



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-9627

This Certificate consists of 3 pages

This is to certify that the
Fused Switch disconnecter
with type designation(s)
OS200 - 400LR

Manufactured by
ABB Oy, Low Voltage Products
VAASA, Finland

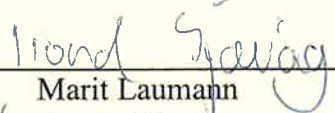
is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det
Norske Veritas' Offshore Standards
IEC 60947-3 (2008-08)

Application
Fused 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-9627
 File No.: 823.40
 Job Id: 262.1-006128

Product description

Fused switch-disconnector OS200 -400,

Technical data:

		OS200	OS250	OS315	OS400
Rated insulation voltage U_i (V)		1000	1000	1000	1000
Rated impulse voltage U_{imp} (kV)		12	12	12	12
Rated operation current AC21A (A)	≤500V	200	250	315	400
	690V	200	250	315	400
Rated operation current AC22A (A)	≤500V	200	250	315	400
	690V	200	250	315	400
Rated operation current AC23A (A)	≤500V	200	250	315	400
	690V	200	250	315	400
Rated breaking capacity AC23A (A)	≤500V	1600	2000	3200	3200
	690V	1600	2000	3200	3200
Rated short circuit withstand current I_{cw} (kA)	690/ 1 sec	8	8	14	14
Rated short circuit making capacity I_{cm} (kA)	690V	-	-	-	-

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 fuse for plug, back, side and top connections. (parts)

Test reports:

Fimco test reports nos. 248247 & 248248-1 dated 2008-02-15, 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



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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