

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Disconnection Switch**with type designation(s)
QCB-NH1

Issued to

**Wöhner GmbH & Co. KG Elektrotechnische Systeme
Rödental, Germany**

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Hamburg** on **2017-04-13**This Certificate is valid until **2022-05-22**.DNV GL local station: **Augsburg**Approval Engineer: **Harald Amberger**for **DNV GL**

**Duy Nam Le
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.



Product description

Fuse-switch-disconnector for surface and busbar mounting

Conventional free air thermal current Ith:	250 A
Rated operational voltage (Ue):	up to 690 V AC
Rated insulation voltage (Ui):	800 V
Rated impulse withstand voltage (Uimp):	8 kV
Rated frequency:	50/60 Hz
Utilization categories without arc chamber:	AC-21B (690 V, 250 A) AC-22B (400 V, 250 A)
Utilization categories with arc chamber:	AC-22B (690 V, 250 A) AC-23B (500 V, 250 A) AC-23B (690 V, 250 A)
Rated conditional short-circuit current:	80 kA (690 V)

Application/Limitation

Location Classes:

Temperature: B, Humidity: B, Vibration: A

Type Approval documentation

Tests carried out

IEC 60947-1(ed.5):2007, IEC 60947-3 (ed.3.0):2008, Cold, Dry Heat, Damp Heat, Vibration.

Marking of product

Acc. IEC 60947-3 subclause 5.2

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are 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 Routine Tests (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 is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE