starters
Description	Manual motor starters with additional auxiliary contacts Refer to the Appendix for further details.
Trade Name	MS165 and MO165
Application	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.
Specified Standard	IEC 60947-2: 2016/AMD1:2019 IEC 60947-4-1: 2018
Ratings	Refer to the Appendix for further details.
Additional Tests	Low temperature test (-25°C/16h)

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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: 16/20038

The Design Appraisal Document HPC1562172-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

TYPES

MS165-16, MS165-20, MS165-25, MS165-32, MS165-42, MS165-54, MS165-65, MS165-73, MS165-80
 MO165-16, MO165-20, MO165-25, MO165-32, MO165-42, MO165-54, MO165-65, MO165-73, MO165-80

Auxiliary contacts:

Front mounted auxiliary contact: HKF1-11, HKF1-10, HKF1-01, HKF1-20

Left mounted auxiliary contact: HK1-11, HK1-20, HK1-02, HK1-20L

Right mounted signal contact: SK1-11, SK1-20, SK1-02, CK1-11, CK1-20, CK1-02

Left mounted shunt trip: AA1-24, AA1-110, AA1-230, AA1-400

Left mounted undervoltage release: UA1-20, UA1-24, UA1-48, UA1-60, UA1-110, UA1-208, UA1-230, UA1-400, UA1-415, UA1-575

RATINGS

	Operational current I _e [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_i: 1000V

Max. impulse voltage U_{imp}: 8 kV

Max. operating voltage U_e: 690 VAC