



# TYPE APPROVAL CERTIFICATE

Certificate no.:  
**TAE00004K8**  
Revision No:  
**2**

**This is to certify:**  
**that the Circuit Breaker**

with type designation(s)  
**ComPacT "NSX 100 to 630"**

issued to  
**Schneider Electric Industries SAS**  
**Eybens, France**

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

## Application:

**Products approved by this certificate are accepted for installation on all vessels classed by DNV.**

**Rated voltage (V) Up to 690 AC, 750 DC**  
**Rated current (A) 100 - 630**

Issued at **Høvik** on **2024-09-27**

for **DNV**

This Certificate is valid until **2027-11-26**.  
DNV local unit: **France CMC**

Approval Engineer: **Qiang William Guo**

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

Circuit breaker including accessories\* with the following data:

### AC Circuit Breakers

NSX100 -160 -250									
Rated insulation voltage (V)	800								
Rated operational voltage AC (V)	690								
Rated Current (A)	100 - 250								
Rated Frequency Hz	50/60								
Number of poles	3P/4P								
Rated Service Short-circuit Breaking capacity (kA) Ics	B	F	N	H	S	L	R	HB1	HB2
660 / 690 V	-	4	10	10	10	10	45	75	100
500 V	7.5*	12.5*	36	50	65	70	80	85	100
440 V	20	35	50	65	90	130	200	-	-
380 / 415 V	25	36	50	70	100	150	200	-	-
220 / 240 V	40	85	90	100	120	150	200	-	-
Rated Ultimate Short-circuit Breaking capacity (kA) Icu									
660 / 690 V	-	8	10	10	15	20	45	75	100
500 V	15	25	36	50	65	70	80	80	100
440 V	20	35	50	65	90	130	200	-	-
380 / 415 V	25	36	50	70	100	150	200	-	-
220 / 240 V	40	85	90	100	120	150	200	-	-
Selectivity category	A								

\* Only for NSX100

NSX400 - 630									
Rated insulation voltage (V)	800								
Rated operational voltage AC (V)	690								
Rated Current (A)	400 - 630								
Rated Frequency Hz	50/60								
Number of poles	3P/4P								
Rated Service Short-circuit Breaking capacity (kA) Ics	F	N	H	S	L	R*	HB1*	HB2*	
660 / 690 V	10	10	10	12	12	45/12*	75/19*	100/25*	
500 V	25	30	50	65	70	80	85	100	
440 V	30	42	65	90	130	200	-	-	
380 / 415 V	36	50	70	100	150	200	-	-	
220 / 240 V	40	85	100	120	150	200	-	-	
Rated Ultimate Short-circuit Breaking capacity (kA) Icu									
660 / 690 V	10	10	20	25	35	45	75	100	
500 V	25	30	50	65	70	80	85	100	
440 V	30	42	65	90	130	200	-	-	
380 / 415 V	36	50	70	100	150	200	-	-	
220 / 240 V	40	85	100	120	150	200	-	-	
Selectivity category	A								

\* Values for CB's with Ir 501 – 630 A

DC circuit breakers

	NSX100				NSX160				NSX250	
Rated insulation voltage (V)	750									
Rated operational voltage DC (V)	250-750								750	
Rated Current (A)	100				160				250	
Number of poles	1P/2P 3P/4P	1P	1P/2P	2P 3P/4P	1P/2P 3P/4P	1P	1P/2P	2P 3P/4P	3P/4P	3P/4P
Rated Service Short-circuit Breaking capacity (kA) Ics	F	N	M	S	F	N	M	S	F	S
750 V (3P*)	36	-	-	100	36	-	-	100	36	100
500 V (2P*)	36	-	85	100	36	-	85	100	36	100
250 V (1P*)	36	50	85	100	36	50	85	100	36	100
24-125 V (1P*)	36	50	85	100	36	50	85	100	36	100
Rated Ultimate Short-circuit Breaking capacity (kA) Icu										
750 V (3P*)	36	-	-	100	36	-	-	100	36	100
500 V (2P*)	36	-	85	100	36	-	85	100	36	100
250 V (1P*)	36	50	85	100	36	50	85	100	36	100
24-125 V (1P*)	36	50	85	100	36	50	85	100	36	100
Selectivity category	A									

\* Number of poles in series taking part in current interruption.

	NSX400		NSX630			
Rated insulation voltage (V)	750					
Rated operational voltage DC (V)	750		750		500	
Rated Current (A)	250-320-400		500-600			
Number of poles	3P/4P		3P/4P			
Rated Service Short-circuit Breaking capacity (kA) Ics	F	S	F	S	F	S
750 V (3P*)	36	100	36	100	36	100
500 V (2P*)	36	100	36	100	36	100
250 V (1P*)	36	100	36	100	36	100
24-125 V (1P*)	36	100	36	100	-	-
Rated Ultimate Short-circuit Breaking capacity (kA) Icu						
750 V (3P*)	36	100	36	100	36	100
500 V (2P*)	36	100	36	100	36	100
250 V (1P*)	36	100	36	100	36	100
24-125 V (1P*)	36	100	36	100	-	-
Selectivity category	A					

\* Number of poles in series taking part in current interruption.

**Name and place of manufacturer**

Schneider Electric Industries Polska Sp z.o.o. Bukowno Poland	Schneider (Beijing) Low Voltage Beijing China
Schneider Electric Industrie Italia S.P.A. Napoli Italy	

## Application/Limitation

Shall be installed and tested according to Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' 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 up to 690 V AC.

## Type Approval documentation

Technical info:

ComPact NSX & NSXm, Catalog 2022

ComPact NSX - ComPact INS / INV - MasterPacT NW: DC - DC PV - DC EP, Catalog 2022

"Introduction and performance of Compact NSX circuit breakers from 100 to 630 A" part of catalogue from Schneider. Schneider Catalogue 2008 "Compact NSX Moulded case circuit breakers from 100A to 630A", (parts). "CIRCUIT BREAKER ACCESSORIES", part of email dated 2009-10-28.

Certificates:

LCIE certificate nos. FR\_711870/M1 issued 2021-10-29

LCIE certificate nos. FR\_711871/M1 issued 2021-10-28

LCIE certificate FR\_711869/M1 issued 2021-10-29

LCIE certificate FR\_711873/M1 issued 2021-10-28

LCIE certificate FR\_711863 issued 2021-08-05

LCIE certificate FR\_711867 issued 2021-08-05

LCIE certificate FR\_711868 issued 2021-08-05

Test reports:

LCIE test reports nos. 2011990033 / 2011990033-A1 issued 2021-03-11 / 2021-08-20

LCIE test reports nos. 2011990036 / 2011990036-A1 issued 2021-03-11 / 2021-08-20

LCIE test reports nos. 2011990035 / 2011990035-A1 issued 2021-02-25 / 2021-08-20

LCIE test reports nos. 2011990037 / 2011990037-A1 issued 2021-03-02 / 2021-08-20

LCIE test report nos. 2011990038 issued 2021-03-04

LCIE test report nos. 2011990039 issued 2021-03-04

LCIE test reports nos. 2011990034 issued 2021-03-29

ZFTG test reports nos. 2111939009 issued 2021-12-15

ZFTG test reports nos. 2111939010 issued 2021-12-15

Test report according to IACS E10 Rev.9 Aug. 2023:

Test report nos. SPEC22AA0287\_v3 issued on 2023-07-12

Test report nos. SPEC22AA6687\_v3 issued on 2023-07-12

Test report nos. SPEC22AA6690\_v3 issued on 2023-07-12

Test report nos. SPEC22AA6541\_v4 issued on 2023-06-27

Test report nos. SPEC23AA0651\_v3 issued on 2023-07-12

Test report nos. SPEC23AA0652\_v3 issued on 2023-07-12

Test report nos. SPEC22AA6560\_v3 EMC Test issued on 2023-06-27

Test report nos. SPEC23AA0279\_v2 EMC Test issued 2023-06-30

Test report nos. SPEC22AA6689\_v3 issued on 2023-12-07

Test report nos. SPEC23AA0317\_v1 EMC Test issued on 2023-06-28

Test report nos. SPEC23AA0313\_v1 EMC Test issued on 2023-06-29

Test report nos. SPEC23AA0761\_v2 EMC Test issued on 2023-06-29

Test report nos. SPEC23AA0972\_v1 EMC Test issued on 2023-06-30

Test report nod. SPEC23AA0715\_v1 EMC test issued on 2023-06-29

Test report nos. SPEC23AA1367\_v1 EMC test issued on 2023-06-29

Test report nos. SPEC23AA4978\_v1 EMC test issued on 2023-06-30

## Tests carried out

IEC 60947-2 (including Annex H), sequence 1 and 2, inclination, vibration, cold, dry heat, damp heat, salt mist, EMC immunity test and emission test. IACS E10 Rev.9 Aug 2023

## Marking of product

Schneider Electric – ComPact NSX – type designation – manufacturing place (code date)

## **Periodical assessment**

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval is 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 Routines (RT) checked (if not available tests according to RT to 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 to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE