



Industrie Service

EU-TYPE EXAMINATION CERTIFICATE

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

Certificate No.: EU-OG 233/1

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

Certificate Holder: SLC - SCHLOSSER LUEZAR & CVR S.L.
Pol. Malpica, C/ F, Grupo Quejido, nave 7
50016 Zaragoza – Spain

Manufacturer of the Test Sample: LUEZAR-ECO, S.L.
Pol. Malpica C/ F, Grupo Quejido, nave 69
50016 Zaragoza – Spain
(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: SLC LF 20 _ _

Directive: 2014/33/EU

Reference Standards: EN 81-20:2020
EN 81-50:2020

Test Report: EU-OG 233/1 of 2021-03-01

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: 2021-03-01

Achim Janocha
Notified Body LCC



Annex to the EU-Type Examination Certificate No. EU-OG 233/1 of 2021-03-01



Industrie Service

1 Scope of application

1.1 Generally

1.1.1 Driving rope

| | |
|----------|--------------------------------------|
| Category | Round strand rope made of steel wire |
| Diameter | 6 – 6.5 mm |

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

| Tension forces [N] in test | Tensile forces in | |
|-------------------------------|---------------------------|-------------------------|
| <i>(New rope and groove)</i> | <i>down direction [N]</i> | <i>up direction [N]</i> |
| 602 | 717 | ---- |
| 1203 | 1030 | 442 |

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

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 | 0.43 – 3.15 m/s |
| Permissible rated speed | ≤ 2.74 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

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

Using **without** detection system (activation at each landing)

| | |
|--|----------|
| Max. possible response distance* | 142 mm |
| Theoretical tripping speed by gravitational acceleration | 1.67 m/s |

*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

2 Terms and Conditions

- 2.1 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.
- 2.2 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).
- 2.3 Rope deflection optional (but at least 180° angle of wrap).
- 2.4 Design with protection against lowering

Annex to the EU-Type Examination Certificate No. EU-OG 233/1 of 2021-03-01



Industrie Service

- 2.5 The triggering of the safety device according 1.4 takes place by interruption of the energy supply to the magnetic coil of anti creep protection. This is not caused positive mechanically but electrically resp. electromagnetically by interruption of the energy supply to the magnetic coil 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 each regular landing, so that the anchor plates can be checked for correct closing (e.g. micro switches resp. proximity switch). If the anchor does not perform correctly (anchors fail to close) the lift must be kept at standstill.
- 2.6 Activation of anti-creep according 1.4 will take place by every operational stop of the lift in the way such as activation is initiated before car stands still.
- 2.7 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).
- 2.8 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.
- 2.9 The identification drawing „PG.LF20CA.00E“ including stamp dated 2021-03-01 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.
- 2.10 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.

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):
 - Small and wide design possible
 - Version acting downwards only also possible. The direction of rotation for retracting the safety gear is to be marked at the overspeed governor
 - Optional switching off prior to achieving the tripping speed (preliminary switch off, optionally with electrical resetting of safety switch)
 - Design with or without remote release possible
- 3.3 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 81-20:2020 (D), part 5.6.2.2.1.7, part 5.6.6.11 and part 5.6.7.13
 - EN 81-50:2020 (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 233/1 of 2021-03-01**



Industrie Service

Authorised Manufacturer of Serial Production – Production Sites (valid from: 2021-03-01):

Company LUEZAR – ECO, S.L.
Address Pol. Malpica C/ F, Grupo Quejido, nave 69
50016 Zaragoza – Spain

- END OF DOCUMENT -

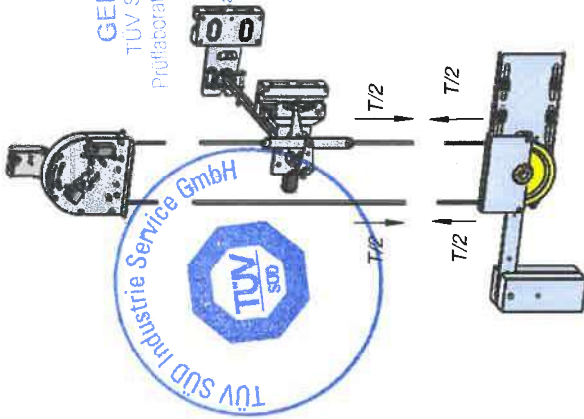
1.- SLC LF 20 CA OVERSPEED GOVERNOR

- The SLC LF 20 CA overspeed governor has been certified under the lift directive 2014/33/EU:
- SLC LF 20 CA overspeed governor is installed in the lift shaft, and it can be placed at the top or at the bottom.
 - It is a centrifugal overspeed governor actuated by a rope, which activates mechanically the safety gears.
 - It can perform in both directions or only in one direction.
 - The tension in the rope is performed by means of a tension pulley and weights.
 - The maximum rope diameter is 6,5mm

General description SLC LF 20 CA
 General assembly instructions SLC LF 20 CA
 Periodic control SLC LF 20 CA

DG.LF20CA.00E
 MM.LF20CA.00E
 CP.LF20CA.00E

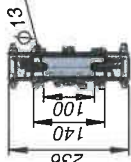
31. MRZ. 2021
GEPRÜFT / APPROVED
 TÜV SÜD Industrie Service GmbH
 Prüflaboratorium für Produkte der Fördertechnik
 Westendstraße 199
 80586 München
 Fachverfahren: 089 30 90 10 10
 M. Neumann
 Fachverfahren: 089 30 90 10 10



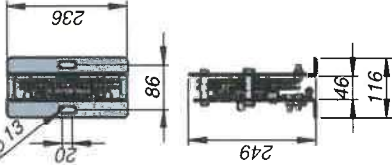
2.- OVERSPEED GOVERNOR ASSEMBLY

- Depending on the car frame type and the shaft configuration, it can be placed:
- With an external support SLC LF 20 CAE.
 - With an internal support SLC LF 20 CAI.
 - Attached to the guide.
 - At the top or at the bottom of the shaft.
 - Standing or upside down.

SLC LF 20 CAI



SLC LF 20 CAE



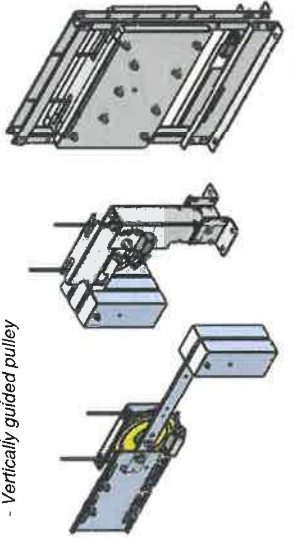
3.- TENSION PULLEY

- Although the overspeed governor SLC LF 20 CA is compatible with the most of the tension pulleys, the following points should be checked:
- The dimensions of the tension pulley should be compatibles with the rope diameter and the overspeed governor disc.
 - It should have a system to detect the rope stretching or breakage in accordance to 5.6.2.2.1.6 c) EN81-20.
 - The tension pulley should keep tensioning force on the rope enough to cause an actuating force in accordance to 5.6.2.2.1.6 c) EN81-20.
- SLC LF 30 CA governor requires the following tensioning forces:

| Tested tensioning force "T" (N) (New rope and groove) | Actuating force | |
|--|-----------------------|---------------------|
| | In down direction (N) | In up direction (N) |
| 602 | 717 | 442 |
| 1203 | 1030 | 442 |

Our tension pulleys compatible with our SLC LF 20 CA overspeed governor are:

- Standard pulley
- Adjustable pulley
- Vertical pulley
- Vertically guided pulley



4.- OVERSPEED GOVERNOR ACTIVATION

- The overspeed governor SLC LF 20 CA include an activating system according to 5.6.2.2.1.5 EN81-20, which causes the opening of the centrifugal masses and the interlocking of the overspeed governor.
- The system can be:
- Manual actuating.
 - Remote actuating.

MANUAL ACTUATING



REMOTE ACTUATING



5.- ELECTRICAL CONTROL

In conformity with point 5.6.2.2.1.6 of EN81-20, the overspeed governor, or another device, shall initiate the stopping of the machine before the car reaches the tripping speed of the governor by means of an electric safety device.

For $V_n > 1m/s$, the device must operate before the tripping speed. This device is called "overspeed switch" which consists of:

- An electromechanical system.
 - An electronic system.
- For $V_n \leq 1m/s$, the device must operate as latest as the moment when the tripping speed of the governor is reached. This function is often carried out by the electrical switch of the steering linkage of the safety gear. But an overspeed switch could be also used.

ELECTRICAL SWITCH



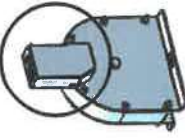
ELECTROMECHANICAL OVERSPEED SWITCH



ELECTRONIC OVERSPEED SWITCH



AD20



6.- ANTI-SLIDING PROTECTION (AD)

Optionally, the overspeed governor can include an anti-sliding protection system as a protection against uncontrolled car movements. This is an electro-mechanical device that locks the overspeed governor when the lift car is stopped. The system performs in both directions (upwards and downwards).

On this overspeed governor only the AD20 system can be used.

AD20 system
 Description
 Instructions
 General drawing

DG.AD20.06E
 MM.AD20.06E
 PG.AD20.02E

| | | | | |
|-------------|------------|--|------------|-----------------------|
| | | Operation: | Revision: | Field of application: |
| | | Formal drawing: | 3 | Verwendungsstadium: |
| Superficie: | ISO 2768-m | Scale / Größe / Dimension: | 16/02/2021 | |
| Checklist: | Formato: | Author / Autor / Diseñador / Designer: | Dibujante | |
| Material: | Formato: | Checked / Revisado / Revisé / Revisé: | I+D | |
| Magasin: | Formato: | Checked / Revisado / Revisé / Revisé: | Producción | |
| SE | A3 | Checked / Revisado / Revisé / Revisé: | Comercial | |
| | | OVERSPEED GOVERNOR SLC LF 20 CA | | |
| | | PG.LF20CA.00E | | |