

TYPE APPROVAL CERTIFICATE

Certificate No:
TAE000013F
Revision No:
1

This is to certify:**That the Disconnection Switch**

with type designation(s)
OS200 and OS250

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 **2021-02-25**

This Certificate is valid until **2025-12-31**.

DNV GL local station: **Finland CMC**

Approval Engineer: **Nicolay Horn**



for **DNV GL**

Digitally Signed By: Alonso Pontes, Marta

Location: DNV GL Høvik, Norway

**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



Job Id: **262.1-022138-3**
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Product description

Switch disconnectors Type OS200 & OS250 as specified in the tables below.

Technical data:

Protection class:	IP20
Operational voltage, U_e	230 - 690 V
Insulation voltage, U_i	1000 V
Rated impulse withstand voltage, U_{imp}	12 kV
Rated frequency:	50 / 60 Hz

	OS200	OS250
Rated thermal current I_{th}	200	250
Rated operational current AC-21A	200	250
Rated operational current AC-22A	200	250
Rated operational current AC-23A	200	250
Rated breaking capacity AC-23	1600	2000
Rated short time withstand current I_{cw} , 690 V 1 s.	8	8
Rated short time making capacity I_{cm}	14	14

Application/Limitation

Switch-disconnectors for control and isolation for installation onboard ships and mobile offshore units

Type Approval documentation

Technical info:

Part of catalogue "Fusegear Switch fuses OS and OSM" doc. no. OS 1 GB 11_04.

Test reports:

SGS Fimko reports nos. FI 44917 and FI 44915 incl.298663-1 & 298663-2 dated 2020-06-30.

SGS Fimko reports nos. FI 6261 incl.260380-1, 256419 & 255384-1 dated 2010-06-30 and FI 6252 incl.260380-2, 256420- & 255384-2 dated 2010-06-30.

Technobothnia reports nos. TA2004-21 dated 2004-12-07 and TA2004-23 dated 2004-12-16.

Tests carried out

Type tests in accordance to IEC 60947-3:2008, AMD1:2012, AMD2:2015.

Environmental tests (Vibration, dry heat and damp heat in accordance with DNV CN 2.4 and shock in accordance with IEC60068-2-27).

Marking of product

ABB Oy - Type designation - Rated voltage - Rated current

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 Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and 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