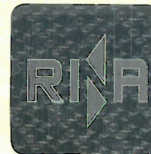




TYPE APPROVAL CERTIFICATE



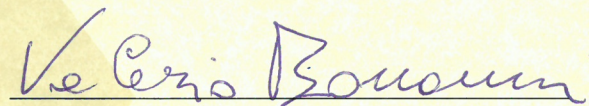
N. ELE197619CS004

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

Description	Contactors
Type	MC2...
Applicant	ABB Stotz Kontakt GmbH Eppelheimer Strasse, 82 69123 Heidelberg Germany
Manufacturer	ABB Industrial Solution Sp. z.o.o. Ul. Pilsudskiego, 5 57300 Klodzko Poland
Testing Standards	Rules for the Classification of Ships. Machinery, Systems and Fire protection, Part C, Ch. 2, Sec. 8

Issued in **Genova** on **June 19, 2019**

This certificate is valid until **June 19, 2024**



RINA Services S.p.A.

Valerio Bonanni



TYPE APPROVAL CERTIFICATE



N. ELE197619CS004

Motor Starter consisting of:

3P, 4P Contactors type: MC2...

Rated insulation Voltage (Ui)	V	750	750	750	750	750	750	750
Rated Frequency	Hz	50-60	50-60	50-60	50-60	50-60	50-60	50-60
Ambient temperature	°C	45	45	45	45	45	45	45
Rated thermal current (Ith)	A	20	20	20	20	20	20	20
Rated operational voltage (Ue)	V	690	400	500	690	400	500	690
Rated operational current (Ie)	A	20	12	10	8	9	8	6
Utilization category		AC-1	AC-3	AC-3	AC-3	AC-4	AC-4	AC-4
Rated prospective short-circuit current "r"	A	1 kA						
Rated conditional short circuit current (Iq)	A	50 kA						
Type of co-ordination		Type 2						
Rated impulse withstand voltage (Uimp)	V	6 kV						

Auxiliary Contact

Rated insulation Voltage (Ui): 750 (V)

Rated conditional short circuit current (Iq): 1 kA

AC-15: Ue/Ie: 120V/ 6A, 240V/ 6A, 400V/ 4A, 500V/ 2.5A, 690V/ 1.5A;

DC-13: Ue/Ie: 24V/ 5A, 48V/ 3.5A, 125V/ 1.2A, 250V/ 0.6A, 440V/ 0.25A

Three poles thermal overload relays type T16

Rated operational voltage (Ue) 690V

Rated insulation voltage (Ui) 690V

Rated impulse withstand voltage (Uimp): 6 kV

Rated frequency: 50/ 60 Hz

Rated duty: Uninterrupted duty

Rated prospective short-circuit current "r" : 1 kA

Rated conditional short-circuit current (Iq) : 35 kA

SCPD: Fuses

Trip Class: 10

Model	Range (A)	Fuse
T16/0,13	0,10-0,13	0,5 AT
T16/0,17	0,13-0,17	1 AT
T16/0,23	0,17-0,23	1 AT
T16/0,31	0,23-0,31	1 AT
T16/0,41	0,31-0,41	2 A gG
T16/0,55	0,41-0,55	2 A gG
T16/0,74	0,55-0,74	4 A gG
T16/1,0	0,74-1,0	6 A gG
T16/1,3	1,0-1,3	6 A gG
T16/1,7	1,3-1,7	10 A gG
T16/2,3	1,7-2,3	10 A gG
T16/3,1	2,3-3,1	10 A gG
T16/4,2	3,1-4,2	20 A gG
T16/5,7	4,2-5,7	20 A gG
T16/7,6	5,7-7,6	35 A gG
T16/10	7,6-10	35 A gG
T16/13	10-13	40 A gG
T16/16	13-16	40 A gG



TYPE APPROVAL CERTIFICATE



N. ELE197619CS004

Auxiliary contact block

Utilization Category	Ue (V)	Ie (A)	
		NC (95/96)	NO (97/98)
AC-15	120V	3A	0,75A
	240V	3A	0,75A
	380V	0,95A	0,75A
	500V	0,75A	0,75A
	600V	0,6A	-
DC-13	24V	1,25A	1,25A
	60V	0,55A	0,55A
	125V	0,55A	0,55A
	250V	0,27A	0,27A
	500V	0,15A	0,15A
	600V	0,1A	0,1A

Accessories:

- side and front mounted auxiliary contacts blocks type MACN... / MACL... / MARN... / MARL...
- transient voltage suppressor type MPO
- mechanical interlock type MMHO

Test report:

SGS Belgium NV-Division SGS CEBEC Testing Laboratory
Reports n. 58293101/00 to 58293101/37 (06/07/2010)

SGS Belgium NV-Division SGS CEBEC Testing Laboratory
CB Test Certificate n. BE-2537 (2010-09-07)

Shanghai Testing & Inspection Institute for Electrical Equipment Co. Ltd. (STIEE)
Report n. 00901-CB2019CQC-085551 (14/05/2019)

Note:

This certificate supersedes and annuls the certificate n. ELE197619CS002 issued on June 12, 2019