



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE00001AN
Revision No:
6

This is to certify:

that the **Disconnection Switch**

with type designation(s)

OT16_C...OT2500_C, OTC16-160

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:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2025-10-01**

This Certificate is valid until **2026-11-15**.

DNV local unit: **Finland CMC**

Approval Engineer: **Qiang William Guo**



for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

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 OT16_C – OT2500_C as specified in the tables below.

Technical data:

Protection class:	IP20
Operational voltage, U _e	690 V (415 V: OT2000_C-2500_C)
Insulation voltage, U _i	1000 V (690 V: OT16F_C – OT125F_C)
Rated impulse withstand voltage, U _{imp}	12 kV (8 kV: OT16F_C – OT125F_C)
Rated frequency:	50 - 60 Hz

	OT16F_C	OT25F_C	OT40F_C
Rated thermal current I _{th}	25 A	32 A	40 A
Rated operational current AC-21A	16 A	25 A	40 A
Rated operational current AC-22A	16 A	25 A	40 A
Rated operational current AC-23A	500 V: 16 A 690 V: 10 A	500 V: 20 A 690 V: 11 A	500 V: 23 A 690 V: 12 A
Rated operational current AC-31B	-	-	-
Rated operational current AC-33B	-	-	-
Rated short time withstand current I _{cw} , 690 V 1 s.	0.5 kA	0.5 kA	0.5 kA
Rated short time making capacity I _{cm}	0.7 kA; 690V	0.7 kA; 690V	0.7 kA; 690V

OT63F_C	OT80F_C	OT100F_C	OT125F_C	OT160_C	OT200_C	OT200U_C
63 A	80 A	100 A	125 A	160 A	200 A	250 A
63 A	80 A	100 A	125 A	160 A	200 A	250 A
63 A	80 A	100 A	125 A	160 A	200 A	250 A
500 V: 45 A 690 V: 20 A	500 V: 58 A 690 V: 20 A	500 V: 60 A 690 V: 40 A	500 V: 70 A 690 V: 50 A	160 A	200 A	250 A
-	-	-	-	160 A	200 A	250 A
-	-	-	-	160 A	200 A	250 A
1.5 kA	1.5 kA	2.5 kA	2.5 kA	8 kA	8 kA	8 kA
2.1 kA; 690V	2.1 kA; 690V	3.6 kA; 690V	3.6 kA; 690V	30kA; 1000V	30kA; 1000V	30kA; 1000V

OT250_C	OT315_C	OT400E/U_C	OT600U_C	OT630_C	OT800_C	OT800U_C
250 A	315 A	400 A	800 A	630 A	800 A	1600 A
250 A	315 A	400 A	800 A	630 A	800 A	1600 A
250 A	315 A	400 A	800 A	630 A	800 A	1600 A
250 A	315 A	400 A	800 A	630 A	800 A	1250 A
250 A	315 A	400 A	720 A	650 A	720 A	1600 A
250 A	315 A	400 A	650 A	650 A	650 A	1000 A
8 kA	15 kA	15 kA	20 kA	20 kA	20 kA	50 kA
30kA; 1000V	65kA; 690V	80kA; 690V	80kA; 1000V	80kA; 1000V	80kA; 1000V	92kA; 690V

OT1000_C	OT1200U_C	OT1250_C	OT1600_C	OT2000_C	OT2500_C
1000 A	1600 A	1250 A	1600 A	2000 A	2500 A
1000 A	1600 A	1250 A	1600 A	2000 A *)	2500 A *)
1000 A	1600 A	1250 A	1600 A	-	-
1000 A	1250 A	1250 A	1250 A	-	-
1000 A	1600 A	1250 A	1600 A	2000 A	2000 A
1000 A	1000 A	1000 A	1000 A	-	-
50 kA	50 kA	50 kA	50 kA	55 kA	55 kA
92kA; 690V	92kA; 690V	92kA; 690V	92kA; 690V	110kA; 690V	110kA; 690V

Types OTC30-160G_(3 and 4 poles)
 Uimp : 8kV
 Ui : 800V

Type designation	Ith (A)	Ue(V)	AC21A	AC22A	AC23A	AC23Ae	Iq	Icm	Icw
OTC63G2_	63	415	63	63	63	50		3,55kA	1,5kA;1s and 2,5kA;0,25s
		690	63	63	32	25	50kA		
OTC80G2_	80	415	80	80	65	65		3,55kA	1,5kA;1s and 2,5kA;0,25s
		690	80	80	40	32	50kA		
OTC30G3 OTC40G3_	40	415	40	40	40	40	-	4,78kA	2,5kA;1s and 3,25kA; 0,25s
		690	40	40	40	40	25kA(only 3 poles)		
		800	25	25	-	-	-		
OTC60G3_ OTC63G3_	63	415	63	63	63	63	-	4,78kA	2,5kA;1s and 3,25kA;0,25s
		690	63	63	50	50	25kA(only 3 poles)		
		800	40	32			-		
OTC80G3_	80	415	80	80	80	63		4,78kA	2,5kA;1s and 3,25kA;0,25s
		690	80	80	50	50	25kA(only 3 poles)		
		800	63	40	-				
OTC100G3_	100	415	100	100	100	80		4,78kA	2,5kA;1s and 3,25kA;0,25s
		690	100	100	63	63	25kA(only 3 poles)		
		800	80	45					
OTC125G3_	125	415	125	125	125	80		4,78kA	2,5kA;1s and 3,25kA;0,25s
		690	125	125	63	63	25kA(only 3 poles)		
		800	80	63			-		
OTC160G3_	160	415	160	160	125	80		4,78kA	2,5kA;1s and 3,25kA;0,25s
		690	125	125	63	63	25kA(only 3 poles)		
		800	80	63	-		-		

Types OTC16-63G1_ (3 and 4 poles)
 Uimp=8kV
 Ui=800V

Type Designation	Ith (A)	Ue (V)	AC21 A	AC22 A	AC23 A	AC23 Ae	Iq	Icm	Icw
OTC16G1_ OTC20G1_	16	415	16	16	16	16	25kA (gG63), 50kA (aM40)	1.76k A	0.8kA; 1s and 1.25kA; 0.25s
		690	16	16	16	16	50kA (gG40, aM25)		
OTC25G1_ OTC30G1_	25	415	25	25	25	20	25kA (gG63), 50kA (aM40)	1.76k A	0.8kA; 1s and 1.25kA; 0.25s
		690	25	25	25	16	50kA (gG40, aM25)		
OTC40G1_	40	415	40	40	40	25	25kA (gG63), 50kA (aM40)	1.76k A	0.8kA; 1s and 1.25kA; 0.25s
		690	40	40	25	20	50kA (gG40, aM25)		
OTC50G1_ OTC63G1	63	415	63	63	40	25	25kA (gG63), 50kA (aM40)	1.76k A	0.8kA; 1s and 1.25kA; 0.25s
		690	40	40	25	20	50kA (gG40, aM25)		

Application/Limitation

Switch-disconnectors for control and isolation for installation onboard ships and mobile offshore units, The instructions from maker shall be observed and followed .

Environmental Location class

Temperature class	D
Humidity class	B
Vibration class	A

Type Approval documentation

Technical info:

Switches Switch-disconnectors OT, catalogue from ABB (parts).

Test reports:

Type Designation	Document Type	Reference	Date
OT16 - OT125	Test Report	251544-1, 2 & 3	2006-08-26
OT160 - OT2500	Approval Letter	MCANO381/BODAK/262.1-023145-J-4	
OTC30-160G_3 and 4 poles	Test Report: IEC 60947-3:2020 in conjunction with IEC 60947-1:2020	HELES2305000591-1	2020-07-24
OTC30G3 - OTC160G-4BS	Test Report: IEC 60947-3:2020 in conjunction with IEC 60947-1:2020	HELES2304000538-1	2020-07-24
OTC160G3-3BS and OTC160G3-4BS	CB Test Certificate	FI-58165	2023-11-28
OTC125G3-3BS and OTC125G3-4BS	CB Test Certificate	FI-58164	2023-11-28
OTC80G2-3BS and OTC80G2-4BS	CB Test Certificate	FI-58201	2023-11-28
OTC63G2-3BS and OTC63G2-4BS	CB Test Certificate	FI-58199	2023-11-28
OTC100G3-3BS and OTC100G3-4BS	CB Test Certificate	FI-58163	2023-11-27
OTC80G3-3BS and OTC80G3-4BS	CB Test Certificate	FI-58162	2023-11-27
OTC60G3-3BS, OTC60G3-4BS, OTC63G3-3BS and OTC63G3-4BS	CB Test Certificate	FI-58161	2023-11-27
OTC30G3-3BS, OTC30G3-4BS, OTC40G3-3BS and OTC40G3-4BS	CB Test Certificate	FI-58160	2023-11-27
OTC16G1-, OTC20G1-	CB Test Certificate	FI-63773	2025-03-28
OTC25G1-, OTC30G1-	CB Test Certificate	FI-63774	2025-03-28
OTC40G1-	CB Test Certificate	FI-63776	2025-03-28
OTC50G1-, OTC63G1-	CB Test Certificate	FI-63777	2025-03-28
OT16-63G1-	CB Test Report	HELES2411001016	2025-03-10
General	IPH Report	14896-25-0030	2025-03-06

Tests carried out

Type tests in accordance to IEC 60947-3 :2020 and IEC 60947-1: 2020

Environmental tests (Vibration, dry heat and damp heat in accordance with DNV-CG-0339 edition 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



Job ID: **262.1-023145-6**
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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