



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE00003EF
Revision No:
2

This is to certify:
that the Circuit Breaker

with type designation(s)
Susol

issued to
LS ELECTRIC Co., Ltd. (Cheong-ju Plant)
Cheongju-si, 04, Korea, Republic of

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.
Rated voltage (V) 500/700 (see specification)
Rated current (A) 16-800

Issued at **Busan** on **2024-05-02**

This Certificate is valid until **2028-12-31**.

for **DNV**

DNV local unit: **Seoul**

Approval Engineer: **Eun Sook Kim**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Moulded case circuit breaker with the following data:

	TD100E	TD100N	TD100S	TD100H	TD100P	TD100L
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	16-100	16-100	16-100	16-100	16-100	16-100
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	18	30	42	50	60	65
440/ 460V	35	50	65	70	100	130
380/ 415V	35	50	65	85	130	150
220/ 240V	65	65	85	100	150	200
Utilization category	A	A	A	A	A	A

	TD160E	TD160N	TD160S	TD160H	TD160P	TD160L
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	16-160	16-160	16-160	16-160	16-160	16-160
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	18	30	42	50	60	65
440/ 460V	35	50	65	70	100	130
380/ 415V	35	50	65	85	130	150
220/ 240V	65	65	85	100	150	200
Utilization category	A	A	A	A	A	A

	TS100E/ TS100E ETS	TS100N/ TS100N ETS	TS100S/ TS100S ETS	TS100H/ TS100H ETS	TS100P/ TS100P ETS	TS100L/ TS100L ETS
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	40-100	40-100	40-100	40-100	40-100	40-100
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	25	42	50	65	70	85
440/ 460V	42	50	65	70	100	130
380/ 415V	42	50	65	85	130	150
220/ 240V	85	100	120	120	150	200
Utilization category	A	A	A	A	A	A

	TS160E/ TS160E ETS	TS160N/ TS160N ETS	TS160S/ TS160S ETS	TS160H/ TS160H ETS	TS160P/ TS160P ETS	TS160L/ TS160L ETS
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	40-160	40-160	40-160	40-160	40-160	40-160
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	25	42	50	65	70	85
440/ 460V	42	50	65	70	100	130
380/ 415V	42	50	65	85	130	150
220/ 240V	85	100	120	120	150	200
Utilization category	A	A	A	A	A	A

	TS250E/ TS250E ETS	TS250N/ TS250N ETS	TS250S/ TS250S ETS	TS250H/ TS250H ETS	TS250P/ TS250P ETS	TS250L/ TS250L ETS
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	40-250	40-250	40-250	40-250	40-250	40-250
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	25	42	50	65	70	85
440/ 460V	42	50	65	70	100	130
380/ 415V	42	50	65	85	130	150
220/ 240V	85	100	120	120	150	200
Utilization category	A	A	A	A	A	A

	TS400E/ TS400E ETS&ETM	TS400N/ TS400N ETS&ETM	TS400S/ TS400S ETS&ETM	TS400H/ TS400H ETS&ETM	TS400P/ TS400P ETS&ETM	TS400L/ TS400L ETS&ETM
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	160-400	160-400	160-400	160-400	160-400	160-400
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	35	42	50	65	70	85
440/ 460V	50	65	70	85	100	130
380/ 415V	50	65	70	85	130	150
220/ 240V	85	100	120	120	150	200
Utilization category	A	A	A	A	A	A

	TS630E/ TS630E ETS&ETM	TS630N/ TS630N ETS&ETM	TS630S/ TS630S ETS&ETM	TS630H/ TS630H ETS&ETM	TS630P/ TS630P ETS&ETM	TS630L/ TS630L ETS&ETM
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	160-630	160-630	160-630	160-630	160-630	160-630
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	35	42	50	65	70	85
440/ 460V	50	65	70	85	100	130
380/ 415V	50	65	70	85	130	150
220/ 240V	85	100	120	120	150	200
Utilization category	A	A	A	A	A	A

	TS800E/ TS800E ETS&ETM	TS800N/ TS800N ETS&ETM	TS800S/ TS800S ETS&ETM	TS800H/ TS800H ETS&ETM	TS800P/ TS800P ETS&ETM	TS800L/ TS800L ETS&ETM
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	500	500	500	500	500	500
Rated Current (A)	630-800	630-800	630-800	630-800	630-800	630-800
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Rated Breaking Capacity Ics = 100% Icu (KA)						
480/ 500V	42	50	65	85	85	100
440/ 460V	50	65	85	100	120	130
380/ 415V	50	65	85	100	130	150

220/ 240V	85	100	120	120	150	200
Utilization category	A	A	A	A	A	A

Application/Limitation

Shall be installed and tested according to DNV Rules for Classification of Ships, High Speed & Light Craft and DNV Offshore Standards.

The manufacturer's instructions to be observed.

Suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at 500 V AC.

Type Approval documentation

Tests carried out

Type tests in accordance with IEC 60947-2 Ed.5. Inclination-, vibration -, dry heat-, damp heat & EMC immunity-test.

Marking of product

- Manufacturer name
- Model name
- Serial number
- Power ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine tests (RT) and selected type tests (ref. to applicable class programs) checked (if not available these tests shall be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE

Declaration Of Conformity

MANUFACTURER : LS ELECTRIC Co., Ltd

**Cheong-Ju Plant#1, 95, Beakbong-ro, Heung deok-gu, 28439,
Cheongju-si, Chungcheongbuk-do, Republic of KOREA**

Declaration under our own responsibility that the product(s):

Product : Molded Case Circuit Breaker

Models : 3, 4 pole MCCB (With Neutral on either right of left side)

TS1000N/H/L, TS1250N/H, TS1600N/H

This declaration is issued under the sole responsibility of the manufacturer.

**We hereby declare, that the product above is in compliance with the essential
requirements of the UK Statutory Instruments and their amendments: (if applicable):**

Electrical Equipment (Safety) Regulations 2016

Electromagnetic Compatibility Regulations 2016

**The Restriction of the Use of Certain Hazardous Substances in Electrical and
Electronic Equipment Regulations 2012**

**And that standards and/or technical specifications referenced below have been
applied :**

Low-voltage Switchgear and Controlgear

Circuit-breakers* *BS EN 60947-2:2017- TC

Technical Documents* *BS EN IEC 63000:2018

Done at Plant Cheong-Ju August 29. 2022

Signatures :

I. C. Song

**I. C. Song
Technical Director**

Park Jae Won

**J. W. Park
Technical Manager**

LS ELECTRIC

Declaration Of Conformity



Marine & Offshore

Certificate number: 19701/D0 BV

File number: ACE 02/138/07

Product code: 2633H

This certificate is not valid when presented without the full attached schedule
composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

LS ELECTRIC CO.,LTD

Cheongju (Chungbuk) - KOREA (REPUBLIC OF)

for the type of product

CIRCUIT BREAKERS (LOW VOLTAGE)

MCCB (Molded Case Circuit Breaker)

Type: TD100-, TD160-, TS160-*, TS250-*, TS400-*, TS630-*, TS800-*# (-:E,N,S,H,P,L *:ETS #:ETM)

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

IEC 60947-1 (2020), IEC 60947-2 (2019)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 11 Oct 2027

For Bureau Veritas Marine & Offshore,

At BV PUSAN, on 11 Oct 2022,

Chang-UK HONG

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=39ftgbzjlm>

BV Mod. Ad.E 530 June 2017

This certificate consists of 5 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation:

TD100-, TD160-, TS160-*, TS250-*, TS400-*, TS630-*, TS800-* (-:E,N,S,H,P,L *:ETS #:ETM)

- Product description:

Moulded Case Circuit Breaker

	TD100E₁ TD160E₁	TD100N₁ TD 160N₁	TD100S₁ TD 160S₁	TD100H₁ TD 160H₁	TD100P₁ TD 160P₁	TD100L₁ TD 160L₁
Number of poles	3	3	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750	750	750
Rated current I_{n max} (A) at 45°C	16-100 16-160	16-100 16-160	16-100 16-160	16-100 16-160	16-100 16-160	16-100 16-160
Rated breaking capacity I_{cu} = I_{cs} (kA)						
480/500V(AC)	18	30	42	50	60	65
440/460V(AC)	35	50	65	70	100	130
380/415V(AC)	35	50	65	85	130	150
220/240V(AC)	65	85	85	100	150	200
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A	A	A

	TS100E₁ TS 100E₂ ETS	TS 100N₁ TS 100N₂ ETS	TS 100S₁ TS 100S₂ ETS	TS 100H₁ TS 100H₂ ETS	TS 100P₁ TS 100P₂ ETS	TS100L₁ TS 100L₂ ETS
Number of poles	3	3	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750	750	750
Rated current I_{n max} (A) at 45°C	40-100 40, 80	40-100 40, 80	40-100 40, 80	40-100 40, 80	40-100 40, 80	40-100 40, 80
Rated breaking capacity I_{cu} = I_{cs} (kA)						
480/500V(AC)	25	42	50	65	70	85
440/460V(AC)	42	50	65	70	100	130
380/415V(AC)	42	50	65	85	130	150
220/240V(AC)	85	100	120	120	150	200
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A	A	A

	TS 160E₁₎ TS 160E₂₎ ETS	TS 160N₁₎ TS 160N₂₎ ETS	TS 160S₁₎ TS 160S₂₎ ETS	TS 160H₁₎ TS 160H₂₎ ETS	TS 160P₁₎ TS 160P₂₎ ETS	TD160L₁₎ TS 160L₂₎ ETS
Number of poles	3	3	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750	750	750
Rated current I_{n max} (A) at 45°C	40-160 40-160	40-160 40-160	40-160 40-160	40-160 40-160	40-160 40-160	40-160 40-160
Rated breaking capacity I_{cu} = I_{cs} (kA)						
480/500V(AC)	25	42	50	65	70	85
440/460V(AC)	42	50	65	70	100	130
380/415V(AC)	42	50	65	85	130	150
220/240V(AC)	85	100	120	120	150	200
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A	A	A

	TS250E₁₎ TS 250E₂₎ ETS	TS250N₁₎ 250N₂₎ ETS	TS 250S₁₎ TS 250S₂₎ ETS	TS 250H₁₎ TS 250H₂₎ ETS	TS 250P₁₎ TS 250P₂₎ ETS	TD250L₁₎ TS 250L₂₎ ETS
Number of poles	3	3	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750	750	750
Rated current I_{n max} (A) at 45°C	40-250 40-250	40-250 40-250	40-250 40-250	40-250 40-250	40-250 40-250	40-250 40-250
Rated breaking capacity I_{cu} = I_{cs} (kA)						
480/500V(AC)	25	42	50	65	70	85
440/460V(AC)	42	50	65	70	100	130
380/415V(AC)	42	50	65	85	130	150
220/240V(AC)	85	100	120	120	150	200
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A	A	A

	TS 400E₁₎ TS 630E₁₎ TS 400E₂₎ ETS/ETM TS 630E₂₎ ETS/ETM	TS 400N₁₎ TS 630N₁₎ TS 400N₂₎ ETS/ETM TS 630N₂₎ ETS/ETM	TS 400S₁₎ TS 630S₁₎ TS 400S₂₎ ETS/ETM TS 630S₂₎ ETS/ETM	TS 400H₁₎ TS 630H₁₎ TS 400H₂₎ ETS/ETM TS 630NH₂₎ ETS/ETM
Number of poles	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750
Rated current I_{n max} (A) at 45°C	300, 400 300-630 160-400 160-630	300, 400 300-630 160-400 160-630	300, 400 300-630 160-400 160-630	300, 400 300-630 160-400 160-630
Rated breaking capacity I_{cu} = I_{cs} (kA)				
480/500V(AC)	35	42	50	65
440/460V(AC)	50	65	70	85
380/415V(AC)	50	65	70	85
220/240V(AC)	85	100	120	120
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A

	TS 400P₁) TS 630P₁) TS 400P₂) ETS/ETM TS 630P₂) ETS/ETM	TS 400L₁) TS 630L₁) TS 400L₂) ETS/ETM TS 630L₂) ETS/ETM	TS 400S₁) TS 630S₁) TS 400S₂) ETS/ETM TS 630S₂) ETS/ETM	TS 800E₁) TS 800E₂) ETS/ETM	TS 800N₁) TS 800N₂) ETS/ETM
Number of poles	3	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750	750
Rated current $I_{n \max}$ (A) at 45°C	300,400 300-630 160-400 160-630	300,400 300-630 160-400 160-630	300,400 300-630 160-400 160-630	800 630, 800	800 630, 800
Rated breaking capacity $I_{cu} = I_{cs}$ (kA)					
480/500V(AC)	70	85	50	42	50
440/460V(AC)	100	130	70	50	65
380/415V(AC)	130	150	70	50	65
220/240V(AC)	150	200	120	85	100
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A	A

	TS 800S₁) TS 800S₂) ETS/ETM	TS 800H₁) TS 800H₂) ETS/ETM	TS 800P₁) TS 800P₂) ETS/ETM	TS 800L₁) TS 800L₂) ETS/ETM
Number of poles	3	3	3	3
Max. Rated operating voltage U_e (VAC)	500	500	500	500
Rated Insulation voltage U_i (VAC)	750	750	750	750
Rated current $I_{n \max}$ (A) at 45°C	800 630, 800	800 630, 800	800 630, 800	800 630, 800
Rated breaking capacity $I_{cu} = I_{cs}$ (kA)				
480/500V(AC)	65	85	85	100
440/460V(AC)	85	100	120	130
380/415V(AC)	85	100	130	150
220/240V(AC)	120	120	150	200
Rated Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Utilization Category	A	A	A	A

Notes :

1) Thermal Type

2) Electronic type (ETS, ETS/ETM)

2. DOCUMENTS AND DRAWINGS :

2.1 - In accordance with the manufacturer's drawings and documents, at latest and at any subsequent issue endorsed by Bureau Veritas:

2.1.1 - Installation Instructions BV ref.: 19701/A0.

2.1.2 - 2007 Manufacturer's catalogue.

2.1.3 - Design drawings: 102000100 ~ 0102090000 (2), 7231 1172 002(2), 7231 1172 012(2), 7231 1172 101(2), 7231 1173 001(2), 7231 1173 012(2), 7231 1173 004(2), 7231 1173 014(2), 7231 1174 002(3), 7231 1174 012(2), 7231 1174 004(2), 7231 1174 014(2).

Nb: This above list can be revised to show changes to drawings and documents issue status.

Before changes can be implemented, new drawings and documents must be provided to Bureau Veritas for review and acceptance. The new documents and drawings list will be stamped and endorsed accordingly.

3. TEST REPORTS :

3.1 - Power Testing & Technology Institute test reports:

- N° R36-0770, R36-0771, R36-0072 and R36-0773, dated 26 Sep 2006.
- N° R36-0774, R36-0775, R36-0776 and R36-0777, dated 11/Aug./2006.
- N° R418-0241, dated 19 Feb 2018.
- N° R421-2288, R421-2289 and R421-2290, dated 25 Nov 2021.
- N° R421-2285, R421-2286 and R421-2287, dated 23 Dec 2021.

3.2 - Korea Institute of Machinery & Materials, Vibration test report No: 2006320823 dated 13 Sep. 2006.

3.3 - KEMA Test reports N°s: 2086029.50, 2086029.51, 2086029.52, 2086029.53, 2086029.54, 2086029.55, 2086029.56 dated 12/Dec./2005.

3.4 - KEMA EMC Certificates N°s: 2087087-QUA/EMC 05-4961, 2087087-QUA/EMC 05-4964, 2087087-QUA/EMC 05-4966 dated 22/Mar./2006.

3.5 - IECEE CB Scheme N° DK-85164-UL, dated 28 Jun 2019 with test report N° 4788765951 issued on 2019-06-21

3.6 - IECEE CB Scheme N° DK-89119-UL, dated 01 Nov 2019 with test report N° 4788765952 issued on 2019-10-28

3.7 - IECEE CB Scheme N° DK-89473-UL, dated 12 Nov 2019 with test report N° 4788765948 issued on 2019-10-28

3.7 - IECEE CB Scheme N° DK-89493-UL, dated 12 Nov 2019 with test report N° 4788765953 issued on 2019-10-28

3.8 - KTC test report N° T2021-12912, T2021-12913 and T2021-12914, dated 07 Dec 2021.

4. APPLICATION / LIMITATION :

4.1 - According to BV Rules for the Classification of Steel Ships and IEC 60947 specifications.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.

4.4 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev8.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above products are to be supplied by **LS ELECTRIC CO.,LTD** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **LS ELECTRIC CO.,LTD** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **LS ELECTRIC CO.,LTD** has declared to Bureau Veritas the following production site(s):

LS ELECTRIC CO.,LTD
95, Baekbong-ro
Heungdeok-gu
28439 Cheongju (Chungbuk)
KOREA (REPUBLIC OF)

6. MARKING OF PRODUCT :

According to IEC 60947 specifications.

7. OTHERS :

7.1 - It is **LS ELECTRIC CO.,LTD's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No. 19701/C1 BV issued on 22 Jun 2020 by the Society.

*** END OF CERTIFICATE ***



www.npower.com.vn

Tài liệu được tổng hợp bởi đội ngũ kỹ thuật của **NPOWER**

Bản quyền nội dung thuộc về **LS Electric**

Powered by **NAVITECH** | www.navitech.co



www.npower.com.vn

Tài liệu được tổng hợp bởi đội ngũ kỹ thuật của **NPOWER**

Bản quyền nội dung thuộc về **LS Electric**

Powered by **NAVITECH** | www.navitech.co