

EU-TYPE EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.
identification number Notified Body 0400,
commissioned by Decree no. 2018-0000125182

Certificate no. : NL20-400-1002-337-01 Revision no.: -

Description of the product : Disc brakes used for Ascending Safety Device and Unintended Car Movement Protection

Trademark, Type : EKER, EKR600

Name and address of the manufacturer : Ekdoksan Dokum Metal Otomotiv San. ve Tic. Ltd. Sti.
9. Sokak No:36, 42300 Selçuklu Konya, Turkey

Name and address of the certificate holder : Ekdoksan Dokum Metal Otomotiv San. ve Tic. Ltd. Sti.
9. Sokak No:36, 42300 Selçuklu Konya, Turkey

Certificate issued on the following requirements : Lifts Directive 2014/33/EU

Certificate based on the following standard : EN 81-20:2020, EN 81-50:2020

Test laboratory : None

Date and number of the laboratory report : None

Date of EU-type examination : Jan. – Sept. 2020

Additional document with this certificate : Report belonging to the EU-type examination certificate
no.: NL20-400-1002-337-01

Additional remarks : None

Conclusion : The safety component meets the requirements of the Lifts Directive 2014/33/EU taking into account any additional remarks mentioned above

Amsterdam

Date : 24-09-2020
Valid until : 24-09-2025

ing. P.J. Peeters
Manager Certification

Certification decision by

Report type-examination

Report belonging to EU-type examination certificate no. : NL20-400-1002-337-01

Date of issue of original certificate : 24-09-2020

Concerns : Safety component

No. and date of revision : -, -

Requirements : Lifts Directive 2014/33/EU
Standards: EN 81-20:2020, EN 81-50:2020

Project no. : P190348

1. General specifications

Name and address manufacturer : Ekdoksan Dokum Metal Otomotiv San. ve Tic. Ltd. Sti.
9. Sokak No:36, 42300 Selçuklu Konya, Turkey

Description of safety component : Ascending Safety Device and Unintended Car Movement Protection

Type : EKR600

Laboratory : -

Address of examined components : 9. Sokak No:36, 42300 Selçuklu Konya, Turkey

Data of examination : Jan. – Sept. 2020

Examination performed by : E. Verkaik

2. Description safety component

The ascending safety device and unintended car movement protection consists of electro-mechanical brakes, acting on one disc brake.

The main pressure plate is split into two and each half functions on the brake disc(s) independently from the other to create redundancy.

The brake torque is fixed and is reached by 10 guided compression springs and shall not be changed in the field. This is indicated at the brake by a decal.

The mounting of the brake disc is at the motor shaft with a splined profile with 18 teeth.

The brakes fulfill the requirements of EN 81-20 and are also used as holding brakes during normal operation of the lift.

The unintended car movement protection must be triggered by a system which fulfills the requirements of EN 81-20 art. 5.11.2.3. The total delays in the system must be small enough to fulfill the demands for stopping distances of EN 81-20 art. 5.6.7.5.

The maximum stopping distance for unintended car movement allowed is depending on the height of the entrances and the length of the apron.

The ascending car overspeed protection shall be actuated by a governor contact or equivalent device fulfilling the requirements of EN 81-20 art. 5.6.6 which was no part of this investigation.

The maximum torque is 2 x 600 Nm and the maximum speed is 160 rpm.

The brakes of EKR600 range are particularly suitable for use with gearless motors and geared machines from EKER ASANSÖR. Table 1 shows the delay times t_{10} , t_{50} and t_{90} during the activation of the disc brake.

Type	t_{10} [ms]	t_{50} [ms]	t_{90} [ms]
EKR600	300	700	1000

See annex 1 for a general overview of the product

3. Examinations and tests

The examination covered a check whether compliance with the Lift Directive 2014/33/EU is met, if possible based on the harmonized product standards EN 81-20:2020 and EN 81-50:2020.

Issues not covered by or not complying these Standards are directly related to the above mentioned essential requirements based on the risk assessment, where applicable with the aid of harmonized A-and B-standards.

The examination included:

- Examination of the technical file (See annex 2).
- Check of performed calculations according to EN 81-50.
- Examination of the representative model in order to establish conformity with the technical file.
- Inspections and tests to check compliance with the requirements.

4. Results

After the final examination the product and the technical file were found in accordance with the requirements. The functional tests passed without remarks. The load tests passed without remarks and did not lead to permanent deformations or loss of stability.

4.1 Calculations

The calculations were found accordance with the requirements.

5. Conditions

Additional to or in deviation of the applicable demands in the considered requirements / standards (see certificate and/or page 1 of this report), the following conditions shall be taken into account:

- The brakes shall fulfill the description that is specified in chapter 2 of this report.
- The maximum tripping speed of the governor contact or similar device that is used to activate the ascending car overspeed protection shall be according EN 81-20 art. 5.6.6.
- The unintended car movement protection must be triggered by a system which fulfills the requirements of EN 81-20 art. 5.11.2.3.

6. Conclusions

Based upon the results of the EU-type examination Liftinstituut B.V. issues an EU-type examination certificate.

The EU-type examination certificate is only valid for products which are in conformity with the same specifications as the type certified product. The certificate is issued based on the requirements that are valid at the date of issue. In case of changes of the product specifications, changes in the requirements or changes in the state of the art the certificate holder shall request Liftinstituut B.V. to reconsider the validity of the certificate.

7. CE marking and EU Declaration of conformity

Every safety component that is placed on the market in complete conformity with the examined type must be provided with a CE marking according to article 18 of the Lift directive 2014/33/EU under consideration that conformity with eventually other applicable Directives is proven. Also every safety component must be accompanied by an EU declaration of conformity according to annex II of the Directive in which the name, address and Notified Body identification number of Liftinstituut B.V. must be included as well as the number of the EU-type examination certificate.

An EU type-certified safety component shall be random checked e.g. according to annex IX of the Lift directive 2014/33/EU before these safety components may be CE-marked and may be placed on the market. For further information see regulation 2.0.1 'Regulations for product certification' on www.liftinstituut.com.

Prepared by:



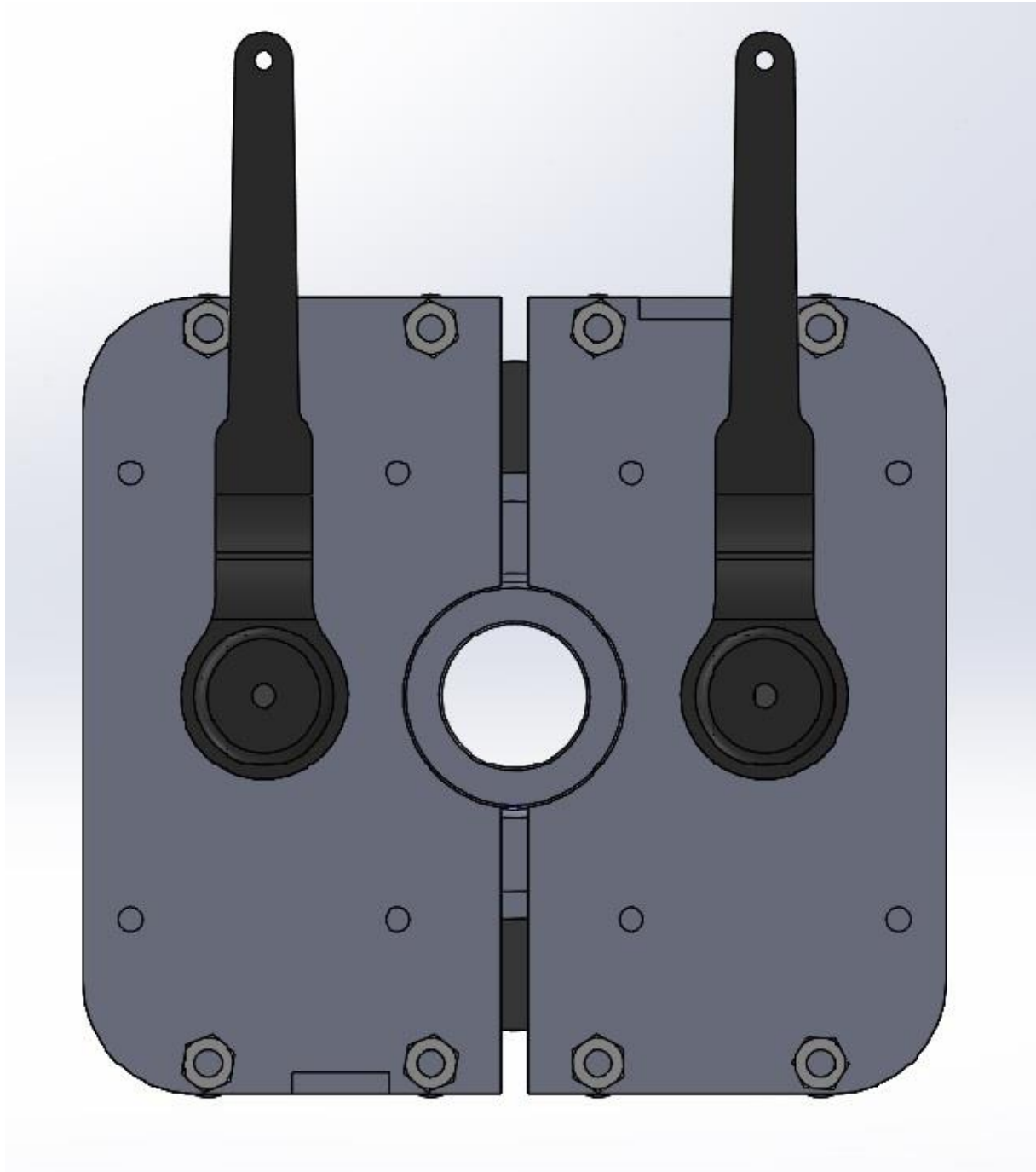
E. Verkaik
Product Specialist Certification
Liftinstituut B.V.

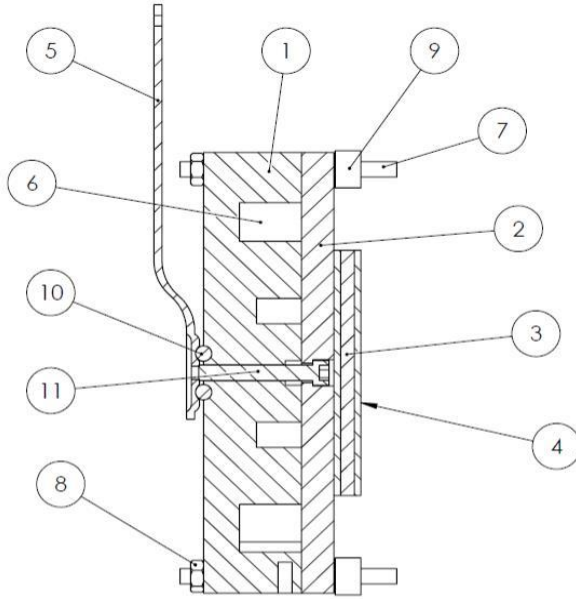
Certification decision by:



Annexes

Annex 1 Basic lay-out





PARÇA NO (PART NUMBER)	PARÇA ADI (PART NAME)	PARÇA ADET (PIECES)
1	GÖVDE(BODY)	1
2	FREN FLANŞ(BRAKE FLANGE)	1
3	ALÜMİNYUM DİSK(ALUMINIUM DISC)	1
4	FREN BALATASI(BRAKE PAD)	2
5	KURTARMA KOLU(RESCUE DEVICE)	1
6	BOBİN(COIL)	1
7	GÖVDE SABİTLEME CIVATASI(BODY FIXING SCREW)	4
8	GÖVDE SABİTLEME SOMUNU(BODY FIXING NUT)	4
9	FREN SABİTLEME PİMİ(BRAKE FIXING PIN)	4
10	KURTARMA KOL BİLYASI(RESCUE DEVICE BEARING)	4
11	KURTARMA KOLU CIVATASI(RESCUE DEVICE SCREW)	1

Annex 2 Documents of the Technical File which were subject of the examination

title	document number	date
EKR-600 TEKNİK DOSYA (EKR-600 TECHNICAL DOCUMENT)	-	-

Annex 3. Reviewed deviations from the standards

EN xx-x par.	Requirement	Accepted design
X.X.X		

Annex 4 Revision of the certificate and its report

Rev.:	Date	Summary of revision
-	24-09-2020	Original