ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Industrie Service

EU TYPE-EXAMINATION CERTIFICATE

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

Certificate No.:	EU-OG 233
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: (Manufacturer of Serial Production – see Enclosure)	LUEZAR-ECO, S.L. Pol. Malpica C/ F, Grupo Quejido, nave 69 50016 Zaragoza – Spain
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 81-20:2014 EN 81-50:2014 EN 81-1:1998+A3:2009 EN 81-2:1998+A3:2009
Test Report:	EU-OG 233 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 annex of this certificate are kept.
Date of Issue:	2016-03-01
Date of Validity:	from 2016-04-20

Werner Rau
Certification Body "lifts and cranes"

TÜV SÜD Industrie Service GmbH 00 36 Notified Body

TÜV®

Annex to the EC Type-Examination Certificate
No. EU-OG 233 of 2016-03-01

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**	
(New rope and groove)	*down direction [N]*	*up direction [N]*
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 over-speed 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

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 do 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 2016-03-01 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 81-20:2014 (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 233 of 2016-03-01

Industrie Service

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

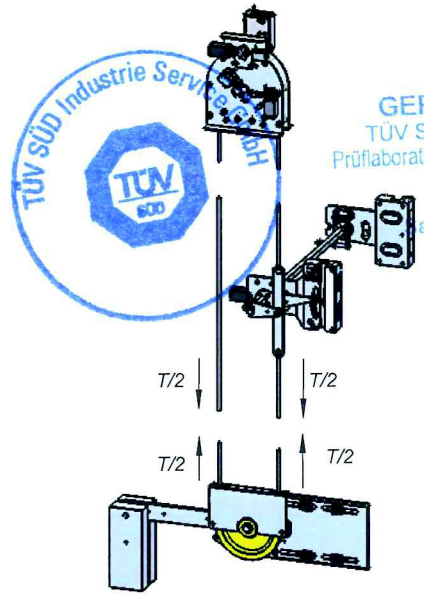
Company	LUEZAR – ECO, S.L.
Address	Pol. Malpica C/ F, Grupo Quejido, nave 69 50016 Zaragoza – Spain

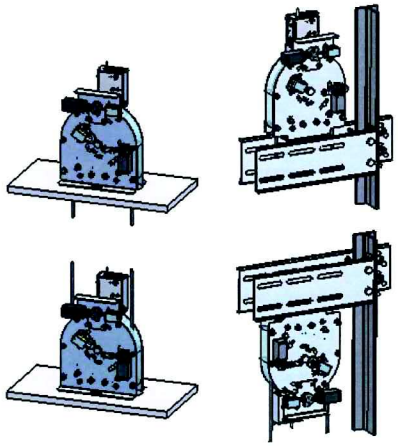
- END OF DOCUMENT -

1.- SLC LF 20 CA OVERSPEED GOVERNOR

The SLC LF 20 CA overspeed governor has been certified under the lift directive 2014/33/UE.
- 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 actioned 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 maximun rope diameter is 6,5mm

General description SLC LF 20 CA	DG.LF20CA.00E
General assembly instructions SLC LF 20 CA	MM.LF20CA.00E
Periodic control SLC LF 20 CA	CP.LF20CA.00E

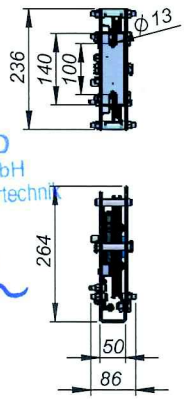




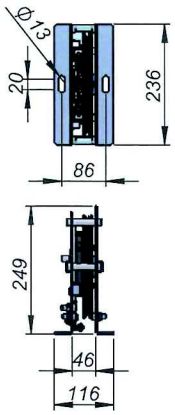
2.- OVERSPEED GOVERNOR ASSEMBLY

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

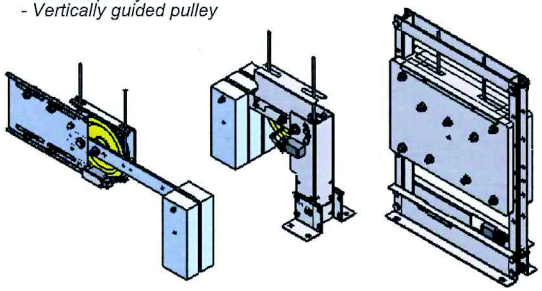


3.- TENSION PULLEY

Although the overspeed governor SLC LF 20 CA is compatible whit the most of the tension pulleys, the following points should be checked:
a) The dimensions of the tension pulley should be compatibles with the rope diameter and the overspeed governor disc.
b) It should have a system to detect the rope stretching or breakage in accordance to 5.6.2.2.1.6 c) EN81-20.
c) The tension pulley should keep atensioning 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)	Actuating force	
(New rope and groove)	In down direction (N)	In up direction (N)
602	717	
1203	1030	442

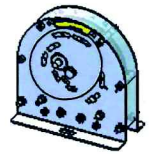
Our tension pulleys compatible with our SLC LF 20 CA overspeed governor are:
- Standard pulley
- Adjustable pulley
- Vertical pulley
- Vertically guided pulley



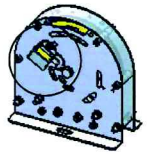
4.- OVERSPEED GOVERNOR ACTIVATION

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:
a) Manual activating.
b) Remote actuating.

MANUAL ACTUATING



REMOTE ACTUATING



5.- ELECTRICAL CONTROL

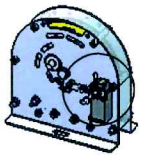
In conformity with point 5.6.2.2.1.6of EN81-20, the overspeed governor, or another device, shall initiate the stopping of the machine before the car reaches the tripping speed of the governor by means of an electric safety device.

For Vn > 1m/s, the device must operate before the tripping speed.
This device is called "overspeed switch" which consists of:
- A mechanical system.
- An electrical safety switch according to the standard 5.11.2 EN81-20.
- A remote reset solenoid (optional).

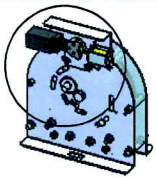
For Vn ≤ 1m/s, the device must operate as latest as the moment when the tripping speed of the governor is reached. This function is often carried out by the electrical switch of the steering linkage of the safety gear. But an overspeed switch could be also used.

Description	DG.CSLIM.02E
Instruction	MM.CSLIM.02E
General drawing	PG.CSLIM.02E

ELECTRICAL SWITCH



OVERSPEED SWITCH



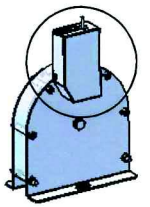
6.- ANTI-SLIDING PROTECTION (AD)

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	DG.AD20.06E
Instructions	MM.AD20.06E
General drawing	PG.AD20.02E

AD20



SLC	Tolerancia: General tolerance: Freimaßtoleranz: ISO 2768-m	Revisión: Revision: Änderung: 2			Aplicación: Field of application: Verwendungsbereich:
Polígono malpica C/F oeste nave nº7 50016 Zaragoza-Spain	Superficie: Surface: Oberfläche:	Material: Material: Werkstoff:			OVERSPEED GOVERNOR SLC LF 20 CA
			Fecha / Date / Datum:	Nombre / Name / Name:	
		Dibujado: Editor: Bearbeiter:	11/06/2015	Dibujante	
		Revisado: Checked: Geprüft:		I+D	
	Escala: Scale: Maßstab: SE Formato: Size: Papierformat: A3	Revisado: Checked: Geprüft:		Producción	
		Revisado: Checked: Geprüft:		Comercial	Dibujo número: Drawing nº: Zeichnung nº: PG.LF20CA.00E