

**TYPE APPROVAL CERTIFICATE****This is to certify:****That the Control Switch etc.**with type designation(s)  
**OXA30-1600 and OXB30-1600**

Issued to

**ABB Oy, Smart Power  
VAASA, Finland**is found to comply with  
**DNV GL 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 GL.**Issued at **Høvik** on **2020-02-12**This Certificate is valid until **2025-02-11**.DNV GL local station: **Turku**Approval Engineer: **Nicolay Horn**for **DNV GL**

Digitally Signed By: Low, Hanwee

Location: DNV GL Høvik, Norway  
on behalf of**Marta Alonso Pontes  
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.



## Product description

Automatic Transfer Switch with the following data:

Rated operational voltage Ue: 200-415Vac  
 Rated insulation voltage, Ui (main contacts): 1000V  
 Rated insulation voltage, Ui (Control unit, PD2): 500V  
 Rated frequency: 50...60Hz  
 Class: PC

	OX_30U	OX_60U	OX_100U	OX_125U	OX_160U	OX_160E
Conventional free air thermal current I <sub>th</sub>	160A	160A	160A	160A	160A	160A
Conventional free air thermal current I <sub>the</sub>	160A	160A	160A	160A	160A	160A
Rated operational current AC31B, up to 415V	160A	160A	160A	160A	160A	160A
Rated operational current AC32B, up to 415V	160A	160A	160A	160A	160A	160A
Rated operational current AC33B, up to 415V	160A	160A	160A	160A	160A	160A
Rated short-time withstand current, I <sub>cw</sub>	18kA; 0.3s	18kA; 0.3s	18kA; 0.3s	18kA; 0.3s	18kA; 0.3s	18kA; 0.3s
Rated short-circuit making capacity I <sub>cm</sub>	36kA	36kA	36kA	36kA	36kA	36kA
Rated impulse withstand voltage U <sub>imp</sub> (Main contacts)	8kV	8kV	8kV	8kV	8kV	8kV
Rated impulse withstand voltage U <sub>imp</sub> (Control unit)	6kV	6kV	6kV	6kV	6kV	6kV

	OX_200E	OX_200U	OX_250E	OX_260U	OX_315E
Conventional free air thermal current I <sub>th</sub>	200A	250A	250A	400A	315A
Conventional free air thermal current I <sub>the</sub>	200A	250A	250A	400A	315A
Rated operational current AC31B, up to 415V	200A	250A	250A	400A	315A
Rated operational current AC32B, up to 415V	200A	250A	250A	400A	315A
Rated operational current AC33B, up to 415V	200A	250A	250A	400A	315A
Rated short-time withstand current, I <sub>cw</sub>	18kA; 0.3s	18kA; 0.3s	18kA; 0.3s	25kA; 0.3s	25kA; 0.3s
Rated short-circuit making capacity I <sub>cm</sub>	36kA	36kA	36kA	52,5kA	52,5kA
Rated impulse withstand voltage U <sub>imp</sub> (Main contacts)	8kV	8kV	8kV	12kV	12kV
Rated impulse withstand voltage U <sub>imp</sub> (Control unit)	6kV	6kV	6kV	6kV	6kV

	OX_400E	OX_400U	OX_500E	OX_600U	OX_630E
Conventional free air thermal current I <sub>th</sub>	400A	400A	500A	800A	630A
Conventional free air thermal current I <sub>the</sub>	400A	400A	500A	800A	630A
Rated operational current AC31B, up to 415V	400A	400A	500A	800A	630A
Rated operational current AC32B, up to 415V	400A	400A	500A	800A	630A
Rated operational current AC33B, up to 415V	400A	400A	500A	800A	630A
Rated short-time withstand current, I <sub>cw</sub>	25kA; 0.3s	30kA; 0.3s	30kA; 0.5s 42kA; 0.1s	30kA; 0.5s 42kA; 0.1s	30kA; 0.5s 42kA; 0.1s
Rated short-circuit making capacity I <sub>cm</sub>	52,5kA	63kA	63kA 89kA	63kA 89kA	63kA 89kA
Rated impulse withstand voltage U <sub>imp</sub> (Main contacts)	12kV	12kV	12kV	12kV	12kV
Rated impulse withstand voltage U <sub>imp</sub> (Control unit)	6kV	6kV	6kV	6kV	6kV

	OX_800E	OX_800U	OX_1000E	OX_1250E	OX_1600E
Conventional free air thermal current I <sub>th</sub>	800A	1600A	1000A	1250A	1600A
Conventional free air thermal current I <sub>the</sub>	800A	1250A	1000A	1250A	1250A
Rated operational current AC31B, up to 415V	800A	1600A	1000A	1250A	1600A
Rated operational current AC32B, up to 415V	800A	1500A	1000A	1250A	1500A
Rated operational current AC33B, up to 415V	800A	1250A	1000A	1250A	1250A
Rated short-time withstand current, I <sub>cw</sub>	30kA; 0.5s 42kA; 0.1s	50kA; 0.5s	50kA; 0.5s	50kA; 0.5s	50kA; 0.5s
Rated short-circuit making capacity I <sub>cm</sub>	63kA 89kA	105kA	105kA	105kA	105kA
Rated impulse withstand voltage U <sub>imp</sub> (Main contacts)	12kV	12kV	12kV	12kV	12kV
Rated impulse withstand voltage U <sub>imp</sub> (Control unit)	6kV	6kV	6kV	6kV	6kV

## Application/Limitation

Location Classes:

Temperature: D, Humidity: B, Vibration: A

Operating instruction from the manufacturer to be observed.

Job Id: **262.1-030055-1**  
Certificate No: **TAE00003A2**

## **Type Approval documentation**

### **Technical info:**

Catalogue TruONE®: 1SCC303008C0201 REV A 07.2018.

### **Test reports:**

SGS Fimko Test reports nos 288795-1, 288795-2 and 291235-1 dated 2018-05-17.

ABB Oy Vibration Test Report doc no. 017\_006 dated 2017-10-18.

ABB Oy Vibration Test Report doc no. 019\_007 dated 2019-09-12.

ABB Oy Dry Heat Test Report doc. No. H17\_001 dated 2017-08-03.

ABB Oy Damp Heat Test Report doc. No. H17\_002 dated 2017-08-03.

ABB Oy Cold Test Report doc. No. H17\_003 dated 2017-08-11.

## **Tests carried out**

Type tests in accordance with IEC 60947-6-1, Environmental tests in accordance with IEC 60947-1 Annex Q category E including cold, dry heat, damp heat, vibration and shock.

## **Marking of product**

ABB, Name of Product, Class PC, Ue, Ie, Utilization category, Uimp, Icw and Icc.

## **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 new 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 shall be performed at renewal of the certificate.

END OF CERTIFICATE