

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

This certificate is issued to:

PRODUCER ABB Oy, Low Voltage Products

PLACE OF PRODUCTION P.O. Box 622,
Muottitie 2A
FIN-65101 VAASA
Finland

DESCRIPTION Switch-Disconnecter-Fuse-see definition in EN60947- 3 or 4 Pole, manually operated

TYPE OS200_LR, OS250_LR, OS315_LR, OS400_LR.

Type Designation Key:

OS¹ _ 400² _ D³ _ 22⁴ _ LR⁵ _ N1⁶ _ 3²

¹Type Marking

² _ Switch Size (rated current): 200, 250, 315, 400A

³ Type of fuse holder: B= BS88 or D= DIN

⁴ 1st number: number of poles on left side: 2nd number: Number of poles on right side

⁵ L= Terminals Left: R= terminals Right..

⁶

F	Fused Neutral	N1	Neutral pole on left side
F1	Fused Neutral pole left side	N2	Neutral pole right side
F2	Fused neutral pole right side	N3	Neutral bar thru mechanism

²

-	N special neutral pole	3	Pole type Up-Back
1	Pole type Up-Down	4	Pole type Back-Back
2	Pole type UP-Back	5	Pole type Plug-Down

Certificate No. 10/70015

Issue Date 12 February 2010

Expiry Date 11 February 2015

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Poul Erik Hansen

Copenhagen design Support Centre

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APPLICATION Marine, Offshore and Industrial application for use in environmental categories ENV1, ENV2 and ENV3 as defined in LR Test Specification No.1:2002 - where the Test Specification is satisfactory for the intended operation.

ADDITIONAL TESTS Low Temperature to -25°C-16 hrs
Shock Test. Half sinus. Peak 10.2g – 11 msec.

STANDARD IEC60947-1, EN60947-1
IEC60947-3, EN60947-3
IEC60068-2-1, Test Ab
IEC60068-2-27, Test Ea

RATINGS Ue= up to 690V, 50-60Hz
Rated insulation voltage Ui= 1000V
Rated impulse withstand voltage: Uimp=12 kV
Conventional free air/(enclosed)thermal current Ith/Ithe as per table 1 below
Utilization cat. AC-21A; AC-22A; AC-23A: as per table below
Rated conditional s/c current (rms): at 690V:or 500V see table below
Table 1

	OS200_LR	OS250_LR	OS315_LR	OS400_LR
AC21A	200A @ 690V	250A@690V	315A@690V	400A@690V:
AC22A	200A@690V:	250 A@690V	315A@690V	400A@690V
AC23A	200A @ 690V	250A@690V	315A@690V	400A@690V
Ith/Ithe	200A/-	250A/-	315A/-	400A/-
I sc,cond	500V:100kA	500V:100kA	500V:100kA	500V:100kA
3 pole	690V: 80kA	690V: 80kA	690V: 80kA	690V: 80kA

CONDITIONS In Marine Installation Classed by LR de-rating of Ithe to an ambient temperature of 45°C may be applicable according to Part 6, Chapter 2, section 5.3 of the Ships Rules. Means of locking in open position and provision of or padlocks as required.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No TA10/70015 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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