

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Disconnection Switch

with type designation(s)

OT_

Issued to

**ABB Oy, Protection and Connection
VAASA, Finland**

is found to comply with

DNV GL rules for classification – Ships and offshore units

Application :

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

This Certificate is valid until **2020-12-31**.

Issued at **Høvik** on **2016-06-17**

DNV GL local station: **Turku**

Approval Engineer: **Nicolay Horn**

for **DNV GL**

**Marit Laumann
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

Switch disconnectors, TYPE OT_ for base, DIN-rail or door mounting.

Protection class: IP20
Rated insulation voltage: 750 V
Rated operation voltage: 690 V

Type designation	Volt [V]	AC 21A	Amp. 1) AC 22A	AC 23A	Ics [kA]	Icm [kA]	Icw [kA]	Construction Family
OT16F_ OT16FT_ OT16M_	415 500 690	16 16 16	16 16 16	16 16 10	50	0,7	0,5	OT40F_
OT25F_ OT25FT_ OT25M_	415 500 690	25 25 25	25 25 25	20 20 11	50	0,7	0,5	OT40F_
OT40F_ OT40FT_ OT40M_	415 500 690	40 40 40	40 40 40	23 23 12	50	0,7	0,5	OT40F_
OT63F_ OT63FT_ OT45ML_	415 500 690	63 63 63	63 63 63	45 45 20	100 50	1,4	1	OT80F_
OT80F_ OT80FT_ OT63ML_	415 500 690	80 80 80	80 80 80	75 58 20	100 50	1,4	1	OT80F_
OT100F_ OT100FT_ OT100M_	415 500 690	100 100 100	100 100 100	80 60 40	50	3,6	2,5	OT125F_
OT125F_ OT125FT_ OT125M_	415 500 690	125 125 125	125 125 125	90 70 50	50	3,6	2,5	OT125F_
OT125A_ OT125AT_ OT125ML_	415 500 690	125 125 125	125 125 125	105 70 50	100 50	12	4	OT160E_
OT160E_ OT160ET_ OT160M_	415 500 690	160 160 160	160 160 160	135 125 80	100 50	12	4	OT160E_

1) According to IEC 60947-1 and 60947-3.

AC 21 = Switching of resistive loads, including moderate overloads.
AC 22 = Switching of mixed resistive and inductive loads, including moderate overloads.
AC 23 = Switching of motor loads or other highly inductive loads.

Application/Limitation

Switch disconnectors for installation inside switchboards / enclosures Onboard Ships and Mobile Offshore units.

Temperature class: D
Vibration class: A
Enclosure class: B

Job Id: **262.1-022138-1**
Certificate No: **TAE000013D**

To be installed inside switchboard / enclosures.

Installation procedures according to the manufacturer's instructions to be followed.

Type Approval documentation

Tests carried out

Type tests in accordance with:

- IEC 60947-1 / 2007 (CB certificates and test reports)
- IEC 60947-3 / 2008 (CB certificates and test reports)
- IEC 60529 Degree of protection

Environmental tests according to DNV Certification note 2.4:

- 3.6 Vibration Test
- 3.8 Damp Heat Test
- 3.9 Cold Test

Marking of product

ABB and/or Strömberg OT - type designation

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 least every second year.

END OF CERTIFICATE