



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAE00001W1**  
Revision No:  
**1**

## This is to certify:

That the Contactor

with type designation(s)  
**AF400 to AF2850,**

Issued to

**ABB Electrification Sweden AB, Motor Starting & Safety  
Västerås, Sweden**

is found to comply with

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

## Application :

**For installations inside switchboards / enclosures onboard ships and offshore units**

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

Type	Rated voltage (V)	Rated current (A)	Frequency (Hz)
<b>AF400 to AF2850</b>	<b>220 - 1000</b>	<b>600 - 2850 (1000 V/ AC1)</b>	<b>50 / 60</b>

Issued at **Høvik** on **2022-12-21**

This Certificate is valid until **2027-05-14**.

for **DNV**

DNV local unit: **Sweden CMC**

Approval Engineer: **Nicolay Horn**

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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 AB, Electrification Sweden AB, Motor Starting & Safety VÄSTERÅS, Sweden	ABB Xinhui Low Voltage Switchgear Co, Ltd Xinhui, China
ABB India Limited, Bangalore Karnataka, India	

### Product description

<b>Contactors type</b>		<b>AF400-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	600			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	500	1000
Rated operational current (Ie)	A	155	350	400	600

<b>Contactors type</b>		<b>AF460-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	700			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	500	1000
Rated operational current (Ie)	A	200	400	460	700

<b>Contactors type</b>		<b>AF580-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	800			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	500	1000
Rated operational current (Ie)	A	250	500	580	800

<b>Contactors type</b>		<b>AF750-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	1050			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	500	1000
Rated operational current (Ie)	A	300	650	750	1050

<b>Contactors type</b>		<b>AF1250-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	1260			
Utilization category		AC-3			AC-1
Ambient temperature	°C	-	-	55	40
Rated operational voltage (Ue)	V	-	-	440	1000
Rated operational current (Ie)	A	-	-	800	1260

<b>Contactor type</b>		<b>AF1350-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	1350			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	440	1000
Rated operational current (Ie)	A	375	800	860	1350

<b>Contactor type</b>		<b>AF1650-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	1650			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	440	1000
Rated operational current (Ie)	A	400	970	1060	1650

<b>Contactor type</b>		<b>AF2050-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	2050			
Utilization category		AC-3			AC-1
Ambient temperature	°C	55	55	55	40
Rated operational voltage (Ue)	V	1000	690	440	1000
Rated operational current (Ie)	A	425	350	800	2050

<b>Contactor type</b>		<b>AF2650-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	2650			
Utilization category		AC-3			AC-1
Ambient temperature	°C	-	-	-	40
Rated operational voltage (Ue)	V	-	-	-	1000
Rated operational current (Ie)	A	-	-	-	2650

<b>Contactor type</b>		<b>AF2850-30</b>			
Rated insulation voltage (Ui)	V	1000			
Rated Frequency	Hz	50/60			
Rated thermal current (Ith)	A	2850			
Utilization category		AC-3			AC-1
Ambient temperature	°C	-	-	-	40
Rated operational voltage (Ue)	V	-	-	-	1000
Rated operational current (Ie)	A	-	-	-	2850

Technical data auxiliary contacts:  
 Auxiliary contacts CAL18-11 1 NO + 1 NC  
 Rated control circuit voltage 24 – 690 V AC  
 Rated impulse withstand voltage Uimp 6 kV  
 Conventional thermal current Ith 16 A

### Application/Limitation

Environmental categories: Vibration A, Temperature D, Humidity B

## Type Approval documentation

### Tests carried out

Type tests according to IEC 60947-4-1(2009 +A1 2012) Sequence I and II,  
Environmental tests in accordance with "Regulation for the Performance of Type Test Edition 2012" / IEC 60947-4-1  
Annex Q: Power supply variations, Inclination test, Vibration test, Shock test, Insulation resistance test, Damp heat test,  
Dry heat test, Low temperature test and high voltage test. EMC in accordance with IACS E10 rev. 7.

### Marking of product

ABB – Type designation – Rated voltage – Breaking capacity.

### 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