DNV·GL

Certificate No:
TAE00001UT

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Contactor Relay

with type designation(s)
DC operated NL contactor relay

Issued to
ABB France
CHASSIEU Cedex, France

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

For installations inside switchboards / enclosures onboard ships and offshore units

Issued at **Høvik** on **2017-04-17**
This Certificate is valid until **2021-12-04**.
DNV GL local station: **Marseille**

Approval Engineer: **Nicolay Horn**

for **DNV GL**

Andreas Kristoffersen
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.

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Job Id: **262.1-024554-1**
Certificate No: **TAE00001UT**

Name and place of manufacturer

ABB France, Chassieu, France	ABB Bulgaria Branch Rakovski Plovdiv, Bulgaria

Product description

Low voltage DC contactor relay

Technical data:

Contactor type		NL 22 E	NL 31 E	NL 40 E
Number of poles		4		
Rated insulation voltage (Ui)	V	690		
Rated impulse withstand voltage Uimp	kV	8		
Rated Frequency	Hz	25 - 400		
Degree of protection	IP	20		
Rated thermal current (Ith)	A	16		
Rated operational current (Ie) (AC-15 690 V)	A	2 A		
Rated operational current (Ie) (DC-13 250 V)	A	0.3 A		
Short circuit prorection (gG fuse)	10 A	10		

Technical data auxiliary contacts:

Add-on Auxiliary contacts w/ screw terminals	1-pole CA 5-xy, 4-pole CA 5xy
Rated control circuit voltage	690 V
Rated impulce withstand voltage Uimp	6 kV
Conventional thermal current Ith	16 A
Rated operational current (I_e) (AC-15 690 V)	2 A
Rated operational current (I_e) (DC-13 250 V)	0.3 A
Short circuit prorection (gG fuse)	10 A

x=N.O. contact y= N.C. contact

Application /limitation

Environmental classes:
Temperature: B, Humidity : B, Vibration : C.

Type Approval documentation

Tests carried out

Guidelines for Performance of Type Approvals Part 2, Edition 2003.
Type tests according to IEC 60947-1 (2001-12), IEC 60947-4-1(2002-12) and IEC60947-5-1 (2003-11).

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 is 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 d Routines (RT) checked (if not available tests 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.

Periodical asessment to be performed at 2 and 3.5 years and at renewal.

END OF CERTIFICATE