



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.

Manufacturer	ABB SpA
Address	via Pescaria, 5, Bergamo, Italy, 24123, Italy
Place of Production	ABB S.p.A. Via E. Fermi, 40, Frosinone, (FR), 03100, Italy
Type	Circuit Breakers (Env Tested)
Description	Low Voltage Moulded-Case Circuit Breakers
Trade Name	Tmax XT series
Application	Marine, Offshore and Industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as detailed in LR Type Approval Test Specification No. 1: 2020.
Specified Standard	IEC 60947-1:2020 IEC 60947-2:2016 + A1:2019

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Ilir Batalli

Electrotechnical Systems Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Ratings	Poles [nr]:	2 / 3 / 4
	Size [A]:	160/250/630/800 1000/1250/1600
	Max Rated Service Voltage AC 50-60 Hz [V]:	690
	Max Rated Service Voltage DC [V]:	750
	Utilization Category (IEC 60947-2):	A/B
	Additional Tests	Low Temperature, -25°C for 16 hours

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.

Previous Version: 12/00065, 12/0006(E1), and 12/00065(E2), LR2024994TA, LR2024994TA-01 and 19/00032

The Design Appraisal Document LR22424105DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.



APPENDIX to Certificate no. LR22424105TA

TYPES:

Tmax XT1

XT1 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT1B	160	240	AC	25	25
XT1C	160	240	AC	40	40
XT1N	160	240	AC	65	50
XT1S	160	240	AC	85	64
XT1H	160	240	AC	100	75
XT1B	160	440	AC	15	12
XT1C	160	440	AC	25	13
XT1N	160	440	AC	36	18
XT1S	160	440	AC	50	25
XT1H	160	440	AC	65	33
XT1B	160	690	AC	3	3
XT1C	160	690	AC	4	4
XT1N	160	690	AC	6	5
XT1S	160	690	AC	8	5
XT1H	160	690	AC	10	5
XT1B	160	250	DC	18	18
XT1C	160	250	DC	25	25
XT1N	160	250	DC	36	36
XT1S	160	250	DC	50	50
XT1H	160	250	DC	70	53
XT1B	160	500	DC	18	18
XT1C	160	500	DC	25	25
XT1N	160	500	DC	36	36
XT1S	160	500	DC	50	50
XT1H	160	500	DC	70	53

Equipped with:

Thermomagnetic based over-current releases type: TMD, TMF

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Tmax XT2

XT2 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT2N	160	240	AC	65	65
XT2S	160	240	AC	85	85
XT2H	160	240	AC	100	100
XT2L	160	240	AC	150	150
XT2V	160	240	AC	200	200
XT2N	160	440	AC	36	36
XT2S	160	440	AC	50	50
XT2H	160	440	AC	65	65
XT2L	160	440	AC	100	100
XT2V	160	440	AC	150	150
XT2N	160	690	AC	10	10
XT2S	160	690	AC	12	12
XT2H	160	690	AC	15	15
XT2L	160	690	AC	18	15
XT2V	160	690	AC	20	15
XT2N	160	250	DC	36	36
XT2S	160	250	DC	50	50
XT2H	160	250	DC	70	70
XT2L	160	250	DC	85	85
XT2V	160	250	DC	100	100
XT2N	160	500	DC	36	36
XT2S	160	500	DC	50	50
XT2H	160	500	DC	70	70
XT2L	160	500	DC	85	85
XT2V	160	500	DC	100	100

Equipped with:

Microprocessor based over-current releases types: Ekip; Ekip Dip; Ekip Touch;

Thermomagnetic based over-current releases type: TMD/TMA, MF/MA, TMG

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Tmax XT3

XT3 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT3N	250	440	AC	25	19
XT3S	250	440	AC	40	20
XT3N	250	690	AC	5	3
XT3S	250	690	AC	5	3
XT3N	250	250	DC	36	36
XT3S	250	250	DC	50	50
XT3N	250	500	DC	36	36
XT3S	250	500	DC	50	50

Equipped with:

Thermomagnetic based over-current releases type: TMD/TMF, MF/MA, TMG

Tmax XT4

XT4 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT4N	250	240	AC	65	65
XT4S	250	240	AC	85	85
XT4H	250	240	AC	100	100
XT4L	250	240	AC	150	150
XT4V	250	240	AC	200	200
XT4X	250	240	AC	200	200
XT4N	250	440	AC	36	36
XT4S	250	440	AC	50	50
XT4H	250	440	AC	65	65
XT4L	250	440	AC	100	100
XT4V	250	440	AC	150	150
XT4X	250	440	AC	200	200

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XT4 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT4N	250	690	AC	10	10
XT4S	250	690	AC	12	12
XT4H	250	690	AC	15	15
XT4L	250	690	AC	20	20
XT4V	250	690	AC	50 ^(*)	50 ^(**)
XT4X	250	690	AC	100	100 ^(**)
XT4N	250	250	DC	36	36
XT4S	250	250	DC	50	50
XT4H	250	250	DC	70	70
XT4L	250	250	DC	85	85
XT4V	250	250	DC	100	100
XT4X	250	250	DC	100	100
XT4N	250	500	DC	36	36
XT4S	250	500	DC	50	50
XT4H	250	500	DC	70	70
XT4L	250	500	DC	85	85
XT4V	250	500	DC	100	100
XT4X	250	500	DC	100	100
XT4V	250	750	DC	50	50
XT4X	250	750	DC	70	70

(*) In<32A Icu=25kA/Ics=20kA.

(**) Ics=100% Icu up to 250 A with EF, ES and Rear terminal. When any other terminals are used and In >200A Ics=25kA.

Equipped with:

- Microprocessor based over-current releases types: Ekip; Ekip Dip; Ekip Touch;
- Thermomagnetic based over-current releases type: TMD/TMA, MF/MA



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Tmax XT5

XT5 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT5N	630	240	AC	70	70
XT5S	630	240	AC	85	85
XT5H	630	240	AC	100	100
XT5L	630	240	AC	150	150
XT5V	630	240	AC	200	200
XT5X	630	240	AC	200	200
XT5N	630	440	AC	36	36
XT5S	630	440	AC	50	50
XT5H	630	440	AC	65	65
XT5L	630	440	AC	100	100
XT5V	630	440	AC	180	180
XT5X	630	440	AC	200	200
XT5N	630	690	AC	20	20
XT5S	630	690	AC	25	25
XT5H	630	690	AC	40	40 ^(*)
XT5L	630	690	AC	70	70 ^(**)
XT5V	630	690	AC	80	80 ^(**)
XT5X	630	690	AC	100	100 ^(**)

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XT5 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT5N	630	250	DC	25	25
XT5S	630	250	DC	35	35
XT5H	630	250	DC	50	50
XT5L	630	250	DC	70	70
XT5V	630	250	DC	85	85
XT5X	630	250	DC	100	100
XT5N	630	500	DC	25	25
XT5S	630	500	DC	35	35
XT5H	630	500	DC	50	50
XT5L	630	500	DC	70	70
XT5V	630	500	DC	85	85
XT5X	630	500	DC	100	100
XT5V	630	750	DC	50 ^(***)	50
XT5X	630	750	DC	70 ^(***)	70

(*) Ics = 75% Icu for In > 500A;

(**) Ics = 50% Icu for In > 500A;

(***) Power supply only from the top

Equipped with:

Microprocessor based over-current releases types: Ekip Dip; Ekip Touch;

Thermomagnetic based over-current releases type: TMD/TMA, MF/MA, TMG



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Tmax XT6

XT6 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT6N	800/1000	240	AC	70	70
XT6S	800/1000	240	AC	85	85
XT6H	800/1000	240	AC	100	100
XT6N	800/1000	440	AC	30	30
XT6S	800/1000	440	AC	45	45
XT6H	800/1000	440	AC	50	50
XT6N	800/1000	690	AC	20	20
XT6S	800/1000	690	AC	22	22
XT6H	800/1000	690	AC	25	25
XT6N	800	250	DC	35	35
XT6S	800	250	DC	50	35
XT6H	800	250	DC	70	35
XT6N	800	500	DC	20	20
XT6S	800	500	DC	35	20
XT6H	800	500	DC	50	25
XT6N	800	750	DC	18	18
XT6S	800	750	DC	24	18
XT6H	800	750	DC	36	18

Equipped with:

Microprocessor based over-current releases types: Ekip Dip

Thermomagnetic based over-current releases type: TMD/TMA



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Tmax XT7

XT7 type	Rated Current In at 45°C [A]	Voltage [V]		Short Circuit	
				Ultimate S.C. Breaking Capacity Icu [kA]	Service S.C. Breaking Capacity Ics [kA]
XT7S	800/1000/ 1200/1600	220	AC	85	85
XT7H	800/1000/ 1200/1600	220	AC	100	100
XT7L	800/1000/ 1200/1600	220	AC	200	200
XT7S	800/1000/ 1200/1600	380-415	AC	50	50
XT7H	800/1000/ 1200/1600	380-415	AC	70	70
XT7L	800/1000/ 1200/1600	380-415	AC	120	120
XT7S	800/1000/ 1200/1600	440	AC	50	50
XT7H	800/1000/ 1200/1600	440	AC	65	65
XT7L	800/1000/ 1200/1600	440	AC	100	100
XT7S	800/1000/ 1200/1600	690	AC	30	30
XT7H	800/1000/ 1200/1600	690	AC	42	42
XT7L	800/1000/ 1200/1600	690	AC	50	50

Equipped with:

Ekip microprocessor based Electronic releases (AC only)

software version:

02.24 (Ekip DIP, Ekip G DIP)

03.00 (Ekip Touch/Hi-Touch/G Touch/G Hi-Touch)

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