



Industrie Service

EU TYPE-EXAMINATION CERTIFICATE

According to Annex IV, Part A of 2014/33/EU Directive

Certificate No.: EU-OG 264/1

Certification Body of the Notified Body: TÜV SÜD Industrie Service GmbH
Westendstr. 199
80686 Munich – Germany
Identification No. 0036

Certificate Holder: Hans Jungblut GmbH & Co. KG
Ostheimer Straße 171
51107 Köln – Germany

Manufacturer of the Test Sample: Hans Jungblut GmbH & Co. KG
Ostheimer Straße 171
51107 Köln – Germany
(Manufacturer of Serial Production – see Enclosure)

Product: Overspeed governor, detecting and tripping element fixed at the overspeed governor, as a part of the protection device against overspeed for the car moving in upwards direction and tripping element against unintended car movement

Type: GB 160

Directive: 2014/33/EU

Reference Standards: EN 81-20:2014
EN 81-50:2014
EN 81-1:1998+A3:2009
EN 81-2:1998+A3:2009

Test Report: EU-OG 264/1 of 2017-08-25

Outcome: The safety component conforms to the essential health and safety requirements of the mentioned Directive as long as the requirements of the annex of this certificate are kept.

Date of Issue: 2017-08-25

Achim Janocha
Certification Body "lifts and cranes"



**Annex to the EU Type-Examination Certificate
No. EU-OG 264/1 of 2017-08-25**



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1 Scope of application

1.1 Generally

1.1.1 Driving rope

| | |
|-----------------------------------|-------------------------------|
| Category version 1 | Steel wire rope of Drako 250T |
| Category version 2 | Steel wire rope of PAWO 819 W |
| Diameter | 6 – 6.5 mm |
| Minimum breaking load (version 1) | 26.8 – 31.5 KN |
| Minimum breaking load (version 2) | 25.9 – 31.5 KN |

1.1.2 Minimum tension forces (force produced by the tensioning weight, acting on the axis of rope deviating pulley)

| | |
|---|---------|
| Tensioning force determined in the test (New rope and groove) | 816 N |
| Tensile force at minimum tension force | > 300 N |

Retraction of the safety gear in both directions of rotation possible.

The safety component can fulfil three security features (1.2, 1.3 and 1.4).

1.2 Using as an overspeed governor – permissible speeds

| | |
|----------------------------|-----------------|
| Permissible tripping speed | 0.30 – 1.50 m/s |
| Permissible rated speed | ≤ 1.30 m/s |

1.3 Using as a part of the protection device against overspeed for the car moving in upwards direction

The overspeed governor can be used as a part of the protection device against overspeed for the car moving in upwards direction. Monitoring of upward speed will be done by overspeed governor itself and a braking device can be triggered (engaged) via the overspeed governor's electric safety device or mechanically (progressive safety gear).

1.4 Using as a part of the protection device against unintended car movement by an installed anti-creep protection

Using **with** detection system (activation by detection system till a permissible tripping speed according 1.2)

Maximum possible response distance** 118 mm

Maximum response time* of retaining solenoid

| Retaining solenoid - type | LHP035053A67 (Standard) | | LCL040050A23 (Special) | | |
|--|----------------------------|------|---------------------------|------|------|
| | Operating power (VDC) | 24 | 12 | 12 | 24 |
| Rated current (A) | 0.98 | 1.95 | 1.41 | 0.66 | 0.09 |
| Established max. response time* of retaining solenoid (ms) | 91 | 71 | 42 | 39 | 43 |

*Response time: Defined as the difference in time between current drop of the power supply for the solenoid retaining the blocking device and achieving the end position for the activation of the safety gear.

**Response distance: Defined as the max. distance that can be covered by the lift moving away from the landing position after the blocking device has engaged and as caused by delay and/or other distance losses at the overspeed governor until the tensile force has built up.

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2 Terms and Conditions

- 2.1 Discarding condition of the rope
- 26 broken wires within a length of $30 \times d$ or
 - 13 broken wires within a length of $6 \times d$ or
 - a diameter reduction of more than 6% related to the nominal rope diameter d
- 2.2 Above mentioned safety component represents only a part at the protection device against overspeed for the car moving in upwards direction and unintended car movement. Only in combination with a braking respectively detecting component in accordance with the standard, which must be subjected to an own type-examination, can the system created fulfil the requirements for a protection device.
- 2.3 The adjusted tripping speed and the safety switch must be sealed against unauthorized adjustment (safety switch e.g. by colour sealing of the fastening bolts).
- 2.4 Rope deflection optional (but at least 180° angle of wrap).
- 2.5 Retraction of the safety gear in both directions of rotation permissible. The direction is to be marked at the overspeed governor, if design works in down direction only
- 2.6 The triggering of the safety device according 1.4 takes place by interruption of the energy supply to the magnetic coin of anti-creep protection. This is not caused positive mechanically but electrically resp. electromagnetically by interruption of the energy supply to the magnetic coin of anti-creep protection. However, the mechanically engagement of the device has to be absolutely guaranteed after the electrical safety device has responded. In light of the above, the device must be made to engage at regular intervals (e.g. once a day or automatically at each landing) so that the anchor plate can be checked for correct closing (e.g. micro switches resp. proximity switch). If the anchor plate does not perform correctly (anchor fail to close) the lift must be kept at standstill.
- 2.7 If activation of anti-creep according 1.4 will take place by every operational stop of the lift, this activation shall be initiated before car stands still.
- 2.8 The installer of the complete lift must create an examination instruction to fulfil the overall concept of the protection device, add it to the lift documentation and provide any necessary tools or measuring devices, which allow a safe examination (e. g. with closed landing doors).
- 2.9 Fast and safe rescuing of lift passengers must be possible by suitable technical measures under all circumstances. It must be documented in the operation manual of the lift.
- 2.10 The identification drawing 160 – U or GB 160 – U – P with certification stamp dated 2017-08-25 shall be included to the EU type-examination for the identification and information of the general construction and operation and distinctness of the approved type.
- 2.11 The EU type-examination certificate may only be used in combination with the corresponding annex and enclosure (List of authorized manufacturer of the serial production). The enclosure will be updated immediately after any change by the certification holder.

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3 Remarks

- 3.1 Considering the whole protection systems, it is necessary to include time need and impact of build-up the tensile force as well as spread and change over time, perhaps possible distances and/or time delay caused by mechanical deflections.
- 3.2 Possible design variants (also in combination):
- Swinging lever (pendulum) installed in up or down position
 - Switching off prior to achieve the tripping speed (preliminary switch off, optionally with electrical resetting of safety switch)
 - Design with or without remote release
 - Anti creep system with monitoring of rest position
 - Installation suspending in the shaft pit
 - Applying an encoder by shaft out jutting (direct actuation), optionally indirect by belt drive
 - Magnetic switch and inductive proximity switch fitting (mounted side component) possible
 - Design with or without testing groove
 - Mounting position turned through 180° (console for fastening in upper position)
- 3.3 The overspeed governor can also be used to a counterweight in compliance with the permissible tripping speed.
- 3.4 This EU type-examination certificate was issued according to the following standards:
- EN 81-1:1998 + A3:2009 (D), Annex F.4, F.7 and F.8
 - EN 81-2:1998 + A3:2009 (D), Annex F.4 und F.8
 - EN 81-20:2014 (D), part 5.6.2.2.1.7, part 5.6.6.11 and part 5.6.7.13
 - EN 81-50:2014 (D), part 5.4, 5.7 and 5.8

A revision of this EU type-examination certificate is inevitable in case of changes or additions of the above mentioned standards or of changes of state of the art.

**Enclosure to the EU Type-Examination Certificate
No. EU-OG 264/1 of 2017-08-25**

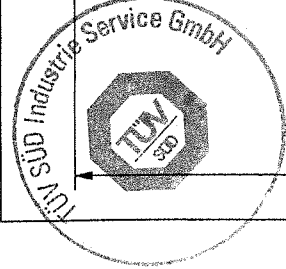


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Authorised Manufacturer of Serial Production – Production Sites (valid from: 2017-08-14):

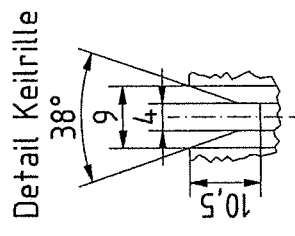
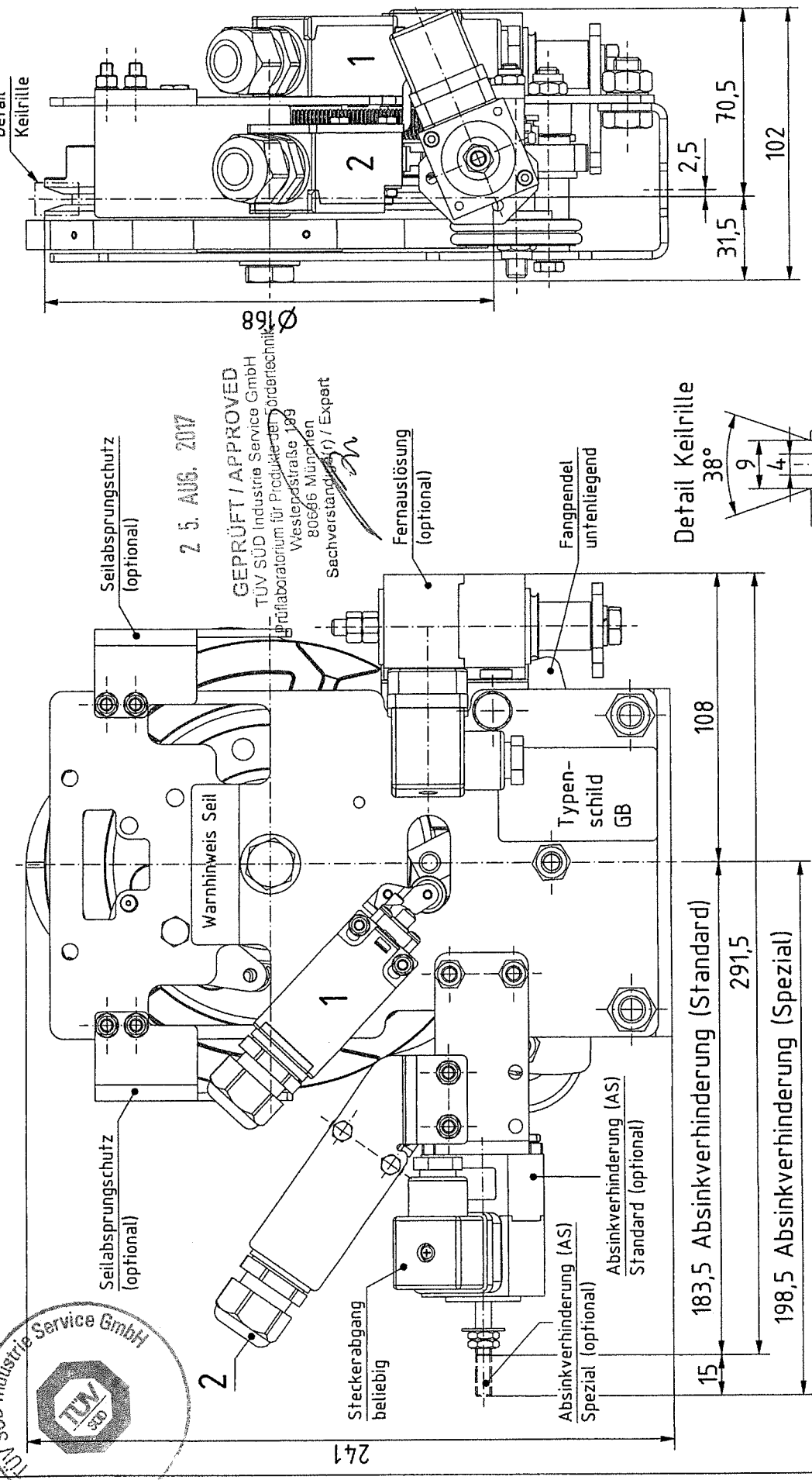
Company Hans Jungblut GmbH & Co. KG
Address Ostheimer Straße 171
51107 Köln – Germany

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2 5. AUG. 2017

GEPRÜFT / APPROVED
 TÜV SÜD Industrie Service GmbH
 Prüflaboratorium für Produktentwerfer / Elektrotechnik
 Westfeldstraße 189
 80866 München
 Sachverständiger / Expert



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GB 160 - U

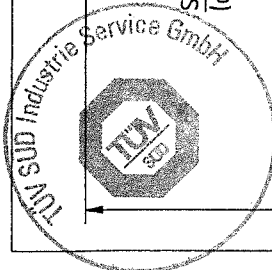
1 = Sicherheitsschalter, rastend oder tastend
 2 = Sicherheitsschalter AS, tastend

Gezeichnet: K. Schmitz (18.08.2017)

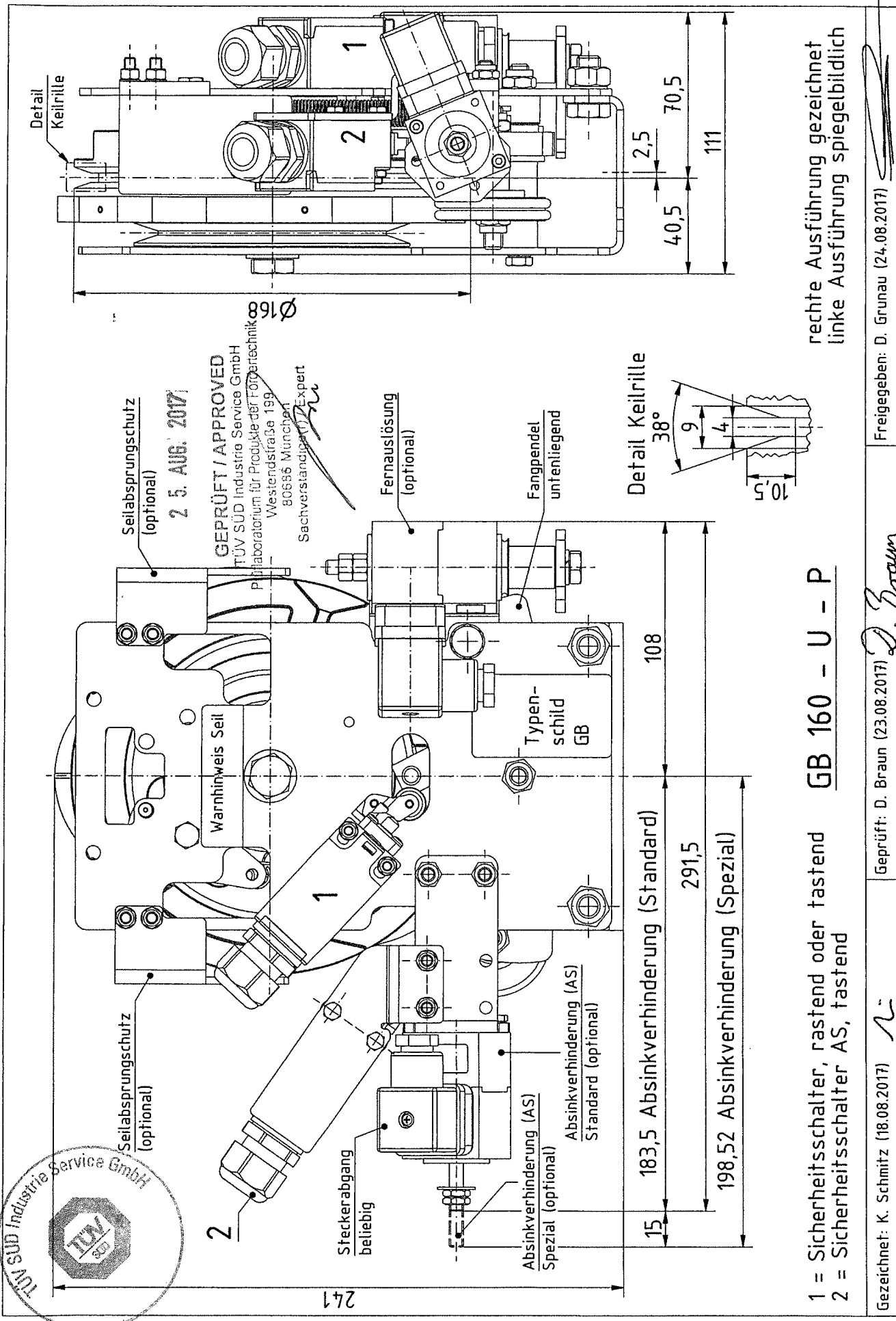
Geprüft: D. Braun (23.08.2017)

Freigegeben: D. Grunau (24.08.2017)

[Signature]



2 5. AUG. 2017
 GEPRÜFT / APPROVED
 TÜV SÜD Industrie Service GmbH
 Prüfaboratorium für Produkte der Fördertechnik
 Westendstraße 199
 80686 München
 Sachverständiger / Expert



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Geprüft: D. Braun (23.08.2017)

Freigegeben: D. Grunau (24.08.2017)

EU-Konformitätserklärung für Sicherheitsbauteile gemäß EU-Aufzugs-Richtlinie 2014/33/EU, Anhang II A

Der Hersteller erklärt, dass ein Konformitätsbewertungsverfahren erfolgreich durchgeführt wurde und die Anforderungen der einschlägigen Harmonisierungsrechtsvorschriften eingehalten wurden.

Beschreibung des Sicherheitsbauteiles: Geschwindigkeitsbegrenzer zur Aktivierung von Fangvorrichtungen an Aufzügen, Regalförderzeugen oder ähnlichen Förder- u. Hebemitteln.

Typ: GB 160

Baujahr: siehe Typenschild Geschwindigkeitsbegrenzer

Das Sicherheitsbauteil entspricht folgenden Vorschriften:

EN 81-1:1998+A3:2009
EN 81-2:1998+A3:2009
EN 81-20:2014 *
EN 81-50:2014 *
2006/42/EG
EN 528:2008

*) gilt nicht für AGB 264

Benannte Stelle Baumusterprüfung: TÜV Süddeutschland Bau und Betrieb GmbH
Zertifizierungsstelle für Aufzüge und Sicherheitsbauteile
Westendstrasse 199, D-80686 München
(Kennnummer: 0036)

Baumusterprüfbescheinigungen: EU-OG 264, AGB 264

Benannte Stelle Produktionsüberwachung: TÜV Rheinland Industrie Service GmbH
Am Grauen Stein, 51105 Köln, Germany
(Kennnummer: 0035)

Benannte Stelle Kontrolle QS-System: wie vor

Ort, Datum/Hersteller-Unterschrift: Köln, 20.04.2016
Angabe zum Unterzeichner:



Geschäftsführer