

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 Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER	ABB SpA – ABB Sace Division Via Baioni, 35 24123 Bergamo Italy
PLACE OF PRODUCTION	ABB SpA - ABB Sace Division Via Enrico Fermi 14 03100 Frosinone Italy
DESCRIPTION	3 and 4 pole Air Circuit Breakers with electronic releases PR331/P, PR332/P and PR333/P
TYPE	Emax X1 B16 and X1 N16
APPLICATION	Marine, offshore and industrial use
SPECIFIED STANDARD	IEC60947-1 IEC 60947-2
RATINGS	Frequency 50/60 Hz

Type	Rated Voltage (V)	Rated Current (A)	Rated making capacity (I _{cm}) kA	Rated S/C breaking capacity (I _{cu} /I _{cs}) kA	Rated S/C withstand current (I _{ew}) kA/s
X1 B16	440	400 - 1600	88.2	42/42	42
	525	400 - 1600	88.2	42/42	42
	690	400 - 1600	88.2	42/42	42

Certificate No.	08/00022
Issue Date	22 April 2008
Expiry Date	21 April 2013
Sheet	1 of 2



M.H.A. Rufaie
London Design Support Services
Lloyd's Register EMEA

Lloyd's Register EMEA
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RATINGS (cont.)

Frequency 50/60 Hz

Type	Rated Voltage (V)	Rated Current (A)	Rated making capacity (I _{cm}) kA	Rated S/C breaking capacity (I _{cu} /I _{cs}) kA	Rated S/C withstand current (I _{cw}) kA/s
X1 N16	440	400 - 1600	143	65/50	42
	525	400 - 1600	105	50/42	42
	690	400 - 1600	105	50/42	42

ADDITIONAL TESTS

Complies with Lloyd's Register EMC test requirements as described Test Specification No. 1: 2002

"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. 08/00022 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 08/00022
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 Sheet 2 of 2



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DESIGN APPRAISAL DOCUMENT

Date 22 April 2008	Quote this reference on all future communications LDSS/PAS/TA/W01569997/MHR/O- 90663
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

**Issued to: ABB SpA - ABB SACE DIVISION
for: 3 AND 4 POLE AIR CIRCUIT BREAKERS**

**Type: Emax X1 B16 AND X1 N16
TYPE APPROVAL CERTIFICATE No. 08/00022**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request form	06.06.2007
LR Milan memo	14.05.2007
LR Milan memo	17.10.2007
LR Milan email	21.04.2008

Data Sheets

ABB Emax X1 ratings	Undated
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TEST REPORTS

IEC / IECCE / CIG (KEMA) Report No. 706692-1	04.07.2007
Intertek report No. E133S2007G1_24aR	14/31.05.2007
Intertek report No. E133S2007G1_24bR	14/31.05.2007
Intertek report No. E133S2007G1_24b	14/31.05.2007
IQNet Certificate No. IT-29263	06.07.2005
IQNet Certificate No. IT-29340	06.07.2005

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

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Lead Specialist

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