

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
Type	Motor Starters
Description	Motor Protection Circuit Breaker for drives up to 30 kW with additional modules refer to the Appendix for details
Trade Name	MS116
Application	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 1996.
Specified Standard	EN 60947-1: 2007/A1:2011/A2:2014 EN 60947-2: 2006/A1:2009/A2:2013 EN60947-4-1: 2010/A1:2012 EN60947-5-1: 2004/A1:2009
Additional Tests	Low temperature test(-25°C/16 hrs)

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

Thorsten Wolff

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Type Approval Certificate

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.

The Design Appraisal Document No. HTS/ETS 40082-20/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Appendix

TYPES

Motor Protection Circuit Breaker	MS116-#	# = operational current range I_e from 0.16 – 32.0 A
Auxiliary Switch Modules	HKF1-11 HK1-11 HK1-20 HK1-02	1 normally open , 1 normally closed contact 1 normally open , 1 normally closed contact 2 normally open contacts 2 normally closed contacts
Signal Contact Modules	SK1-11 SK1-20 SK1-02	1 normally open , 1 normally closed contact 2 normally open contacts 2 normally closed contacts
Undervoltage Tripping Modules	UA1-24 UA1-48 UA1-60 UA1-110 UA1-208 UA1-230 UA1-400 UA1-415	24 V 50 Hz 48 V 50 Hz 60V 50 Hz 110V 50Hz/120V 60Hz 208 V 60Hz 230V 50Hz / 240V/60Hz 400V/50Hz 415V/50Hz/480V 60Hz
Undervoltage Tripping Modules with auxiliary switch	UA1-HK-24 UA1-HK-48 UA1-HK-60 UA1-HK-110 UA1-HK-208 UA1-HK-230 UA1-HK-400 UA1-HK-415	24V 50Hz 48V 50Hz 60V 50Hz 110V 50Hz/120V 60Hz 208V 60Hz 230V 50Hz/240V 60Hz 400V 50Hz 415V 50Hz/480V 60Hz
Current Working Tripping Modules	AA1-24 AA1-110 AA1-230 AA1-400	20-24V 50/60Hz 110V 50/60Hz 200-240V 50/60Hz 350-415V 50/60Hz

**PLACES OF
PRODUCTION**

ABB Stotz-Kontakt GmbH
Eppelheimer Strasse 82
69123 Heidelberg
Germany

ABB Xinhui Low Voltage Switchgear Co., Ltd.
Jinguzhou Industrial Development Zone
Xinhui district, Jiangmen city, Guangdong Province
People's Republic of China

