



Marine & Offshore

Certificate number: 71232/A1 BV

File number: MPA2201403

Product code: 2633H

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

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**SCHNEIDER ELECTRIC INDUSTRIES SAS - ELECTROPOLE 38EQI**  
EYBENS - FRANCE

*for the type of product*

**CIRCUIT BREAKERS (LOW VOLTAGE)**

Moulded-Case Circuit-Breakers (AC and DC)

ComPacT NSX 100-630

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships, Offshore Units, Naval Ships and Yachts.  
IEC 60947-1 (2014), 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: 28 Nov 2027**

**For Bureau Veritas Marine & Offshore,**

At BV LYON, on 25 Feb 2025,

Yann Krempelwicz

***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: <https://www.veristarp.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=snzav3dyww>

BV Mod. Ad.E 530 June 2017

This certificate consists of 6 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

#### AC Circuit-breakers ComPacT:

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b>   |                  | <b>NSX 100</b>  |
|---|------------------|---|
| Maximum rated current (A) at 40°C   | In               | 100   |
| Maximum Rated operational voltage (V)   | Ue               | 690   |
| Rated insulation voltage (V,ac)   | Ui               | 800   |
| Rated Operational Frequency (Hz)  | /                | 50/60   |
| No. of poles  | /                | 2, 3 and 4  |
| Rated ultimate Short Circuit breaking capacity (kA) 50/60 Hz,<br>240V<br>415V<br>440V<br>500V<br><br>525V<br>550V<br>690V | Icu/Ver.         | 40/B, 85/F, 90/N, 100/H, 120/S, 150/L, 200/R<br>25/B, 36/F, 50/N, 70/H, 100/S, 150/L, 200/R<br>20/B, 35/F, 50/N, 65/H, 90/S, 130/L, 200/R<br>15/B, 25/F, 36/N, 50/H, 65/S, 70/L, 80/R, 85/HB1,<br>100/HB2<br>22/F, 35/N/H, 40/S, 50/L, 65/R, 80/HB1, 100/HB2<br>10/F/N, 15/H, 20/S, 35/L,<br>8/F, 10/N/H, 15/S, 20/L, 45/R, 75/HB1, 100/HB2 |
| Rated service Short Circuit breaking capacity (kA) 50/60 Hz   | Ics              | 100% of Icu<br>- Excepted NSX100, B version at 500V and F versions at 500, 525, 690V for which Ics=50% Icu<br>- Excepted for NSX100, S and L versions at 690V for which Ics =10 kA  |
| Rated Impulse Withstand voltage (kV)  | Uimp             | 8   |
| Selectivity Category  | /                | A   |
| Release type  | Thermal-Magnetic | TM16D to 100D (16 to 100A)<br>TM16G to 100G   |
|   | Magnetic         | MA 2.5 to 100 (2.5 to 100A)   |
|   | Electronic       | MicroLogic 2.2 (40, 100A)<br>MicroLogic 5.2A, 5.2 E, 6.2A, 6.2E (40 to 100A)  |

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b>   |                  | <b>NSX 160</b>  |
|---|------------------|---|
| Maximum rated current (A) at 40°C   | In               | 160   |
| Maximum Rated operational voltage (V)   | Ue               | 690   |
| Rated insulation voltage (V,ac)   | Ui               | 800   |
| Rated Operational Frequency (Hz)  | /                | 50/60   |
| No. of poles  | /                | 2, 3 and 4  |
| Rated ultimate Short Circuit breaking capacity (kA) 50/60 Hz,<br>240V<br>415V<br>440V<br>500V<br><br>525V<br>550V<br>690V | Icu/Version      | 40/B, 85/F, 90/N, 100/H, 120/S, 150/L, 200/R<br>25/B, 36/F, 50/N, 70/H, 100/S, 150/L, 200/R<br>20/B, 35/F, 50/N, 65/H, 90/S, 130/L, 200/R<br>15/B, 30/F, 36/N, 50/H, 65/S, 70/L, 80/R, 85/HB1,<br>100/HB2<br>22/F, 35/N/H, 40/S, 50/L, 65/R, 80/HB1, 100/HB2<br>10/F/N, 15/H, 20/S, 35/L,<br>8/F, 10/N/H, 15/S, 20/L, 45/R, 75/HB1, 100/HB2 |
| Rated service Short Circuit breaking capacity (kA) 50/60 Hz   | Ics              | 100% of Icu<br>Excepted for NSX160, S and L versions at 690V for which Ics =10 kA   |
| Rated Impulse Withstand voltage (kV)  | Uimp             | 8   |
| Selectivity Category  | /                | A   |
| Release type  | Thermal-Magnetic | TM32D to 160D (32 to 160A)<br>TM25G to 160G   |
|   | Magnetic         | MA 25 to 150 (25 to 150A)   |
|   | Electronic       | MicroLogic 2.2 (40 to 160A)<br>MicroLogic 5.2A, 5.2E, 6.2A, 6.2E (40 to 160A)   |

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b>   |                      | <b>NSX 250</b>  |
|---|----------------------|---|
| Maximum rated current (A) at 40°C   | In                   | 250   |
| Maximum Rated operational voltage (V)   | Ue                   | 690   |
| Rated insulation voltage (V,ac)   | Ui                   | 800   |
| Rated Operational Frequency (Hz)  | /                    | 50/60   |
| No. of poles  | /                    | 2, 3 and 4  |
| Rated ultimate Short Circuit breaking capacity (kA) 50/60 Hz,<br>240V<br>415V<br>440V<br>500V<br><br>525V<br>550V<br>690V | Icu/Version          | 40/B, 85/F, 90/N, 100/H, 120/S, 150/L, 200/R<br>25/B, 36/F, 50/N, 70/H, 100/S, 150/L, 200/R<br>20/B, 35/F, 50/N, 65/H, 90/S, 130/L, 200/R<br>15/B, 30/F, 36/N, 50/H, 65/S, 70/L, 80/R, 85/HB1,<br>100/HB2<br>22/F, 35/N/H, 40/S, 50/L, 65/R, 80/HB1, 100/HB2<br>10/F/N, 15/H, 20/S, 35/L,<br>8/F, 10/N/H, 15/S, 20/L, 45/R, 75/HB1, 100/HB2 |
| Rated service Short Circuit breaking capacity (kA) 50/60 Hz   | Ics                  | 100% of Icu<br>Excepted for NSX250, S and L versions at 690V for<br>which Ics = 10 kA   |
| Rated Impulse Withstand voltage (kV)  | Uimp                 | 8   |
| Selectivity Category  | /                    | A   |
| Release type  | Thermal-<br>Magnetic | TM63D to 250D (63 to 250A)<br>TM160G to 250G  |
|   | Magnetic             | MA 100 to 220 (100 to 220A)   |
|   | Electronic           | MicroLogic 2.2 (40 to 250A)<br>MicroLogic 5.2A, 5.2E, 6.2A, 6.2 E (40 to 250A)  |

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b>   |             | <b>NSX 400</b>  |
|---|-------------|---|
| Maximum rated current (A) at 40°C   | In          | 400   |
| Maximum Rated operational voltage (V)   | Ue          | 690   |
| Rated insulation voltage (V,ac)   | Ui          | 800   |
| Rated Operational Frequency (Hz)  | /           | 50/60   |
| No. of poles  | /           | 3 and 4   |
| Rated ultimate Short Circuit breaking capacity (kA) 50/60 Hz,<br>240V<br>415V<br>440V<br>500V<br><br>525V<br>550V<br>690V | Icu/Version | 40/F, 85/N, 100/H, 120/S, 150/L, 200/R<br>36/F, 50/N, 70/H, 100/S, 150/L, 200/R<br>30/F, 42/N, 65/H, 90/S, 130/L, 200/R<br>25/F, 30/N, 50/H, 65/S, 70/L, 80/R, 85/HB1,<br>100/HB2<br>20/F, 22/N, 35/H, 40/S, 50/L, 65/R, 80/HB1,<br>100/HB2<br>20/F/N, 22/H, 35/S, 40/L<br>10/F, 10/N, 20/H, 25/S, 35/L, 45/R, 75/HB1,<br>100/HB2 |
| Rated service Short Circuit breaking capacity (kA) 50/60 Hz,<br><br>525V<br>550V<br>690V                                  | Ics         | 100% of Icu<br>excepted NSX400, F/N/H/S/L versions at 525, 550,<br>690V for which Ics=<br>10/F, 11/N/H, 12/S/L<br>10/F/N/L, 11/H, 9/S,<br>10/F/N/H, 12/S/L  |
| Rated Impulse Withstand voltage (kV)  | Uimp        | 8   |
| Selectivity Category  | /           | A   |
| Release type  | Electronic  | MicroLogic 2.3 (250, 400A)<br>MicroLogic 1.3-M (320A)<br>MicroLogic 5.3A, 5.3E, 6.3A, 6.3E (400A)   |

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b>   |             | <b>NSX 630</b>  |
|---|-------------|---|
| Maximum rated current (A) at 40°C   | In          | 630   |
| Maximum Rated operational voltage (V)   | Ue          | 690   |
| Rated insulation voltage (V,ac)   | Ui          | 800   |
| Rated Operational Frequency (Hz)  | /           | 50/60   |
| No. of poles  | /           | 3 and 4   |
| Rated ultimate Short Circuit breaking capacity (kA) 50/60 Hz,<br>240V<br>415V<br>440V<br>500V<br><br>525V<br>550V<br>690V | Icu/Version | 40/F, 85/N, 100/H, 120/S, 150/L, 200/R<br>36/F, 50/N, 70/H, 100/S, 150/L, 200/R<br>30/F, 42/N, 65/H, 90/S, 130/L, 200/R<br>25/F, 30/N, 50/H, 65/S, 70/L, 80/R, 85/HB1,<br>100/HB2<br>20/F, 22/N, 35/H, 40/S, 50/L, 65/R, 80/HB1,<br>100/HB2<br>20/F/N, 22/H, 35/S, 40/L<br>10/F, 10/N, 20/H, 25/S, 35/L, 45/R, 75/HB1,<br>100/HB2 |
| Rated service Short Circuit breaking capacity (kA) 50/60 Hz,<br><br>525V<br>550V<br>690V                                  | Ics         | 100% of Icu<br>excepted NSX630, F/N/H/S/L versions at 525, 550,<br>690V for which Ics=<br>10/F, 11/N/H, 12/S/L<br>10/F/N/L, 11/H, 9/S,<br>10/F/N/H, 12/S/L  |
| Rated Impulse Withstand voltage (kV)  | Uimp        | 8   |
| Selectivity Category  | /           | A   |
| Release type  | Electronic  | MicroLogic 2.3 (250 to 630A)<br>MicroLogic 1.3- M (320, 500A)<br>MicroLogic 5.3A, 5.3E, 6.3A, 6.3E (400, 630A)  |

**DC Circuit-breakers ComPacT:**

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b> |                      | <b>NSX 100 DC<br/>NSX 160 DC<br/>NSX 250 DC</b>             |
|---|----------------------|---|
| Maximum rated current (A) at 40°C                                 | In                   | 100, 160, 250   |
| Maximum Rated operational voltage (V)                             | Ue                   | 750   |
| Rated insulation voltage (V,ac)                                   | Ui                   | 750   |
| Rated Impulse Withstand voltage (kV)                              | Uimp                 | 8   |
| No. of poles  |                      | 3, 4  |
| Rated ultimate Short Circuit breaking capacity (kA),              | Icu/Ver.             | 100/S   |
| Rated service Short Circuit breaking capacity (kA),               | Ics                  | 100% of Icu   |
| Selectivity Category  | /                    | A   |
| Release type  | Thermal-<br>Magnetic | TM-D (16 to 63A)<br>TM-DC (80 to 250A)<br>TM-G (16 to 250A) |

| <b>Moulded Case Circuit Breaker (MCCB)<br/>Specification/Type</b> |                      | <b>NSX 400 DC<br/>NSX630 DC</b> |
|---|----------------------|---------------------------------|
| Maximum rated current (A) at 40°C                                 | In                   | 400, 600                        |
| Maximum Rated operational voltage (V)                             | Ue                   | 750                             |
| Rated insulation voltage (V,ac)                                   | Ui                   | 750                             |
| Rated Impulse Withstand voltage (kV)                              | Uimp                 | 8                               |
| No. of poles  |                      | 3, 4                            |
| Rated ultimate Short Circuit breaking capacity (kA),              | Icu/Ver.             | 36/F<br>100/S                   |
| Rated service Short Circuit breaking capacity (kA),               | Ics                  | 100% of Icu                     |
| Selectivity Category  | /                    | A                               |
| Release type  | Thermal-<br>Magnetic | TM-DC (250 to 600A)             |

**2. DOCUMENTS AND DRAWINGS:**

Catalog N° LVPED221001EN, dated Dec 2021.

Catalog N° LVPED221002EN, dated Apr 2022.

**3. TEST REPORTS:****LCIE-Laboratoire Central des Industries Electriques:**

CB Scheme N° FR\_711873/M1, dated 28 Oct 2021.

- Test report N° 2011990037, dated 02 Mar 2021.

- Test report N° 2011990037-A1, dated 20 Aug 2021.

CB Scheme N° FR\_711869/M1, dated 29 Oct 2021.

- Test report N° 2011990035, dated 25 Feb 2021.

- Test report N° 2011990035-A1, dated 20 Aug 2021.

CB Scheme N° FR\_711867, dated 05 Aug 2021.

- Test report N° 2011990039, dated 04 Mar 2021.

CB Scheme N° FR\_711871/M1, dated 28 Oct 2021.

- Test report N° 2011990036, dated 11 Mar 2021.

- Test report N° 2011990036-A1, dated 20 Aug 2021.

CB Scheme N° FR\_711863, dated 05 Aug 2021.

- Test report N° 2011990038, dated 04 Mar 2021.

CB Scheme N° FR\_711870/M1, dated 28 Oct 2021.

- Test report N° 2011990033, dated 11 Mar 2021.

- Test report N° 2011990033-A1, dated 20 Aug 2021.

**Zhejiang Fangyuan Test Group Co., Ltd.:**

Test reports N° 2111939009 and 2111939010, dated 15 Dec 2021.

**VOLTA Centre d'essais-Station d'essais à grande puissance:**

Test report N° SPEC22AA6541\_V4, dated 27 Jun 2023.

Test report N° SPEC22AA6560\_V3, dated 27 Jun 2023.

Test report N° SPEC23AA0317\_V1, dated 28 Jun 2023.

Test report N° SPEC23AA0313\_V1, dated 29 Jun 2023.

Test report N° SPEC23AA0715\_V1, dated 29 Jun 2023.

Test report N° SPEC23AA0761\_V2, dated 29 Jun 2023.

Test report N° SPEC23AA1367\_V1, dated 29 Jun 2023.

Test report N° SPEC23AA0279\_V2, dated 30 Jun 2023.

Test report N° SPEC23AA0972\_V1, dated 30 Jun 2023.

Test report N° SPEC23AA4978\_V1, dated 30 Jun 2023.

Test report N° SPEC22AA0287\_v3, dated 12 Jul 2023.

Test report N° SPEC23AA0651\_v3, dated 12 Jul 2023.

Test report N° SPEC23AA0652\_v3, dated 12 Jul 2023.

Test report N° SPEC22AA6687\_v3, dated 12 Jul 2023.

Test report N° SPEC22AA6689\_v3, dated 12 Jul 2023.

Test report N° SPEC22AA6690\_v3, dated 12 Jul 2023.

**4. APPLICATION / LIMITATION:**

4.1 - According to BV Rules for the Classification of Steel Ships, Offshore Units, Naval Ships and Yachts.

4.2 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 9.

**5. PRODUCTION SURVEY REQUIREMENTS:**

5.1 - The above products are to be supplied by **SCHNEIDER ELECTRIC INDUSTRIES SAS - ELECTROPOLE 38EQI** 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 - **SCHNEIDER ELECTRIC INDUSTRIES SAS - ELECTROPOLE 38EQI** 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, **SCHNEIDER ELECTRIC INDUSTRIES SAS - ELECTROPOLE 38EQI** has declared to Bureau Veritas the following production sites:

**For NSX 100-250:**

**Schneider Electric Industries Polska Sp. z o.o.  
ul. Mostowa 19  
32-332 BUKOWNO  
POLAND**

**For NSX 400-630:**

**Schneider Electric Industrie Italia S.P.A  
CORSO ITALIA 113  
80020 CASAVATORE -NA  
ITALY**

**For NSX 100-630:**

**Schneider (Beijing) Low Voltage Co., Ltd.  
No. 2, Liang Shui He 2nd Street  
Beijing Economic and Technological Development Area  
100176 Beijing  
CHINA**

**6. MARKING OF PRODUCT:**

According to IEC60947 specifications.

**7. OTHERS:**

7.1 - It is **SCHNEIDER ELECTRIC INDUSTRIES SAS - ELECTROPOLE 38EQI**'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 N° 71232/A0 BV issued by the Society.

**\*\*\* END OF CERTIFICATE \*\*\***