



TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB000085D
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Penetrations through "A" class divisions: busbar trunking penetration systems

with type designation(s)

**BUSBAR PENETRATION SYSTEM FOR CLASS A-60 and A-0 BULKHEADS AND DECKS
Roxtec GK Firestop Sealing Kit (GK FS SK) size 127-244**

Issued to

**Roxtec International AB
Karlskrona, Sweden**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 9,**
item No. UK/3.26c. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ. 1488

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-02-06**.

Issued at **London** on **2024-11-08**

DNV local unit:
Sweden CMC



for **DNV UK Ltd.**

Approval Engineer:
Karolina Kusmider

Approved Body No.: **0097**

**Mydlak-Röder, Christine
MER Service Responsible**



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

"The Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

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.

Product description

A-60 and A-0 steel bulkhead and deck penetration for “Schneider Electric Industries S.A.S.” busbar system type KTA 1000-1600, KSA 250-1000 and KNA 63-160.

“GK FS SK sealing kit” consisting of a fiberglass cloth with built in heat activated intumescent material to be wrapped around busbar and fitted into circular or steel pipe sleeves. Folded back on each side with ends sealed off to create a cold smoke tight seal and secured by metal cable ties.

The installation shall be made in symmetrically welded or bolted pipe sleeves.

Installation details according drawing Roxtec No. S1573045 Rev.A and S1572947 Rev.A

Table 1: Approved penetrations in A60 Bulkhead.

Sealing kits for round sleeves	Pipe sleeve depth Min – Max [mm]	Type of penetration	Insulation drawing No.	Arrangement No.
GK FS SK 127-244	105 - 205	KTA1000 - KTA1600 KSA250 - KSA1000 KNA63 - KNA160	S1572947 Rev. A	1
GK FS SK 127-244	105 - 205	No service	S1572947 Rev. A	2

Table 2: Approved penetrations in A60 Deck.

Sealing kits for round sleeves	Pipe sleeve depth Min – Max [mm]	Type of penetration	Insulation drawing No.	Arrangement No.
GK FS SK 127-244	105 - 205	KTA1000 - KTA1600 KSA250 - KSA1000 KNA63 - KNA160	S1572947 Rev. A	3
GK FS SK 127-244	105 - 205	No service	S1572947 Rev. A	4

Table 3: Approved penetrations in A0 Bulkhead.

Sealing kits for round sleeves	Pipe sleeve depth Min – Max [mm]	Type of penetration	Insulation drawing No.	Arrangement No.
GK FS SK 127-244	105 - 205	KTA1000 - KTA1600 KSA250 - KSA1000 KNA63 - KNA160	S1573045 Rev. A	1
GK FS SK 127-244	105 - 205	No service	S1573045 Rev. A	2

Table 4: Approved penetrations in A0 Deck.

Sealing kits for round sleeves	Pipe sleeve depth Min – Max [mm]	Type of penetration	Insulation drawing No.	Arrangement No.
GK FS SK 127-244	105 - 205	KTA1000 - KTA1600 KSA250 - KSA1000 KNA63 - KNA160	S1573045 Rev. A	3
GK FS SK 127-244	105 - 205	No service	S1573045 Rev. A	4

Application/Limitation

Approved for use as a busbar penetration system for Schneider Electric Industries S.A.S. type KTA 1000-1600, KSA 250-1000 and KNA 63-160 in class A-60 and A-0 steel bulkheads and decks.

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

Approved for Schneider busbar system KTA 1000-1600, KSA 250-1000 and KNA 63-160 in class A-60 and A-0 steel bulkheads and decks. Other applications are subject to case-by-case approval. Approved for use in class 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.

The insulation material used has to be approved according to the Marine Equipment Regulation and bear the Mark of Conformity.

Only one busbar system per GK FS SK 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 busbar trunking systems KTA, KSA and KNA shall be constructed in that way, that no smoke can pass through them, at the locations of the bulkhead or deck penetrations.

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

Type Examination documentation

Test Reports A-60 Fire Class:

No. RS-20/B-083/E, dated 2020-04-20; No. PGA11611A, dated 2020-01-11

RS-21/B-242/E, dated 2021-06-30; RS-21/B-445/E, dated 2021-10-07; RS-19/B-255/E, dated 2019-08-20; PGB10113A, dated 2021-07-23; PGB10118A, dated 2021-11-15; RS-19/B-225/E, dated 2019-08-01; RS-19/B-256/E, dated 2019-08-20;

Test Reports A-0 Fire Class:

No. RS-19/B-423/E, dated 2019-11-19; No. PGA11610A, dated 2020-01-10

RS-21/B-240/E, dated 2021-06-30; RS-20/B-081/E, dated 2020-03-31; PGB10110A, dated 2021-04-27; PGB10119A, dated 2021-11-15; RS-21/B-517/E, dated 2021-12-15;

Test Reports Cold Smoke:

Roxtec No. 29092016-01, dated 2016-09-29; No. 22032017-01, dated 2017-03-22; No. 14122016-01, dated 2016-12-14; No. 25042017-01, dated 2017-04-25

Installation Drawing:

Roxtec No. S1573045 Rev.A and S1572947 Rev.A dated 2021-12-01

Tests carried out

- IMO Res. MSC.307(88)-(2010 FTP Code), Annex 1: Part 3,
- MSC.1/Circ. 1488

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire-technical rating, Mark of Conformity (see first page).