



---

# DET NORSKE VERITAS

---

## TYPE APPROVAL CERTIFICATE

---

**CERTIFICATE NO. E-8875**  
This Certificate consists of 3 pages


*This is to certify that the*  
**Disconnection Switch**  
*with type designation(s)*  
**OS 200 and OS 250**

*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

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


*Place and date*  
Høvik, 2008-03-05  
for DET NORSKE VERITAS AS

  
Marit Laumann  
Head of Section



*Local Office*  
DNV Helsinki

*This Certificate is valid until*  
2012-06-30

  
Nicolay Horn  
Surveyor *(vabu)*

**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-8875

File No.: 823.30

## Product description

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

Type OS 200 & OS 250 as specified in the tables below.

Technical data:

Protection class:	IP20
Operational voltage, $U_e$	230 - 690 V
Insulation voltage, $U_i$	1000 V
Rated impulse withstand voltage, $U_{imp}$	12 kV
Rated frequency:	50 - 60 Hz

	OS 200E	OS 250E
Rated thermal current $I_{th}$	200	250
Rated operational current AC-21A	200	250
Rated operational current AC-22A	200	250
Rated operational current AC-23A	200	250
Rated breaking capacity AC-23	1600	2000
Rated short time withstand current $I_{cw}$ , 690 V 1 s.	8	8
Rated short time making capacity $I_{cm}$	14	14

## Application/Limitation

Current data given for an ambient temperature of 40 °C. To be modified for an ambient temperature of 45 °C

## Type Approval documentation

Technical info:

OT 200...OT 400 Switch-Disconnector, Bulletin OT 23 GB 04\_11.

Test reports:

SGS Fimko reports nos. 234540-1 & 234540-2 dated 2004-09-09 and 234540-3 dated 2004-10-11. Technobothnia reports nos. TA2004-21 dated 2004-12-07 and TA2004-23 dated 2004-12-16.



Cert. No.: E-8875

File No.: 823.30

### **Tests carried out**

Type tests in accordance to IEC 60947-3 / 1999

Environmental tests (Vibration, dry heat and damp heat in accordance with DNV CN 2.4 and shock in accordance with IEC60068-2-27).

### **Marking of product**

ABB Oy - Type designation - Rated voltage - Rated current

### **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