

### **EU TYPE-EXAMINATION CERTIFICATE**

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

Certificate No.:

**EU-OG 273** 

**Certification Body** of the 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

(Manufacturer of Serial Production -

see Enclosure)

50016 Zaragoza - Spain

**Product:** Overspeed governor, detecting and tripping ele-

ment fixed at the overspeed governor, as a part of the protection device against overspeed for the

car moving in upwards direction

Type:

SLC LM 12 \_ \_

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 273 of 2016-03-01

**Outcome:** 

The safety component conforms to the essential health and safety requirements of the mentioned Directive as long as the requirements of the an-

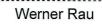
nex of this certificate are kept.

Date of Issue:

2016-03-01

Date of Validity:

from 2016-04-20



Certification Body "lifts and cranes"



## Annex to the EC Type-Examination Certificate No. EU-OG 273 of 2016-03-01



#### 1 Scope of application

#### 1.1 Generally

1.1.1 Drive Endwise toothed belt acting on a tooth wheel

1.1.2 Toothed belt

Type RPU 8 M10

Dimension

Width x height10.0 x 5.4 mmTooth height3.2 mmTooth distance8.0 mmTensile strength5415 NMaximum permissible length89.1 m

1.1.3 Tooth wheel

Material Polyamide (PA6)
Diameter 70 / 120 mm

1.1.4 Maximum tensioning force of toothed belt

(Pre-stressing of toothed belt at the fix points in the headroom and pit realize by pressure springs)

100 N

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

1.1.5 Tensile force in the toothed belt respectively tangential force at the tooth wheel after activating the overspeed governor

450 - 500 N

(look for this remarks 3.6)

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.

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

The safety component can fulfil two security features (1.2 and 1.3)

#### 1.2 Using as an overspeed governor – permissible speeds

Permissible tripping speed 0.27 - 1.50 m/sPermissible rated speed  $\leq 1.00 \text{ m/s}$ 

### 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.

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#### 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. 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).
- 2.6 The identification drawing "SLC.LM12CD.000" including stamp dated 2015-08-25 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.
- 2.7 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 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 tooth wheel, insert wheel (= part of the overspeed governor) and the shaft of the safety gear have a common centre or centre of rotation and the shaft of the safety gear are positive connected with insert wheel. 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 Based on the shaft of the safety gear is positive connected with the insert wheel of overspeed governor and both have a common centre of rotation, there is a common electrical safety switch needed only.

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
- > 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 will adjust by the manufacturer and is not adjustable at the operating place of the lift.

## Annex to the EC Type-Examination Certificate No. EU-OG 273 of 2016-03-01



- 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 issued according to the following standards:
  - EN 81-1:1998 + A3:2009 (D), Annex F.4 and F.7
  - EN 81-2:1998 + A3:2009 (D), Annex F.4
  - EN 81-20:2014 (D), part 5.6.2.2.1.7 and part 5.6.6.11
  - EN 81-50:2014 (D), part 5.4 and 5.7

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 273 of 2016-03-01



Authorised Manufacturer of Serial Production – Production Sites (valid from: 2016-03-01):

Company LUEZAR – ECO, S.L.

Address Pol. Malpica C/ F, Grupo Quejido, nave 69

50016 Zaragoza – Spain

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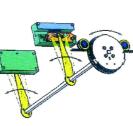
Based on: Application form from SLC Schlosser Luezar & CVR S.L. of 2016-02-24

# 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.

Service Gmx 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 call. The toothed disc is connected through a clutch to the centrifugal masses. The overspeed governor

Depending on the parts configuration, the SLC LM12CD overspeed governor can engage in boths 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

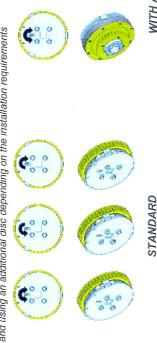


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# **APLICATIONS**

The SLC LM 12 CD overspeed governor can work in a bidirectional way or only in down direction, and using an additional disc depending on the installation requirements

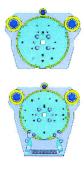


# WITH ADITIONAL DISC

BIDIRECTIONAL/DOWNWARDS LEFT/DOWNWARDS RIGHT SLC.LM12CD.004 / SLC.LM12CD.006 BIDIRECTIONAL/DOWNWARDS LEFT/DOWNWARDS RIGHT SLC.LM12CD.001 / SLC.LM12CD.003 / SLC.LM12CD.002

# 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.





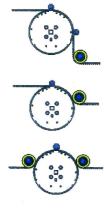
# **TOOTHED BELT**

The toothed belt used is model RPU 8 M10 with the following features:

Breaking force: 5415N

Maximum length: 89,1m

The toothed belt can engage on the overspeed governor by using guiding rollers of ø50mm 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

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 s witch guarantees the compliance of point 5.6.2.2.1.6 b) in EN81-20.





