



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

**CERTIFICATE NO. E-9626**  
This Certificate consists of 3 pages

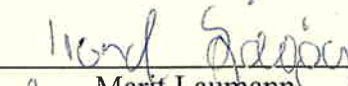
*This is to certify that the*  
**Disconnection Switch**  
*with type designation(s)*  
**OT630 - 1600**

*Manufactured by*  
**ABB Oy, Low Voltage Products**  
VAASA, Finland

*is found to comply with*  
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards  
IEC 60947-3 (2008-08)

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


*Place and date*  
Høvik, 2009-11-03  
for DET NORSKE VERITAS AS

  
for **Marit Laumann**  
*Head of Section*



*Local Office*  
DNV Helsinki

*This Certificate is valid until*  
2013-12-31

  
**Nicolay Horn**  
*Surveyor*

**Notice: 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.**

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: E-9626  
 File No.: 823.30  
 Job Id: 262.1-006128

## Product description

Switch-disconnector OT600 -1600,

Technical data:

		OT630		OT800		OT1000	
						E	X
Rated insulation voltage $U_i$ (V)		1000	1000	1000			
Rated impulse voltage $U_{imp}$ (kV)		12	12	12			
Rated operation current AC21A (A)	$\leq 500V$	630	800	1000	1000		
	690V	630	800	1000	1000		
	1000V	630	800	1000	1000		
Rated operation current AC22A (A)	$\leq 500V$	630	800	1000	1000		
	690V	630	800	800	1000		
	1000V	630	800	-	-		
Rated operation current AC23A (A)	$\leq 500V$	630	800	800	1000		
	690V	630	800	650	1000		
	1000V	400	400	-	-		
Rated breaking capacity AC23A (A)	$\leq 500V$	5040	6400	8000	10000		
	690V	5040	6400	6400	10000		
Rated short circuit withstand current $I_{cw}$ (kA)	690 / 1 sec.	20	20	50	50		
Rated short circuit making capacity $I_{cm}$ (kA)	690V (3pole / 4 pole, OT1000)	80	80	110/92	110/92		

		OT1250		OT1600	
		E	X	E	X
Rated insulation voltage $U_i$ (V)		1000		1000	
Rated impulse voltage $U_{imp}$ (kV)		12		12	
Rated operation current AC21A (A)	$\leq 500V$	1250	1250	1000	1600
	690V	1250	1250	1600	1600
	1000V	1250	1250	1600	1600
Rated operation current AC22A (A)	$\leq 500V$	1250	1250	1600	1600
	690V	1000	1250	1250	1600
	1000V	-	-	-	-
Rated operation current AC23A (A)	$\leq 500V$	1000	1250	1060	1250
	690V	650	1250	650	1250
	1000V	-	-	-	-
Rated breaking capacity AC23A (A)	$\leq 500V$	8000	10000	10000	10000
	690V	6400	10000	8000	10000
Rated short circuit withstand current $I_{cw}$ (kA)	690 / 1 sec.	50	50	50	50
Rated short circuit making capacity $I_{cm}$ (kA)	690V (3pole / 4 pole)	110/92	110/92	110/92	110/92



Cert. No.: E-9626  
File No.: 823.30  
Job Id: 262.1-006128

### **Application/Limitation**

Ingress protection IP20. To be installed inside switchboard / enclosures.

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

### **Type Approval documentation**

Technical info:

ABB Oy catalogue "Low Voltage Products – Switch-disconnectors OT and OETL (parts)

Test reports:

Fimco test reports nos. 240964-1 dated 2006-02-01, 247299-1 / 2 / 3 / 4 / 5 / 6 dated 2007-06-08, TRC test report noTA2008-93 dated 2008-12-19, and ABB test report no. L09-011 dated 2009-05-04.

### **Tests carried out**

Type tests in accordance with IEC 60947-3. Environmental tests in accordance with DNV CN 2.4.

### **Marking of product**

ABB Oy – Disconnecting switch – Type designation

### **Certificate retention survey**

The scope of the retention/renewal survey 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 survey 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.

Survey to be performed at least every second year.

END OF CERTIFICATE