



CERTIFICATE NUMBER	24-0067741-PDA
EFFECTIVE DATE	10-Oct-2024
EXPIRY DATE	09-Oct-2029
ABS TECHNICAL OFFICE	Hamburg Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

SCHNEIDER ELECTRIC INDUSTRIES SAS

located at

31 RUE PIERRE MENDES FRANCE, EYBENS, , GRENOBLE
CEDEX 9, France, 38050

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: **MasterPacT NW**
Endorsements:
Tier: **2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 09/Oct/2029 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping
Efstratios Maliatsos, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's 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 ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

SCHNEIDER ELECTRIC INDUSTRIES SAS

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GRENOBLE CEDEX 9

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Tier: 2 - PDA Issued

Product: **Circuit Breaker**
Model: **MasterPacT NW**
Endorsements:

Intended Service:
Electrical Installation protection in low voltage circuits.

Description:
Low Voltage Air Circuit Breaker and Switch-disconnector with suffix N1,H1, H2, H3 or L1 (for Circuit-Breaker) and with suffix NA,HA or HF (for Switch-disconnector), fixed or withdrawable type, 3 and 4 poles, suitable for isolation. MasterPacT NW circuit-breakers are equipped with Trip Units Micrologic 2.0A – 5.0A – 6.0A – 7.0A - 2.0E – 5.0E – 6.0E - 5.0P – 6.0P – 7.0P – 5.0H – 6.0H – 7.0H

STRUCTURE OF DESIGNATION

NW 16 N1
I II III

I - Indicates the breaker line
II - Indicates the max current rating 08 through 63 (x100)
III - Indicates the performance levels

N1 – indicates Normal type for Circuit Breaker
H1 – H2 – H3 indicate Heavy duty types for Circuit Breaker
L1 – indicates current Limiting type for Circuit Breaker
NA: indicates Normal type for Switch-disconnector
HA, HF: indicates Heavy duty types for Switch-disconnector

Rating:
Circuit Breaker ratings

NW08-40 : 800A to 4000A – U_{max}=690V
NW40b-63 : 4000A to 6300A – U_{max}=690V
(Refer to the attachment for details)

Switch Disconnector ratings

NW08-40 : 800A to 4000A (AC23A) – U_{max}=690V
NW40b-63 : 4000A to 6300A (AC23A) – U_{max}=690V
(Refer to the attachment for details)

Service Restriction:
- Unit Certification is not required for this product.
- If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006.
- Product is approved for installation in general power distribution zone.

Comments:
1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2) Micrologic Trip units type A, E, P, and H have been assigned with a Category I systems classification in accordance with 4-9-3/7.1 of the Marine Vessels Rules Ed.2019. Accordingly, the following documentation as detailed in 4-9-3/Table 2 is to be kept by the manufacturer and is to be available to ABS upon request:
i) Final Test Reports;

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- ii) Factory Acceptance Test Reports;
- iii) details of any modification of program contents and data and changes of version.

Notes/Drawing/Documentation:

Drawing No. Ratings and Short Circuit Characteristics

ASEFA Certificate of Conformity No.01-46-028-01 dated 07/06/2019

ASEFA Certificate of Conformity No.01-46-028-02 dated 07/06/2019

LCIE IECCE CB SCHEME CERTIFICATE No.FR680619 dated 2015-12-24

ASEFA Certificate of Conformity No.047-03BT dated 2003/11/26

ASEFA Certificate of Conformity No.048-14BT dated 22/05/2014

ASEFA Certificate of Conformity No.049-14BT dated 22/05/2014

ASEFA Certificate of Conformity No.050a-14BT dated 04/06/2014

ASEFA Certificate of Conformity No.051-14BT dated 22/05/2014

ASEFA Certificate of Conformity No.052-14BT dated 22/05/2014

ASEFA Certificate of Conformity No.053-14BT dated 22/05/2014

STIIE TEST REPORT No.AT19-0373-1 dated 2019-05-24

STIIE TEST REPORT No.AT19-0373-2 dated 2019-05-24

catalogue, NT-NW catalogue 2023

TR_2266490.0502_NW EMC IACS E10rev8,

TR_2266478.01_NT-NW_Dry heat IACS E10rev8,

Circuit Breaker

CoC 01-47-318-02 NW-H1-H2-H3-L1-N1 2021-01-06 (ASEFA)

TR_2011990022-02_NW-H1-H2-H3-N1-L1_2020-11-16

TR_AT19-0373-2_NW-H1-H2-H3-L1-N1_2019-05-24

TR_201304204-004_NW-H1-H2-H3-L1-N1_2014-03-10

TR_201403676-001_NW-H1_2014-05-22-3P-4P, TR_201403676-001_NW-H1_2014-05-22

TR_201403676-001_NW-H1_2014-05-22-6P-8P, TR_201403676-001_NW-H1_2014-05-22

CoC 01-47-318-01 NW 6-8P H1-H2 2021-01-06 (ASEFA)

TR_2011990022-01_NW 6-8P H1-H2_2020-11-16

TR_AT19-0373-1_NW 6-8P H1-H2_2019-05-24

Switch Disconnecter

CB-CoC FR 717771 NW-NA-HA 3-4P SSPA-SEA-HYD 2023-10-10

CB-TR 23119Y90039 NW-NA-HA 3-4P SSPA-SEA-HYD 2023-09-28

CB-CoC FFR 717951 M1 NW 3P-4P HF SEA-HYD-SSPA 2024-01-15

CB-TR 23119Y90041 NW 3P-4P HF SEA-HYD-SSPA 2023-11-09

CB-TR 23119Y90041 A1 NW 3P-4P HF SEA-HYD-SSPA 2024-01-12

CB-CoC FR 717756 NW-HA 6-8P SSPA-SEA-HYD 2023-10-10

CB-TR 23119Y90038 NW-HA 6-8P SSPA-SEA-HYD 2023-09-27

Terms of Validity:

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STANDARDS

ABS Rules:

2024 Marine Vessels Rules: 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/5.3.3

2024 Mobile Offshore Unit Rules: 1-1-4/9.7, 1-1-A2, 1-1-A3, 6-1-7/13.1

National:

International:

Circuit Breaker: IEC 60947-2 Ed.5.1 (A1: 2019) in conjunction with IEC 60947-1 Ed. 5.2 (A2:2014)

Switch Disconnector: IEC 60947-3 Ed. 4.0 (2020) in conjunction with IEC 60947-1 Ed. 6.0 (2020)

Government:

NA

EUMED:

NA

OTHERS:

IACS UR E10 Rev.9, (Aug. 2023)

SCHNEIDER ELECTRIC INDUSTRIES SAS (232819),
31 RUE PIERRE MENDES FRANCE, EYBENS , GRENOBLE CEDEX 9, FRANCE, 38050
24-0067741-PDA (MASTERPACT NW)
ISSUE DATE: 10-OCT-2024
EXPIRTION DATE: 09-OCT-2029

CIRCUIT-BREAKER : IEC 60947-2 ELECTRICAL CHARACTERISTICS

Number of poles		3 - 4
Rated insulation voltage	Ui (V)	1000
Impulse withstand voltage	Uimp (kV)	12
Frequency	f (Hz)	50 - 60
Degree of pollution	IEC 60947-1	3
Suitability for isolation	IEC 60947-1	Yes

	Type	In	selectivity categories	Ue	Icu	Ics	Icw
NW 08-40	N1	800A - 1600A	cat. B	220/415/440V 525V 690V	42 kA	42 kA	42kA-1s
	H1	800A - 4000A	cat. B	220/415/440V 525V 690V	65 kA	65 kA	65kA-1s
	H2	800A - 4000A	cat. B	220/415/440V 525V 690V	100 kA 85 kA 85 kA	100 kA 85 kA 85 kA	85kA-1s
	H3	2000 - 4000A	cat. B	220/415/440V 525V 690V	150 kA 130 kA 100 kA	150 kA 130 kA 100 kA	65kA-3s
	L1	800A - 2000A	cat. B	220/415/440V 525V 690V	150 kA 130 kA 100 kA	150 kA 130 kA 100 kA	30kA-1s
NW 40b-63	H1	4000A - 6300A	cat. B	220/415/440V 525V 690V	100 kA	100 kA	100kA-1s
	H2	4000A - 6300A	cat. B	220/415/440V 525V 690V	150 kA 130 kA 100 kA	150 kA 130 kA 100 kA	100kA-1s

SWITCH-DISCONNECTOR : IEC 60947-3 ELECTRICAL CHARACTERISTICS

Number of poles		3 - 4
Rated insulation voltage	Ui (V)	1000
Impulse withstand voltage	Uimp (kV)	12
Frequency	f (Hz)	50 - 60
Degree of pollution	IEC 60947-1	3
Suitability for isolation	IEC 60947-1	Yes

	Type	Ith	Ie AC23A	Ue	Icm	Icw
NW 08-40	NA	800A 1000A 1250A 1600A	800A 1000A 1250A 1600A	690V	88 kÂ	42kA-1s
	HA	800A 1000A 1250A 1600A 2000A 2500A 3200A 4000A	800A 1000A 1250A 1600A 2000A 2500A 3200A 4000A	690V	143 kÂ	65kA-1s
	HF	800A 1000A 1250A 1600A 2000A 2500A 3200A 4000A	800A 1000A 1250A 1600A 2000A 2500A 3200A 4000A	690V	187 kÂ	85kA-1s
NW 40b-63	HA	4000A 5000A 6300A	4000A 5000A 6300A	690V	187 kÂ	85kA-3s