



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

20-2060694-PDA
10-Dec-2020
09-Dec-2025
Genoa Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

ABB FRANCE

located at

3 RUE JEAN PERRIN, CS 90009, CHASSIEU CEDEX, France, 69687

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Contactor, Electrical**
Model: **AF09 to AF96, NF and CA4, CC4, CAL4, CAT4, TEF4 auxiliary contactors**
Endorsements:
Tier: **2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 09/Dec/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Giorgio Barbini

Giorgio Barbini, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

ABB FRANCE

3 RUE JEAN PERRIN

CS 90009

69687 CHASSIEU CEDEX

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France 69687

Telephone: 33-4-72221722

Fax: 33-4-78902758

Email:

Web:

Tier: 2 - PDA Issued

Product: Contactor, Electrical**Model:** AF09 to AF96, NF and CA4, CC4, CAL4, CAT4, TEF4 auxiliary contactors**Endorsements:****Intended Service:**

Marine Shipboard and Offshore application

Description:

A(S)F09 to AF(S)96 3 poles contactors, screw, spring and push-in terminals

AF09 to AF80 4 poles contactors, screw, spring and push-in terminals

NF contactor relays, screw, spring and push-in terminals

CA4, CC4, CAL4, CAT4, TEF4 accessories (auxiliary contact, mechanical and electrical interlock, connecting kit...)

Rating:

Rated Voltages: 600 / 690 V

Rated Frequency: 50 / 60 Hz

Rated Currents for AF09 to AF96 3 poles contactors: up to 130A

Rated Currents for AF09 to AF80 4 poles contactors: up to 125A

See attachment for details

Service Restriction:

1) Unit Certification is not required.

2) If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

3) The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing Table Rating

CB Test Certificate No.CN46281 dated 02 April 2019

CB Test Certificate No.SE-93051M2 dated 28 September 2020

CB Test Certificate No.SE-93052A1 dated 09 December 2019

CB Test Certificate No.SE-93053 dated 16 January 2019

CB Test Certificate No.SE-96551M1 dated 28 September 2020

CB Test Certificate No.SE-96552M1 dated 28 September 2020

CB Test Certificate No.SE-96553M1 dated 25 June 2020

CB Test Certificate No.SE-96554M1 dated 02 July 2020

CB Test Certificate No.SE-96557M1 dated 02 July 2020

GQI Test Report No.GQI-POW-2019001 dated 05 March 2019 in China

INTERTEK Test Report No.1818873STO-001 dated 16 January 2020 in Sweden

INTERTEK Test Report No.1917992STO-001 dated 06 December 2019 in Sweden

INTERTEK Test Report No.2020464STO-001 dated 29 June 2020 in Sweden

INTERTEK Test Report No.2020464STO-002 dated 29 June 2020 in Sweden

INTERTEK Test Report No.2021525STO-001 dated 17 September 2020 in Sweden

INTERTEK Test Report No.2021526STO-001 dated 17 September 2020 in Sweden

INTERTEK Test Report No.2021527STO-001 dated 16 June 2020 in Sweden

INTERTEK Test Report No.2021528STO-001 dated 21 September 2020 in Sweden

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Terms of Validity:

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STANDARDS**ABS Rules:**

2020 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
2020 Marine Vessel Rules 4-8-3/5.3

2020 Rules for Conditions of Classification – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2020 Mobile Offshore Unit Rules, 6-1-7/9.11

2020 Facilities on Offshore Installations Rules 3-6/11.3

National:

NA

International:

IEC 60947-4-1 Ed.4.0 (2018-10)

IEC 60947-5-1 Ed.4.0 (2016-05)

Government:

NA

EUMED:

NA

OTHERS:

NA

ABB FRANCE (WCN 338394) ABS Certification for AF Range / Rating to declare (Summary)

AF09 to AF96 3 poles

Product : Contactor, Electrical

Model : AF09-30; AF12-30; AF16-30; AF26-30; AF30-30; AF38-30; AF40-30; AF52-30; AF65-30; AF80-30; AF96-30

Description : 3 pole contactors with AC/DC control supply (3 NO contactors)

Rated operational current

	AF09	AF12	AF16	AF26	AF30	AF38	AF40	AF52	AF65	AF80	AF96
lth 40°C	35	35	35	50	50	50	105	105	105	130	130
AC-1 690V	25	28	30	45	50	50	70	100	105	125	130
AC-3 240V	9	12	18	26	33	40	40	53	65	80	96
AC-3 400V	9	12	18	26	32	38	40	53	65	80	96
AC-3 440V	9	12	18	26	32	38	40	53	65	80	96
AC-3 500V	9.5	12.5	15	23	28	33	35	45	55	65	80
AC-3 690V	7	9	10.5	17	21	24	25	35	39	49	57
AC-3 1000V										25	30

AF09 to AF80 4 poles

Product : Contactor, Electrical

Model : AF09-40; AF09-22; AF16-40; AF16-22; AF26-40; AF26-22; AF38-40; AF38-22; AF40-40; AF40-22; AF52-40; AF80-40; AF80-22

Description : 4 pole contactors with AC/DC control supply (4 NO contactors or 2 NO + 2 NC contactor)

Rated operational current

	AF09	AF16	AF26	AF38	AF40	AF52	AF80
lth 40°C	35	35	55	55	105	105	125
AC-1 690V	25	30	45	50	70	100	125
AC-3 240V	9	18	23.2	23.2	40	53	80
AC-3 400V	9	18	22	22	40	53	80
AC-3 440V	9	18	20	20	40	53	80
AC-3 500V	9.5	15	17.6	17.6	35	45	65
AC-3 690V	7	10.5	10.5	10.5	25	35	49

CA4, NF

Product : Auxiliary contactor, Electrical

Model : CA4-1 pole; CA4-4 pole; CC4-1 pole; CAT4; CAL4

Description : CA4, CC4, CAT4 : front mounted auxiliary; CAL4 side mounted auxiliary; NF contactor relays

CA4, CC4, CAT4, CAL4, NF	
lth 40°C	16
AC-15 127V	6
AC-15 240V	4
AC-15 440V	3
AC-15 500V	2
AC-15 690V	2
DC-13 24V	6
DC-13 48V	2.8
DC-13 72V	1
DC-13 110-125V	0.55
DC-13 220-250V	0.27
DC-13 400V	0.15
DC-13 500V	0.13
DC-13 600V	0.1

TEF4

Product : Timer for contactor, Electrical

Model : TEF4-ON; TEF4-OFF

Description : TEF4 : front mounted timer

	TEF
lth 40°C	16
AC-15 127V	6
AC-15 240V	1.5
DC-13 24V	1