

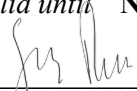


TYPE APPROVAL CERTIFICATE
No. ELE221722XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	MANUAL MOTOR STARTER and auxiliary devices
<i>Type</i>	MS165, MO165
<i>Applicant</i>	ABB STOTZ-KONTAKT GMBH
	Eppelheimer Strasse 82, 69123 HEIDELBERG
	GERMANY
<i>Manufacturer</i>	ABB STOTZ-KONTAKT GMBH
<i>Place of manufacture</i>	Eppelheimer Strasse 82, 69123 HEIDELBERG
	GERMANY
<i>Reference standards</i>	IEC 60947-5-1:2003; IEC 60947-4-1:2018; IEC 60947-2: 2016

Issued in **HAMBURG** on **November 16, 2022**. *This Certificate is valid until* **November 15, 2027**



RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure

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No. ELE221722XG

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MS165, MO165

Product Description

The MS165 series are manual motor starter with thermal and magnetic over current protection.

The MO165 series are manual motor starter with magnetic over current protection only and auxiliary contacts.

Main characteristics:

Number of poles: 3.

Rated frequency: 50/60 Hz.

Rated operational voltage (Ue): 690V AC.

Rated insulation voltage (Ui): 1000V.

Utilization Category according to IEC 60947-2: A.

Utilization Category according to IEC 60947-4-1: AC-3.

Variants MS 165 series:

Order code	Type	Setting range A	230V AC		400V AC		440V AC		500V AC		690V AC	
			I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA
1SAM451000R1011	MS165-16	10...16	100	100	100	100	75	75	40	40	10	10
1SAM451000R1012	MS165-20	14...20	100	100	100	100	75	75	40	40	10	10
1SAM451000R1013	MS165-25	18...25	100	100	100	100	50	50	30	30	10	10
1SAM451000R1014	MS165-32	23...32	100	100	100	100	50	50	30	30	10	10
1SAM451000R1015	MS165-42	30...42	50	50	50	50	50	50	30	30	10	10
1SAM451000R1016	MS165-54	40...54	30	50	30	50	30	45	20	20	6	8
1SAM451000R1017	MS165-65	52...65	30	50	30	50	30	45	20	20	6	8
1SAM451000R1018	MS165-73	62...73	30	30	30	30	18	18	10	10	6	8
1SAM451000R1019	MS165-80	70...80	30	30	30	30	18	18	10	10	6	8

Variants MO 165 series:

Order code	Type	Rated current A	230V AC		400V AC		440V AC		500V AC		690V AC	
			I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA	I _{cs} kA	I _{cu} kA
1SAM461000R1011	MO165-16	16	100	100	100	100	75	75	40	40	10	10
1SAM461000R1012	MO165-20	20	100	100	100	100	75	75	40	40	10	10
1SAM461000R1013	MO165-25	25	100	100	100	100	50	50	30	30	10	10
1SAM461000R1014	MO165-32	32	100	100	100	100	50	50	30	30	10	10
1SAM461000R1015	MO165-42	42	50	50	50	50	50	50	30	30	10	10
1SAM461000R1016	MO165-54	54	30	50	30	50	30	45	20	20	6	8
1SAM461000R1017	MO165-65	65	30	50	30	50	30	45	20	20	6	8
1SAM461000R1018	MO165-73	73	30	30	30	30	18	18	10	10	6	8
1SAM461000R1019	MO165-80	80	30	30	30	30	18	18	10	10	6	8

Auxiliary contacts:

- UA1 Undervoltage release
- AA1 Shunt release
- HKF1-11 Auxiliary switch for front mounting
- HK-... Auxiliary switches for lateral mounting (at right):
 - HK1-11; HK1-20; HK1-20L (with lead contacts); HK1-02
- SK-... Signaling contacts for lateral mounting:
 - SK1-11; SK1-20; SK1-02
- CK-... Short-circuit signaling contacts for lateral mounting:
 - CK1-11; CK1-20; CK1-02

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MS165; MO165

Documents:

Catalogue 1SBC100202L0201 dated 07.2015;

Data sheet: - 2CDC131083D0201 dated 2021; 2CDC131084D0201 dated 03.2015;

- 1SAM400401F0001 Rev. A; 1SAM400402F0001 Rev. A; 2CDC131081M680 dated 03/2015;

Test reports:

China Quality Certification Centre : - CN33567 dated 2015-03-31;

ABB Stotz-Kontakt : - D2015030 Rev. 3.0 dated 12.11.2015; LAB201312-02-TR-10 dated 2013.12.26;

- TT2015054 Rev. 1.0 dated 12.11.2015;

Paconsult : - 15-7022 dated 28 October 2015;

Shanghai Testing & Inspection Institute : - 00901-CB2014CQC-063993-1 & -2 dated 2015-02-28;

Remarks:

- The products fulfill EC-Code: EC 31/41.

HAMBURG November 16, 2022

