DNV·GL

Certificate No:
TAF00001BB

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class A and B Penetration

with type designation(s)
BUSBAR PENETRATION SYSTEM FOR CLASS A-60 BULKHEADS AND DECKS,
Type HK-MG 219 x 168 x 180mm to 219 x 720 x 180mm

Issued to
Shanghai Huoke New Material Co., Ltd.
Shanghai, China

is found to comply with
DNV GL rules for classification – Ships
DNV GL offshore standards

Application :

Approved for use as a busbar penetration system for Schneider Busway (GuangZhou) Limited Guangzhou, China Type I-LINE / Canalis Series B Busway 800A to 5000A in class A-60 steel bulkheads and decks.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2019-10-14**
This Certificate is valid until **2024-10-13**.
DNV GL local station: **Shanghai**

Approval Engineer: **Carsten Hunsalz**

for **DNV GL**

Arne Schaarmann
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.

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Product description

A-60 steel bulkhead and deck penetration for Schneider Busway (GuangZhou) Limited Guangzhou, China Type I-LINE / Canalis Series B Busway 800A to 5000A.

HK-MG is a rectangular busbar penetration system composed of a 5 mm thick 180 mm long steel sleeve welded to the steel bulkhead/deck.

The HK-G type expansion fireproof filler sleeve is filling the remaining space between sleeves and busbar. The HK-M type expansion fireproof sealant of thickness 15 mm is applied on the two ends of the penetration. Both manufactured by Shanghai Huoke New Material Co., Ltd.

The Sleeve shall be fully insulated.

For further details, see drawings in test report listed under Type Approval documentation below.

Application/Limitation

Only the penetration system is covered by this type approval certificate. The busbars itself shall hold a valid Type Approval Certificate.

Approved for Schneider Busway (GuangZhou) Limited Guangzhou, China type I-LINE / Canalis Series B Busway 800A to 5000A in class A-60 steel bulkheads and decks. Other applications are subject to case-by-case approval. Approved for use in class A-0, A-15 and A-30 when the penetration system is insulated as A-60. In addition the division is to be insulated with A-60 insulation at least 200 mm around the penetration.

Only one busbar system per HK-MG sleeve is approved, the busbar system shall be arranged in the center of the sleeve.

The systems must not be installed in bulkheads and decks if water- and gas- tightness is required.

The Schneider busbar system shall include an inner fire stop as tested.

Each product is to be supplied with its manual for installation, use and maintenance.

Type Approval documentation

Test Reports A60 Fire Class:

Far East Fire Testing Centre (FEFTC) No. FT19115, dated 2019-05-29 and FT19116, dated 2019-06-06

Installation Drawing:

No.: C02 2018/7/15 and C03 2018/7/15 for A-60 Bulkhead as included in test report FT19115
J02 2018/7/15 and J03 2018/7/15 for A-60 Deck as included in test report FT19116

Tests carried out

Fire Test acc. 2010 FTP Code, Annex 1: Part 3, IMO Resolution MSC.307(88)

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in DNVGL-CP-0338 Section 4.