



EU-TYPE EXAMINATION CERTIFICATE

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

Certificate No.: EU-OG 273-2

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

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

Manufacturer of the Test Sample: LUEZAR-ECO, S.L.
Pol. Malpica C/ F, Grupo Quejido, nave 69
50016 Zaragoza – Spanien
(Manufacturer series production see Enclosure to the EU Type examination certificate)

Product: Overspeed governor, speed detecting and triggering element as part of the safety device for the upward moving car against overspeeding and triggering element against unintended car movement

Type: SLC LM 12 _ _

Directive: 2014/33/EU

Reference Standards: EN 81-20:2020
EN 81-21:2022
EN 81-50:2020

Report: EU-OG 273-2 of 2025-05-12

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

Date of issue: 2025-06-18


Achim Janocha
Notified Body LCC



Annex to the EU-Type Examination Certificate
No. EU-OG273-2 of 2025-06-18



1. Scope of application

1.1 Generally

Overspeed governor, speed detecting and triggering element as part of the safety device for the upward moving car against overspeeding and triggering element against unintended car movement.

1.1.1 Drive Endwise toothed belt acting on a tooth wheel at the car

1.1.2 Toothed belt

Type ISO 13050 R8M

Dimension

Width x height 10.0 x 5.4 mm

Tooth height 3.2 mm

Tooth distance 8.0 mm

Minimum tensile strength ≥ 5415 N

Maximum permissible length 131.1 m

1.1.3 Toothed wheel

Material Polyamide (PA6)

Diameter 70 / 120 mm

1.1.4 Maximum tensioning force of toothed belt 100 N

(Pre-stressing of toothed belt at the fix points in the headroom and pit, or only in the pit, realized by pressure springs)

The tensioning force bases on the normal operation only and refers not to the insert force

1.1.5 Tensile force of the toothed belt respectively tangential force at the tooth wheel after activating the overspeed governor (see remarks point 3.6) 450 – 500 N

1.1.6 Arrangement Lower or upper side of car

1.1.7 Permissible application

The overspeed governor can be used with instantaneous safety gears, progressive safety gears or progressive safety gear including a braking device against overspeed in upwards direction.

Note: The English text is a translation of the German original. In case of any discrepancy, the German version is valid only.

Retraction of the safety gear in both direction of rotation is permissible.

The safety component can fulfil following safety functions (1.2 to 1.4)

1.2 Using as an overspeed governor – permissible speeds

Permissible tripping speed 0.27 – 1.50 m/s

Permissible maximum rated speed 1.00 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.

1.4 Use as an element of the protective device against unintended movement of the car from the landing

Use without detection device (activation at each landing)

1.4.1 Triggering speed and reaction distances

Execution Type AD 12

Maximum possible reaction distance 102.0 mm

Theoretical triggering speed (gravitation) 1.41 m/s*

Reaction path: is the maximum distance that the elevator system can travel from the hall station, after the blocking device is engaged, due to the response delay and/or further loss paths at the speed limiter until the beginning of the build-up of the pulling force.

1.4.2 Related Characteristics Triggering speed and reaction distances

Retaining magnet

Nominal voltage 24 – 190 V DC or 230 V AC

Switch on duration 75 – 100 %

2 Terms and Conditions

2.1 Above mentioned safety component represents only a part at the protection device against over-speed for the car moving in upwards direction. Only in combination with a braking 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 The releasing of the overspeed governor must be carried out by a remote control from outside of the shaft.

2.4 It must be possible to test the engaging force at the operating place of the lift.

2.5 If the overspeed governor is mounted on the lower side of car, for inspection and maintenance the overspeed governor must be available without any risk from the pit (means reachability the lower side of car by a car position, where you can enter or leave the pit riskless).

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- 2.6 The identification drawing „SLC.LM12CD.000“ including stamp dated 2025-05-12 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.
- 2.7 The activation of the safety component according to 1.4 occurs with each operational stop of the lift system in such a way that the activation is initiated when the lift car comes to a standstill.
- 2.8 The installer (elevator system) must create a test instruction for the safety devices of the elevator system(s) in order to fulfill the overall concepts, attach it to the elevator documentation, and keep any necessary tools or measuring devices ready that allow for a safe inspection (e.g. with closed shaft doors).
- 2.9 Suitable technical measures must ensure that a quick and safe rescue of individuals is possible under all conditions, which must be documented in the operating instructions accompanying the elevator.
- 2.10 For identification and information about the fundamental construction and functioning principle and distinction of the tested and approved design, the EU type examination certificate and its annex, the identification drawing with the number SLC.LM12CD000 with proof mark dated 2025-05-12 must be included.
- 2.11 The EU type examination certificate may only be used together with the corresponding annex and the appendix (list of manufacturers in series production). This appendix will be updated according to the information provided by the manufacturer / authorized representative and issued with the new status.

3 Remarks

- 3.1 Changes of characteristics in scope of application over time are not covered by this type examination.
- 3.2 Possible design variants (also in combination):
 - Version acting downwards only also possible. The direction of rotation for retracting the safety gear is to be marked at the overspeed governor.
 - Optional the overspeed governor can be arranged with protection against lowering
- 3.3 The tensioning force of 100 N is fixed, if the switch compensator at the compensator guide is pending (no gap). The distance of switch actuation is about 2 mm.
- 3.4 The toothed wheel, the ratchet disc (= parts of the overspeed governor) and the shaft of the safety gear can be connected with a common center of rotation (the transmission bar passes through the overspeed governor) or by means of a rod (the shaft of the safety gear is positive connected to the ratchet disc). Therefore, the force of toothed belt is to regard as the engaging force acting on the lever of the shaft of the safety gear.
- 3.5 As the overspeed governor and the safety gear are firmly attached acting as one , only one common electrical safety switch is necessary .

The meaning is, based on this common electrical safety switch, the drive will power off if

 - Engaging of safety gear parts not by an overspeed governor or

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➤ Blocking the overspeed governor (e.g. in up direction) not affect the engaging of the safety gear.

- 3.6 The force produced by the friction clutch is adjusted by the manufacturer and is not adjustable at the operating place of the lift.
- 3.7 The overspeed governor can also be used to a counterweight in compliance with the permissible tripping speed.
- 3.8 This EU type-examination certificate was drawn up in accordance with and/or on the basis of the following standards:
- EN 81-20:2020 (D), 5.6.2.2.1.7
 - EN 81-21:2022 (D)
 - EN 81-50:2020 (D), 5.4
- 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.
- 3.9 The TÜV SÜD Industrie Service GmbH Certification Body for Materials Handling Technology is a certification body accredited by DAkkS according to DIN EN ISO 17065. The accreditation is valid only for the scope of accreditation listed in the certificate annex D-ZE-14153-03-00.

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**Enclosure to the EU Type-Examination Certificate
N° EU-OG 273-2 of 2025-06-18**



Industrie Service

Authorised Manufacturer of Serial Production – Production Sites (valid from: 2025-03-14):

Company **LUEZAR-ECO, S.L.**
Adress Pol. Malpica C/ F, Grupo Quejido, nave 69
 50016 Zaragoza – Espagne

END OF DOCUMENT -

BASIS OF WORKING

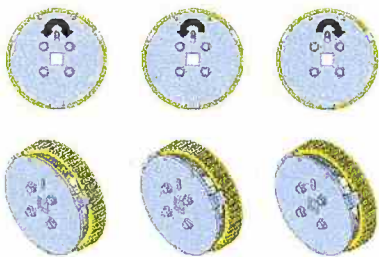
The SLC LM 12 CD overspeed governor, which travels along the lift shaft on the lift car, consists of a toothed disc which engages on a toothed belt arranged along the lift shaft, and fixed in both sides through a tensioner.

The toothed disc is connected through a clutch to the centrifugal masses. The overspeed governor gets operated because of the blockage of the centrifugal masses against the disc, which causes the movement of the safety gear's steering linkage. The clutch allows the toothed disc to keep turning, and restricts the effort on the toothed belt and the linkage while the braking movement of the lift car.

Depending on the parts configuration, the SLC LM12CD overspeed governor can engage in both directions, or only in one direction, and can be used with progressive safety gears, instantaneous safety gears, or a combined system (progressive in down direction and instantaneous in up direction).

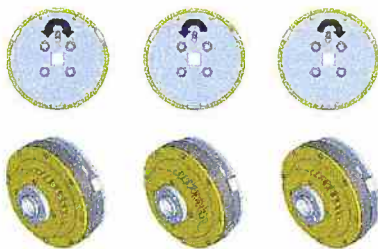
APPLICATIONS

The SLC LM 12 CD overspeed governor can work in a bidirectional way or only in down direction. There are two models, standard or low speed.



STANDARD

BIDIRECTIONAL / ANTICLOCKWISE / CLOCKWISE
SLC.LM12CD.001 / SLC.LM12CD.003 / SLC.LM12CD.002



LOW SPEED

BIDIRECTIONAL / ANTICLOCKWISE / CLOCKWISE
SLC.LM12CD.004 / SLC.LM12CD.006 / SLC.LM12CD.005

OVERSPEED GOVERNOR ASSEMBLY

Depending on the type of installation, the overspeed governor and its peripheral accessories can be assembled in different ways. In the instructions manual MI.LM12CD.00ES, all the delivery, assembly, plugging, adjustment and maintenance operations are explained.

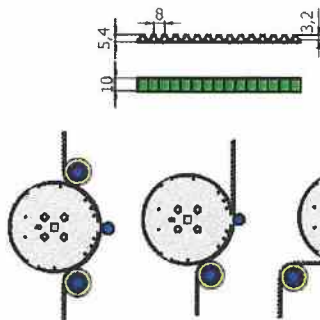


TOOTHED BELT

The toothed belt used is model ISO 13050 R8M with the following features:

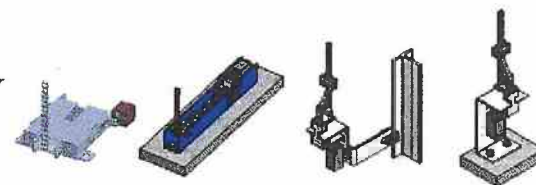
Breaking force: 5415N
Maximum length: 131,1m

The toothed belt can engage on the overspeed governor by using guiding rollers of $\varnothing 50\text{mm}$ and anti-releasing bushes. There should have at least 10 teeth engaged.



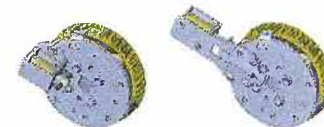
BELT TENSIONERS

On each side of the lift shaft one belt tensioner should be placed, in order to fix the belt to a 100N force, whose stretching is controlled by means of safety switches. These tensioners can be fixed to the roof/ pit or to the guide rail.



REMOTE ACTIVATING

In compliance with point 5.6.2.2.1.4 c) 1) in EN81-20, the overspeed governor has been provided with a remote activating system consisting on an electromagnet which operates on the centrifugal masses and causes the overspeed governor's tripping. This device can be provided assembled on the disc or external.



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.

Option A:

This device is called "overspeed switch" and it is an electronic system.

Option B:

As the maximal rated speed is 1m/s, the safety gear's switch orders the stop of the lift machine when the overspeed governor tripping speed is reached, in compliance with point 5.6.2.2.1.6 a) in EN81-20.



The overspeed governor and the transmission bar are jointly attached, so when the safety gear gets unengaged, the overspeed governor goes back to the working position. Thus, the safety gear witch guarantees the compliance of point 5.6.2.2.1.6 b) in EN81-20.

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)

GEPRÜFT -
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Abteilung Aufzüge und Sicherheitsbauteile
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Der Sachverständige

12. Mai 2025

	Tolerancias: General tolerance: From all tolerances:	Revisions: Revision: Änderung:	02	Aplicación: Field of application: Verwendungsbereich:	LIMITADOR DE VELOCIDAD SLC LM12CD OVERSPEED GOVERNOR SLC LM12CD
	ISO 2768-m	Material: Material: Werkstoff:			
	Superficie: Surface: Oberfläche:	Fecha / Date / Datum:	26/02/2025	Dibujante:	
	Formato: Size: Papierformat:	Revisado: Checked: Geprüft:		Producción:	
S/E A3				Comercial:	
				Dibujos número: Drawing n°: Zeichnung n°:	SLC.LM12CD.000

PLANO GENERAL SLC LM 12 CD
GENERAL DRAFT SLC LM 12 CD

