



CERTIFICATE NUMBER

DATE

14-GE1167987-PDA

28 March 2014

ABS TECHNICAL OFFICE

Genoa - Tech

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
ABB S.P.A. - ABB SACE DIVISION - SESTO S. GIOVANNI (MI)

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Circuit Breaker**

MODEL: **Tmax XT1, XT2, XT3 and XT4 (UL 489 Version).**

This Product Design Assessment (PDA) Certificate 14-GE1167987-PDA, dated 28/Mar/2014 remains valid until 27/Mar/2019 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Giorgio Barbini
Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturers standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

ABB S.P.A. - ABB SACE DIVISION

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Tier: 2

Product: Circuit Breaker

Model: Tmax XT1, XT2, XT3 and XT4 (UL 489 Version).

Intended Service:

Circuit Breakers for installation in electrical switchboards and panels for marine and offshore installations.

Description:

Low Voltage Moulded Case Circuit Breakers with electronic and thermal-magnetic release.

Ratings:

Rated Service Voltage 240 - 480 - 600Y/347 Vac
Rated Frequency 50 - 60 Hz
Rated Current 125 - 225 - 250 A
(Please refer to attachment for details about interrupting ratings).

Service Restrictions:

Unit Certification is not required for this product.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes / Drawings / Documentation:

Tmax XT Ratings No.1SDL000282R427 dated 25 March 2014.
UL Certificate of Compliance No. 20130509-E93565 - Report Reference E93565-20130509 issued on 2013-May-09 for Tmax XT1.
UL Certificate of Compliance No. 20130423-E93565 - Report Reference E93565-20130422 issued on 2013-April-23 for Tmax XT2.
UL Certificate of Compliance No. 20130514-E93565 - Report Reference E93565-20130513 issued on 2013-May-14 for Tmax XT3.
UL Certificate of Compliance No. 20130520-E93565 - Report Reference E93565-20130426 issued on 2013-May-20 for Tmax XT4.
UL Test Reports File E93565 (Project No.11CA51463), Description, Figures and Illustrations.

Term of Validity:

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STANDARDS

ABS Rules:

2014 Steel Vessel Rules 1-1-4/7.7, 1-1 Appendix 3 and 4, 4-8-3/5.3.3
2014 MODU Rules 1-1-4/9.7, 1-1 Appendix 2 and 3, 6-1-7/13.1.1
2014 Steel Vessels Under 90 Meters (295 Feet) in Length 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-6-4/11.1.1
2014 Facilities on Offshore Installations 1-1-4/9.7, 1-1-Appendix 2 and 3, 3-6/11.3.3

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Tier: 2

2014 Offshore Support Vessels 1-1-4/1.1, 1-1-Appendix 3 and 4, 4-8-3/5.3.3

National:

UL 489

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

NA

1SDL000282R427

To: ABS

Bergamo, March 25th 2014

Please find herewith the electrical performances of Moulded case circuit breakers Tmax XT, according to and UL489 Standard.

ATTACHMENT TO CERTIFICATE No.14-GE1167987-PDA dated 28 March 2014 remaining valid until 27 March 2019 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

ABB is not responsible of the installation activity. The above statement refers to standard installation conditions and assumes ABB installation and maintenance instructions are followed by a technicians with adequate expertise.
ABB General Terms and Conditions – Ed. Apr. 2012 apply, including the express exclusion of any liability for direct and indirect damages.

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Vittuone (MI)

UL 489		XT1		
Frame Size	[A]	125		
Rated service voltage	(AC) 50-60 Hz [V]	600Y/347		
Interrupting ratings		N	S	H
240 V (AC)	[kA]	50	65	100
480 V (AC)	[kA]	25	35	65
600Y/347 V (AC)	[kA]	10	14	25

UL 489		XT2				
Frame Size	[A]	125				
Rated service voltage	(AC) 50-60 Hz [V]	600				
Interrupting ratings		N	S	H	L	V
240 V (AC)	[kA]	65	100	150	200	200
480 V (AC)	[kA]	25	35	65	100	150
600 V (AC)	[kA]	14	18	25	35	42

UL 489		XT3	
Frame Size	[A]	225	
Rated service voltage	(AC) 50-60 Hz [V]	600Y/347	
Interrupting ratings		N	S
240 V (AC)	[kA]	50	65
480 V (AC)	[kA]	25	35
600Y/347 V (AC)	[kA]	10	10

UL 489		XT4				
Frame Size	[A]	250				
Rated service voltage	(AC) 50-60 Hz [V]	600				
Interrupting ratings		N	S	H	L	V
240 V (AC)	[kA]	65	100	150	200	200
480 V (AC)	[kA]	25	35	65	100	150
600 V (AC)	[kA]	14	18	25	35	50