

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000085D

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

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 **(EU) 2022/1157**,

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

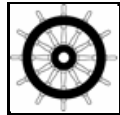
Further details of the equipment and conditions for certification are given overleaf.

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

Issued at **Hamburg** on **2023-02-07**

DNV local unit:
Sweden CMC

Approval Engineer:
Carsten Hunsalz



Notified Body
No.: **0098**

for **DNV GL SE**

**Christine Mydlak-Roeder
Head of Notified 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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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 Directive 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

For identification to this type examination certificate the product or packing is to be marked with:

- Manufacturer's name
- Type designation and fire-technical rating
- Mark of Conformity according to Article 10 of the Council Directive (MED)