



# EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No:  
**MRE0000010**

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to

**Schneider Electric Industries S.A.S.**  
**Eybens, Isere, France**

for

**Circuit Breakers**

with type designation(s)

**MasterPact "NW 10-20-40 EPDC-D"**

The product is found to comply with

**EU RO Mutual Recognition Technical Requirements for Circuit Breakers**

Intended service

**Circuit breaker for use onboard ship and offshore platforms.**

**Rated Voltage (V) Up to 1100 DC**

**Rated Current (A) 2000 - 4000**

**Frequency (Hz) NA**

## This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This Certificate is valid until **2026-03-17**.

Issued at **Høvik** on **2021-03-18**

DNV local station: **France CMC**

for **DNV**

Approval Engineer: **Nicolay Horn**

.....  
**Marta Alonso Pontes**  
**Head of Section**

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.



Form code: MRTA 201

Revision: 2021-03

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Page 1 of 3

## Product description

DC Circuit breaker including accessories with the following data:

|                                         |       | NW 10 DC |     | NW 20 DC |     | NW 40 DC |     |
|-----------------------------------------|-------|----------|-----|----------|-----|----------|-----|
| Rated insulation voltage AC (V)         |       | 1250     |     |          |     |          |     |
| Rated impulse withstand voltage (kV)    |       | 12       |     |          |     |          |     |
| Rated operational voltage DC (V)        |       | 1100     |     |          |     |          |     |
| Ratedc current (A)                      |       | 1000     |     | 2000     |     | 4000     |     |
| Rated. ultimate break. cap. (KA) Icu    |       | N        | H   | N        | H   | N        | H   |
| L/R = 5 ms                              | 500V  | 85       | 100 | 85       | 100 | 85       | 100 |
|                                         | 750V  | -        | 100 | -        | 100 | -        | 100 |
|                                         | 900V  | -        | 100 | -        | 100 | -        | 100 |
|                                         | 1100V | -        | 100 | -        | 100 | -        | 100 |
| L/R = 15 ms                             | 500V  | 35       | 65  | 35       | 65  | 35       | 65  |
|                                         | 750V  | -        | 65  | -        | 65  | -        | 65  |
|                                         | 900V  | -        | 65  | -        | 65  | -        | 65  |
|                                         | 1100V | -        | 65  | -        | 65  | -        | 65  |
| Rated service break. cap. (KA) Ics %Icu |       | 100      |     |          |     |          |     |
| Rated making cap. (KA) Icm %Icu 15 ms   |       | 100      |     |          |     |          |     |
| Short time withstand current Icw 1 sec  |       | 50       | 65  | 50       | 65  | 50       | 65  |
| Utilization category                    |       | B        |     |          |     |          |     |

## Manufactured by

Schneider Electric France MasterTech  
ZA Centre'alp  
Moirans  
France

## Application/Limitation

Shall be installed and tested according to DNV GL Rules for Classification of Ships, High Speed & Light Craft and DNV GL Offshore Standards. The manufacturer's instructions to be observed.

## Type Approval documentation

## Marking of product

Schneider Electric – Masterpact NW – DC and EPDC type D – manufacturing place (code date)

## Other Conditions

IEC 60947-1 2007 + A1 2010 + A2 2014, IEC 60947-2 2016 + A1 2019, Environmental tests as inclination-, vibration-, cold-, dry heat-, damp heat, salt mist and EMC test.

## 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, 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 annually.

## Generic Statement for EU RO MR Type Approval Certificate

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).

END OF CERTIFICATE