



CERTIFICATE NUMBER	20-1969864-PDA
EFFECTIVE DATE	30-Apr-2020
EXPIRY DATE	29-Apr-2025
ABS TECHNICAL OFFICE	Hamburg Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

DELLNER BUBENZER GERMANY GMBH

located at

**FRIEDRICHSHUETTENSTR. 1, D-57548 KIRCHEN-WEHBACH,
Germany**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Brake, Electromagnetic Motor Brake
Model: KFB 5, 10, 16, 25, 30, 40, 63, 100, 160
Endorsements:
Tier: 5 - Unit Certification Required

This Product Design Assessment (PDA) Certificate remains valid until 29/Apr/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Efstratios Maliatsos, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

DELLNER BUBENZER GERMANY GMBH

FRIEDRICHSHUETTENSTR. 1
D-57548 KIRCHEN-WEHBACH
Germany
Telephone: +49-2741-9488-0
Fax: +49-2741-9488-44
Email: info@dellnerbubenzler.com
Web: www.dellnerbubenzler.com

Tier: 5 - Unit Certification Required

Product: Brake, Electromagnetic Motor Brake
Model: KFB 5, 10, 16, 25, 30, 40, 63, 100, 160
Endorsements:

Intended Service:

Brakes for holding and emergency stopping of hoisting and pulling machinery (jacking application) & brakes for jacking gear systems for MODUs/MOUs.

Description:

Spring-set disk brakes of fail safe design for dry run operation via two friction areas, closed by spring forces, operated (opened) by electromagnetic coils whereby provisions are optional made at the brake for manual release.

Rating:

Nom. dyn./ stat. brake torque (Nm): 50 - 1600, reduced brake torques on request.
Standard power supply for coil 110 V/207 V DC, other voltage on request.
Optional anti-condensation heating 230 V AC, manual lever, wear monitoring sensors or speed sensor.
Degree of protection IP 67.
Duty cycle: S1.

Service Restriction:

1. The brakes are to be operated in line with manufacturer's recommendations/manuals.
2. Unit certification is required for this product when used for Jacking applications (2020 MOU 6-1-9/Table 2). However, Unit Certification is not required for this product except for winches installed on facilities with CRC Class Notation.
3. For CRC Class Notation the material is to be certified by the attending Surveyor. Brakes of fail-safe type are to be provided for all winches and are to be effective in stopping and holding the test load. The operation of the brakes is to be demonstrated under simulated loss of power conditions. Refer to 2-6/15, 2-6/5 and 2-5/3.7 of the ABS Guide for Certification of Lifting Appliances.
4. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

The manufacturer has provided a declaration about the control of, or the lack of asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. A01076600-951, Drawing KFB 40, Revision: A, Pages: 1
Drawing No. A01100400-953, Data Sheet KFB (Standard), Revision: F, Pages: 1
Drawing No. A01100402-953, Data Sheet KFB (Increased Torque), Revision: 0, Pages: 1
Drawing No. A01125100-971, Operating Manual KFB, Revision: 8, Pages: 1
Drawing No. A01220000-951, Drawing KFB 160, Revision: A, Pages: 1
Drawing No. A01231001-951, Drawing KFB Tacho, Revision: 0, Pages: 1
Drawing No. A01271600-951, Drawing KFB Hand Lever, Revision: A, Pages: 1
Drawing No. A01275000-951, Drawing KFB 5, Revision: 0, Pages: 1
Drawing No. A01275000-960, Calculation KFB 5 Brake Torque, Springs, Revision: A, Pages: 1
Drawing No. A01275000-961, Calculation KFB 5 Screwed Joint Intermediate Flange, Revision: 0, Pages: 1
Drawing No. A01275010-961, Calculation KFB 5 Screwed Joint Brake Flange, Revision: 0, Pages: 1
Drawing No. A01275020-961, Calculation KFB 5 Adjusting Screw, Revision: 0, Pages: 1
Drawing No. A01275030-961, Calculation KFB 5 Tothing, Revision: 0, Pages: 1

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 29/Apr/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

DELLNER BUBENZER GERMANY GMBH

FRIEDRICHSHUETTENSTR. 1
D-57548 KIRCHEN-WEHBACH
Germany
Telephone: +49-2741-9488-0
Fax: +49-2741-9488-44
Email: info@dellnerbubenzler.com
Web: www.dellnerbubenzler.com

Tier: 5 - Unit Certification Required

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

Marine Vessel Rules 2020: 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/1.17, 4-8-3/Table 2.
Mobile Offshore Units 2020: 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 6-1-1/9, 6-1-1/13, 6-1-1/19, 6-1-1/21, 6-1-1/25.
Guide for Certification of Lifting Appliances 2019: 2-6/5 /15 /19.5 /21.3.

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA