



Certificate No.

IECRE.WE.CC.20.0018-R0

IECRE - IEC System for Certification
to Standards Relating to Equipment
for Use in Renewable Energy
Applications

PROVISIONAL COMPONENT CERTIFICATE

This certificate is issued to

LM Wind Power
Jupitervej 6
6000 Kolding
Denmark

for the component

Rotor blade LM 107 P

wind turbine class (class, standard, year)

unspecific; OD501, ed.2:2018; OD501-1, ed. 1:2017

This certificate attests compliance with IEC 61400 Series as specified in subsequent pages. It is based on the following reference documents:

Design basis evaluation conformity statement
Dated

TÜV NORD Reg.-No.: 44 220 18550174-CDB-IEC, Rev. 0
2018-02-28

Design evaluation conformity statement
Dated

TÜV NORD: IECRE.WE.CS.19.0003-R2
2019-08-09

Provisional type test conformity statement
Dated

TÜV NORD Reg.-No.: 44 220 20482702-PCT-IECRE, Rev. 0
2020-03-24

Manufacturing conformity statement
Dated

TÜV NORD Reg.-No.: 44 220 19482702-CM-IECRE, Rev. 1
2019-07-19

Final evaluation report
Dated

TÜV NORD Report-No.: 8116 482 702 - 20 E, Rev. 0
2020-03-24

The conformity evaluation was carried out in accordance with the rules and procedures of the IECRE System www.iecre.org

The component specification begins on page 2 of this certificate.

Changes in the system design or the manufacturer's quality system are to be approved by the Certification Body. Without approval, the certificate loses its validity.

This certificate is valid until:
2021-03-23

Approved for issue on behalf of the IECRE
Certification Body:



Dipl.-Ing./M.Sc. M. Lange
Deputy/Specialist Manager Wind Energy
Essen, 2020-03-24

TÜV NORD CERT GmbH
Langemarckstraße 20
45141 Essen

Machine parameters :

Design life time: 25 years

Other environmental conditions (where taken into account):

Temperature ranges:

Power Production: -20°C to +50°C

Survival: -20°C to +50°C

Lightning protection system (standard and protection class): IEC 61400-24, ed. 1, LPL Class 1

Interfaces:

Design loads for the component: TR-08879/A4, Rev. A4

Interface assumptions, conditions and requirements: Blade bolt assessment not within scope

Other interface conditions: None

**If not otherwise stated, the certificate holder is the manufacturer.

Blade:

Type: Modular, 2 main I webs (LE and TE); 3rd I web (TE) and C stiffener

Material: Glass fibre reinforced polyester material along with carbon and hybrid fibre, balsa and foam

Blade length: 107 m

Specification: BS-00431/A4, Rev. A4

Main Drawing: DR-08898/A2, Rev. A2

Blade root connection: 216 bushings, M36

Attachments: VGs Mk II, T-Spoiler Mk II

Partial safety factor tower clearance: $\gamma_m = 1.07$

Manuals:

Handling, Service & Maintenance: BM-00367/A1, Rev. A1

Outstanding issues:

Evaluation of fatigue blade test and post fatigue static test

The mass and the deflection of the blade with the serial number #0002 shall be measured after the fatigue test