Certificate no.:
TAE00004YA

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Disconnection Switch

with type designation(s)
OT160-800Y

issued to
ABB Oy, Smart Power
VAASA, **Finland**

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.

Issued at **Høvik** on **2024-09-16**
This Certificate is valid until **2029-09-15**.
DNV local unit: **Finland CMC**

Approval Engineer: **Qiang William Guo**

for **DNV**

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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 USD 300 000.

Product description

Switch disconnectors for installation inside switchboards / Enclosures onboard ships and mobile offshore units.

Type OT160/800Y as specified in the table below.

Technical data:

Protection class:	IP20
Operational voltage, Ue	690V
Insulation voltage, Ui	1000V
Rated impulse withstand voltage, Uimp	12kV
Rated frequency:	50 - 60Hz

	OT160_Y	**OT200_Y**	**OT250_Y**
Rated thermal current Ith	160 A	200 A	250 A
Rated operational current AC-21A	160 A	200 A	250 A
Rated operational current AC-22A	160 A	200 A	250 A
Rated operational current AC-23A	160 A	200 A	250 A
Rated short time withstand current Icw, 690V 1s	8kA	8kA	8kA
Rated short time making capacity Icm	30kA; 1000V	30kA; 1000V	30kA; 1000V

OT315_Y	**OT400_Y**	**OT630_Y**	**OT800_Y**
315 A	400 A	630 A	800 A
315 A	400 A	630 A	800 A
315 A	400 A	630 A	800 A
315 A	400 A	630 A	800 A
15kA	15kA	20 kA	20 kA
65 kA; 1000V	65 kA; 1000V	80 kA; 1000 V	80 kA; 1000 V

Application/Limitation

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

Type Approval documentation

Tests carried out

Type tests in accordance to IEC 60947-3: 3th Edition (2008) and IEC 60947-6:(2005)
Environmental tests (dry heat and damp heat and low temperature test in accordance with DNV- CG- 0339 Aug. 2021 and shock/vibrations in accordance with IEC60068-2-27 and IEC60068-2-6).

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 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