

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Contactor

with type designation(s)

AFC09 to AFC96 3 pole contactors, AFC09 to AFC80 4 pole contactors

Issued to

ABB France
Chassieu, France

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Type	Rated voltage (V)	Rated current (A)	Frequency (Hz)
AFC09 to AFC96 3 pole contactors	600 / 690	7 to 80 (AC-3 690 V)	50 / 60
AFC09 to AFC80 4 pole contactors	600 / 690	25 to 125 A (AC-1)	50 / 60

Issued at **Høvik** on **2025-01-30**

This Certificate is valid until **2030-01-29**.

for **DNV**

DNV local station: **France CMC**

Approval Engineer: **Qiang William Guo**

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Frederik Tore Elter
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Name and place of manufacturer

ABB France 11 Rue d'Arsonval 68680 Chassieu, France	ABB Xinhui Low voltage Switchgear Co Ltd. Jiangmen City, Jinguzhou Industrial Development Zone Guangdong Province, China
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Product description

AFC09-30 ... AFC25-30 3 pole contactors, AFC09...AFC16 4 pole contactors AC/DC operated – with screw, or push-in terminal:

Contactor type	AFC09-30	AFC12-30	AFC16-30	AFC25-30	AFC09-40	AFC16-40
Maximum rated voltage Ue (V AC)	600 / 690*	600 / 690*	600 / 690*	600 / 690*	600 / 690*	600 / 690*
Rated frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated insulation voltage (V)	690*	690*	690*	690*	690*	690*
Main contacts:						
Rated operational current AC-1 40 °C	25 A	28 A	32 A	32 A	25 A	32 A
AC3 Utilization category:						
Rated operational current AC-3 400 V	9.5 A	12.5 A	15 A	25 A	-	-
Rated operational current AC-3 690 V	7 A	9 A	10.5 A	10 A	-	-

Contactor type	AFC09-22	AFC16-22	AFC16-04
Maximum rated voltage Ue (V AC)	600 / 690*	600 / 690*	600 / 690*
Rated frequency (Hz)	50/60	50/60	50/60
Rated insulation voltage (V)	690*	690*	690*
Main contacts:			
Rated operational current AC-1 40 °C	25 A	28 A	30 A
AC3 Utilization category:			
Rated operational current AC-3 400 V	9.5 A	12.5 A	5.7 A
Rated operational current AC-3 690 V	7 A	9 A	5.1A

AFC26-30 ... AF38-30 3 pole contactors, AFC26 ... AF38 4 pole contactors AC/DC operated

Contactor type	AFC26-30	AFC30-30	AFC38-30
Maximum rated voltage Ue (V AC)	600/690*	600/690*	600/690*
Rated frequency (Hz)	50/60	50/60	50/60
Rated insulation voltage (V)	690*	690*	690*
Main contacts:			
Rated operational current AC-1 40 °C	45 A	50 A	50 A
AC3 Utilization category:			
Rated operational current AC-3 400 V	26 A	33 A	38 A
Rated operational current AC-3 690 V	17 A	21 A	24 A

Contactor type	AFC26-40	AFC38-40	AFC26-22	AFC38-22
Maximum rated voltage Ue (V AC)	600/690*	600/690*	600/690*	690/690*
Rated frequency (Hz)	50/60	50/60	50/60	50/60
Rated insulation voltage (V)	690*	690*	690*	690*
Main contacts:				
Rated operational current AC-1 40 °C	45 A	55 A	45 A	55 A
AC3 Utilization category:				
Rated operational current AC-3 400 V	-	-	-	-
Rated operational current AC-3 690 V	-	-	-	-

AFC40-30 ... AFC78-30 3 pole contactors, AFC40...AFC52 4 pole contactors AC/DC operated – with screw terminal:

Contactor type	AFC40-30	AFC52-30	AFC65-30	AF78-30	AFC40-40	AFC52-40	AFC40-22
Maximum rated voltage Ue (V AC)	600 / 690*	600 / 690*	600 / 690*	600 / 690*	600 / 690*	600 / 690*	600 / 690*
Rated frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Rated insulation voltage (V)	690*	690*	690*	690*	690*	690*	690*
Main contacts:							
Rated operational current AC-1 40 °C	70 A	100 A	105 A	105 A	70 A	100 A	70 A
AC3 Utilization category:							

Rated operational current AC-3 400 V	40 A	53 A	65 A	80 A	40 A	53 A	40 A
Rated operational current AC-3 690 V	25 A	35 A	39 A	-	25 A	35 A	25 A

AFC80-30 ... AFC96-30 3 pole contactors, AFC80 4 pole contactors AC/DC operated – with screw terminal:

Contact type	AFC80-30	AFC96-30	AFC80-40	AFC80-22
Maximum rated voltage Ue (V AC)	690	690	690	690
Rated frequency (Hz)	50/60	50/60	50/60	50/60
Rated insulation voltage (V)	690	690	690	690
Main contacts:				
Rated operational current AC-1 40 °C	125 A	130 A	125 A	125 A
AC3 Utilization category:				
Rated operational current AC-3 400 V	80 A	96 A	80 A	-
Rated operational current AC-3 690 V	49 A	80 A	49 A	-

* See Application / limitation

Application/Limitation

When Uimp=6kV the max. rated voltage is 600 V when used in IT (ship) net. It can be used in applications with directly earthed systems with rated voltage of 400/690 V.

Type Approval documentation

Tests carried out

Electrical type tests in accordance with IEC 60947-4-1:2018

Environmental tests in accordance with DNV-CG-0339 Aug.2021(Vibration, Dry heat, damp heat and cold test,high voltage and insulation resistance measurement test)

Marking of product

ABB France – Type designation – Ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE