

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Disconnection Switch

with type designation(s)
OTP16-125 and OTE16-90

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.

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

Issued at **Høvik** on **2021-02-25**

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.

Job Id: **262.1-022138-3**
 Certificate No: **TAE000013E**
 Revision No: **1**

Product description

Plastic Enclosed Safety and Plastic Enclosed Load Break Switches, TYPE OTP _:

Rated insulation and operation voltage: 400 V

Protection class: IP65

Family	Type designation	Type of switch 1)	Switch disconnecter	Ie max 400V [A]		Pe max 400V [kW]
				AC 22A	AC 23A	
OTP16_	OTP16B_ OTP16HB_	E	OT16F_	16	16	7,5
	OTP16A_ OTP16H_ OTP 16K_ OTP16T_	S	OT40_	-	16	7,5
OTP25_	OTP25B_	E	OT25F_	25	20	9
	OTP25A_ OTP25T_	S	OT63_	-	30	15
OTP32_	OTP32B_	E	OT40F_	32	23	11
OTP36_	OTP36A_ OTP36T_	S	OT80_	-	38	18,5
OTP45_	OTP45B_	E	OT63F_	45	30	15
OTP63_	OTP63B_	E	OT80F_	63	38	18,5
	OTP63A_ OTP63T_	S	OT100_	-	63	30
OTP75_	OTP75A_ OTP75T_	S	OT100_	-	80	37
OTP90_	OTP90A_ OTP90T_	S	OT125F_	-	90	45
OTP125_	OTP125B_	E	OT125F_	125	90	45

1) Type of switch, description:

S	Enclosed Safety Switch
E	Enclosed Load Break Switch

Plastic Enclosed EMC-safety switches TYPE OTE _:

Protection class: IP65

Family	Type designation	Type of switch 2)	Switch disconnecter	Ie max 400V [A]		Pe max 400V [kW]
				AC 22A	AC 23A	
OTE16_	OTE16T_ OTE16A_	S	OT40_	-	16	7,5
OTE25_	OTE25T_ OTE25A_	S	OT63_	-	30	15
OTE36_	OTE36T_ OTE36A_	S	OT80_	-	38	18,5
OTE75_	OTE75T_ OTE75A_	S	OT100_	-	80	37
OTE90_	OTE90T_ OTE90A_	S	OT125F_	-	90	45

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2) Type of switch, description:

S	Enclosed Safety Switch
E	Enclosed Load Break Switch

Application/Limitation

Plastic Enclosed Safety Switches and Plastic Enclosed Load Break Switches for use Onboard Ships and Offshore units.

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

Installation procedures according to the manufacturer to be followed
Switch-disconnectors used in the products as listed above are to be in accordance with conditions as given in Type Approval certificate E-9050.

Type Approval documentation

Name of document	Number	Issue date
Technical Brochure, SafeLine Enclosed	OT 3GB,	05/2012
Technical Brochure, SafeLine Safety Switches	OT 2GB,	05/2012
Common test procedures for the shipping approvals of the OT_ range	-	16/09/1998
Vibration test for the OT_ range switch-	AUT/TES/742/98,	15/10/1998
Environmental test on safety switches	9 AFX98-239,	28/10/1998
Degree of protection of enclosure	9 AFX98-3 Rev. 1, 30/04/98	30/04/1998
CB Test Certificate for OT and Test reports	FI5929, FI5931-FI5933, FI5936, FI15939M1, FI15945M1, 257441-1 & 2, 257441-3 and 265550-1	02.11.2009, 03.11.2009, 20.10.2011, 24.10.2011

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 DNVGL-CG-0339:

3.6 Vibration Test
3.8 Damp Heat Test
3.9 Cold Test

Marking of product

ABB - 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.

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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