

Type Approval Certificate Extension

This is to certify that Certificate No. 05/00021 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

ABB Oy, Low Voltage Switches

PLACE OF

P.O. Box 622,

PRODUCTION

FIN-65101 VAASA FINLAND

DESCRIPTION

Switch-Disconnector; 2, 3 or 4 Pole, manually operated

TYPE

OT200_, OT250_, OT315_, OT400_

Type Designation Key:

 $OT^{1}_{200}^{2} = E^{3}_{13}^{4} = W^{5}_{1}^{5} + H^{6}_{1}^{2} = P^{7}_{1}^{6}$

¹⁾Type Marking

OT: Switch disconnector

²⁾Switch Size_(rated current): 200, 250, 315, 400

3)Structure

E=Front operated IEC type,

ES=side operated IEC types, U=Front operated IEC & UL types US=Side operated IEC & UL types

4) Num of poles & mech.

⁵⁾Insulation Plates between poles: W

⁶⁾ Silver plating

H: layer 20 μm

Blanco: layer 7µm

7) Handle & Shaft

P: Handle & Shaft incl.

K: Direct Handle

BLANCO= w/o handle & shaft

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.

STANDARD

IEC60947-3:2004,

EN60947-3:2004,

IEC60947-3:1999(Ed 2)

EN60947-3:1999(Ed2)

Certificate No.

10/70106

Issue Date

21 May 2010

Expiry Date

10 April 2015

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Poul Erik Hansen Copenhagen design Support Centre

Lloyd's Register EMEA Strandvejen 104A, DK-2900 Hellerup

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STANDARD (cont.)

+A1:2001+A2:2005

+A1:2001+A2:2005

IEC60947-1:2004 (Ed 4)

EN60947-1:2004

IEC60947-1:1999

EN60947-1:1999

+A1:2001+A2:2005

+A1:2001+A2:2005

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

	OT200	OT250	OT315	OT400_
AC21A	200A@690V	250A@690V	315A@690V	400A@690V:
AC22A	200A@690V:	250A@690V	315A@690V	400A@690V
AC23A	200A@690V	250A@690V	315A@690V	400A@690V
Ith/Ithe	200A/200A	250A/250A	315A/315A	400A/400A
Isc,cond	500V:100kA, 3-p	500V:100kA, 3-p	500V:100kA, 3-p	500V:100kA, 3-p
1sc,cond	690V: 80kA, 3-p	690V: 80kA, 3-p	690V: 80kA, 3-p	690V: 80kA, 3-p
See NOTE	500V:100kA, 4-p	500V:100kA, 4-p	500V:100kA, 4-p	500V:100kA, 4-p
Tow	8kA-1s/ 15kA-0.25s	8kA-1s/ 15kA-0.25s	15kA-1s/31kA-0.15s	15kA-1s/31kA-0.15s
Icm@690V	30 kA	30 kA	65kA	65kA

NOTE: Refer to manufacturer's literature for conditions

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 attached Design Appraisal Document No.TA10/70106 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 05/00021 to which this extension should be attached.

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