TYPE APPROVAL CERTIFICATE

Certificate No:
TAE000020Y
Revision No:
1

This is to certify:

That the Circuit Breaker

with type designation(s)
Tmax T7 S/H/L/V/X

Issued to
ABB S.p.A. - ABB Sace Division
Frosinone, FR, Italy

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

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV

Rated voltage (V)	**230 - 690 (AC)**
Rated current (A)	**800 - 1600**

Issued at **Hamburg** on **2022-06-29**

This Certificate is valid until **2027-06-14**.
DNV local station: **Italy/Malta CMC**

Approval Engineer: **Harald Amberger**

for **DNV**
Digitally Signed By: Hartmann, Thomas
Location: DNV GL SE Hamburg, Germany
Signing Date: 2022-07-07 , on behalf of

Arne Schaarmann
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.

Name and place of manufacturer

ABB SpA – ABB Sace Division
Frosinone, ITALY

Product description

Circuit breakers type TmaxT7. To be delivered with electronic trip units. Technical data:

	T max T7				
	S	H	L	V	X
Rated insulation voltage Ui (V)	1000	1000	1000	1000	1000
Rated impulse withstands voltage Uimp (kV)	8	8	8	8	8
Rated current In (A) at 40°C (See application/ limitation)	800-1600	800-1600	800-1600	800-1250	800
Rated service voltage Ue (V)	690 AC	690 AC	690 AC	690 AC	690 AC
Rated frequency AC (Hz)	50-60	50-60	50-60	50-60	50-60
Rated ultimate short-circuit breaking capacity (kA) ICU					
440 V AC (kA)	50	65	100	130	170
690 V AC (kA)	30	42	50	60	75
Rated service short-circuits breaking capacity, ICS (% ICU)	100 %	100 % *	100% *	100%*	100%
Utilisation category	B	B	B	B	B
Rated short-circuit making capacity Icm					
440 V AC (kA)	105	143	220	286	374
690 V AC (kA)	63	88.2	105	132	165

* 75 % for 690 V and for 500 V L edition.

Application/Limitation

Suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at 690 V AC.

Equipped with electronic releases which need no deration from 40°C to 45°C ambient temperature.

Tests carried out

Type tests according to IEC 60947-2 sequence I, II, III & IV and Annex H. Vibration, inclination, EMC, dry heat, damp heat and low temperature test.

Marking of product

ABB SACE – Type designation – Electrical data

Type Approval documentation

Test Certificates: LOVAG test certificates nos. IT 10.049 & IT 10050. LOVAG certificates nos (including test reports): 07.001- 07.003, 007.005 – 07.014, 07.040, 07.062, 07.075 – 07.078, 08.009, 08.010, 08.018 – 08.020, 08.051 – 08.054, 08.074, 08.075, 08.078 & 08.079.

Test Reports: ABB SACE test report nos. LBRP 102/00 & 10210/01 dated 2010-06-01, 7876/01 dated 2007-12-20 & 8013/00 dated 2008-09-08. CESI test report nos. A9027591 & A9027593 dated 2009-09-30, A7027438 dated 2008-02-26.

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.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE