



CONJUNTO UCM/

UCM UNIT/

ENSEMBLE UCM/

BAUGRUPPE UCM/

**SD-BOX + STAR A3 BETA+ ASG 1XX/ASG
1XX-UD + T-25/T-25UD**

INSTRUCCIONES DE USO Y MANUTENCIÓN/

INSTRUCTIONS FOR USE AND MAINTENANCE/

INSTRUCTIONS D'USAGE ET ENTRETIEN/

GEBRAUCHS- UND WARTUNGSANLEITUNG/

CERTIFICADO

CERTIFICATE

Examen UE de tipo para componentes de seguridad
EU type-Examination of safety components
Según el anexo IV parte A de la Directiva 2014/33/UE
According annex IV part A of Directive 2014/33/EU

Certificado Nº.: TRI/DAS.IV-A/001353/20
Certificate-No.:

Organismo Notificado
Notified Body

TÜV Rheinland Ibérica Inspection, Certification & Testing, S.A.
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Certificate holder

DYNATECH DYNAMICS & TECHNOLOGY S.L.U
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España (Spain)

Fabricante del ejemplo ensayado
Manufacturer of the test sample
Fabricante autorizado
Authorized manufacturer

DYNATECH DYNAMICS & TECHNOLOGY S.L.U
Pol. Ind. Pina de Ebro, Sector C, P-9
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España (Spain)

Tipo
Type

SD-BOX + STAR + ASG

Descripción
Description

Sistema de Protección contra movimientos incontrolados de la cabina.
Protection against unintended car movement.

Componentes
Components

Módulo de control SD-BOX
Control system SD-BOX
Dispositivo de Activación STAR (parking Beta)
Activation device STAR (parking Beta)
Paracaídas Progresivo modelo ASG + Timonería T25UD/T25
Progressive Safety Gear ASG model + driving bar T25UD/T25

Informe
Report

33220168 (09.07.2012)
33432391 (10.05.2016)
92570408 (30.03.2020)

Normas de Referencia
Standards

EN 81-20:2014
EN 81-50:2014

Fecha emisión certificado
Date of issue

06.04.2020

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This certificate consists of this main page, and technical annex (2 pages). It shall be reproduced with all its pages to be considered valid.

Nota: Este sistema de protección contra movimientos incontrolados de la cabina puede usarse como parte del sistema de pre accionamiento de parada para el cumplimiento de la Norma EN 81-21, cumpliendo con los requisitos de seguridad y/o medidas de protección descritos en dicha norma.

Note: This protection system against unintended car movements can be used as a part of pre-activation system to stop the car, in order to comply with the EN 81-21 Standard and its described safety requirements and/or protection measures.

Este certificado perderá su validez debido a cambios de diseño, procedimiento, cambios en la legislación o en la normativa aplicable. El fabricante deberá poner en conocimiento de este Organismo Notificado cualquier cambio de diseño previsto
This certificate would lose its validity in case of design or procedure modifications, changes in the applicable law or standards. Manufacturer must communicate to this Notified Body any foreseeable change in the design




Javier Mediavilla / Armand Hernandez
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Organismo Notificado Nº 1027
Notified Body, ID-No

INSTRUCTIONS FOR USE AND MAINTENANCE

1	INTRODUCTION.....	2
1.1	DESCRIPTION.....	2
2	RISKS AND SECURITY WARNINGS	2
2.1	RISKS.....	2
2.2	SECURITY WARNINGS	2
3	DESCRIPTION OF THE UNIT	3
3.1	COMPONENTS OF THE SYSTEM	3
3.2	OPERATION AS A UNIT.....	3
5	ASSEMBLY AND MAINTENANCE.....	6
5.1	ASSEMBLY	6
5.2	MAINTENANCE	6

1 INTRODUCTION

1.1 DESCRIPTION

This system is made up of a SD-BOX signal control box, STAR overspeed governor, T-25 steering mechanism and ASG-1XX progressive safety gear, everything manufactured by Dynatech. This system operates as a complete system of protection against car uncontrolled movements with the door open, also known as UCM.

This unit complies with the EN 81-20:2014 and EN 81-50:2014 standard by using the SD-BOX as a signal management system, the governor as a UCM detection component and the safety gears as braking components. The entire system stops the car when a UCM occurs at a distance lower than 1 metre in accordance with the standard requirements.

This protection system is certified as detection and braking device in the scope of protection against car uncontrolled movements with door open. Furthermore, each component making up the system has also been individually certified for this purpose; obviously, without negatively affecting its certification as overspeed governor and progressive safety gears when descending and braking component against overspeed when ascending.

UCM certification also includes the combinations between the different versions of these component models.

COMPONENT	CERTIFICATE
SD-BOX + STAR A3 BETA+ ASG 1XX + T-25	TRI/DAS.IV-A/001353/20
SD-BOX	TRI/DAS.IV-A/001315/20
STAR	ATI/LV/009
ASG 1XX UD/ASG 1XX	ATI/PP/010

The assembly of this safety package in an installation exempts the installation itself from requiring the UCM certificate but not from checking that the unit is in compliance with the standard's requirements. The installer must be held responsible for fitting the system in the installation and checking its correct working order.

2 RISKS AND SECURITY WARNINGS

2.1 RISKS

	Electrical hazard	Do not handle or open the box with its terminals connected to the SD-BOX'S electrical power supply.
	Electrical hazard	Never handle the STAR overspeed governor's interlocking coil.

2.2 SECURITY WARNINGS

- Reference to the manuals for use and maintenance of the different components making up the unit is recommended before their installation.
- The SD-BOX + Star A3 Beta + ASG 1XX/ASG 1XX-UD + T-25/T-25 UD unit is valid for installations where the P/Q ratio is above 0.7.

- When a UCM occurs, a qualified technician is required for the installation to be operative again. Once the problem causing the UCM has been solved, the RESET button must be pressed in order to restore the safety line and for the system to be operative again.
- SD-BOX'S input signals are typical of the installation controller. As a result, response times of the controller components are inherent to it even though the total response times of the SD-BOX + Star A3 Beta+ ASG 1XX + T-25 unit are considered as standard.
- In the case of checking the installation or carrying out a manual rescue, it must be checked that the SD-BOX is set at the correct operation mode for each of these situations so as to prevent unwanted jamming in the safety gears.
- The parking or anti-creep system, Beta model, incorporated in the Star governor to detect uncontrolled movements, must always include a 24V coil in order to operate correctly along with the SD-BOX.
- Connection between the STAR governor's star and ASG safety gear must be designed for this purpose in order to prevent increasing response times.

3 DESCRIPTION OF THE UNIT

3.1 COMPONENTS OF THE SYSTEM

The components making up the system are:

- CONTROL SYSTEM

The SD-BOX operates as a control systemSD-BOX'SSD-BOXSD-BOXSD-BOX'S.

- GOVERNOR

The Star A3 model two-way governor operates as a UCM actuator.

SD-BOXSAFETY GEAR AND STEERING MECHANISM

The two-way progressive safety gear model ASG-1XX/ASG-1XX UD is used as a braking means.

3.2 OPERATION AS A UNIT

As can be seen in FIGURE 2, the SD-BOX electronic device is connected to the installation controller and the Star A3 governor's parking system. SD-BOX connection is described in the SD-BOX'S manual for use and maintenance.

The Star A3 overspeed governor with Beta parking system is fitted in the lift's car or frame and moves together with them. Therefore, the governor in the machine room and the diverter pulley in the pit can be eliminated. The governor moves whereas the rope remains fixed attached to the pit via a tensioning system.

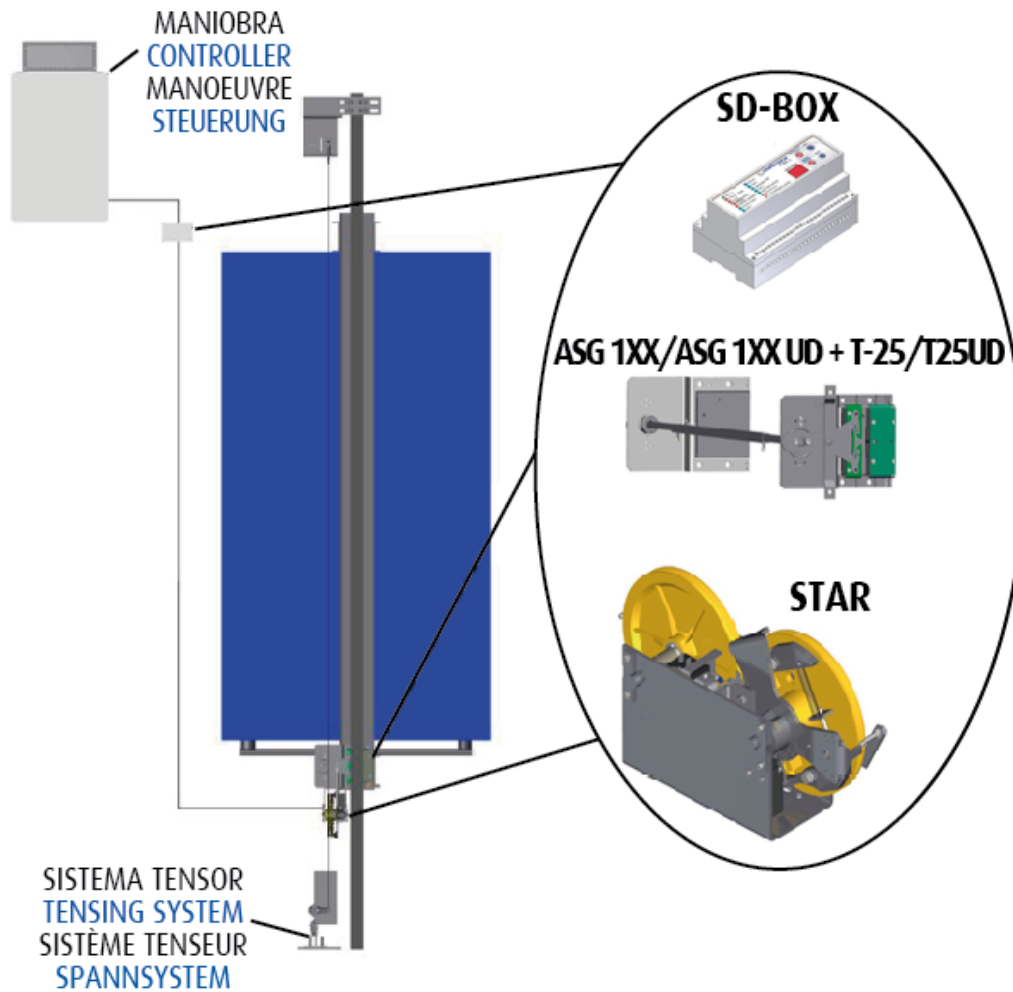


FIGURE 2: Components of the system

As displayed in FIGURE 3, the Star A3 Beta governor is connected to the T-25/T-25 UD steering mechanism via an auxiliary part. This part, not supplied by Dynatech, must be designed so that the drive does not have clearance or cause extra travel. Ideally, the part must directly go from the governor star to the steering mechanism's handle as displayed in FIGURE 3. The installer must check that the safety gears are correctly operated by the governor.

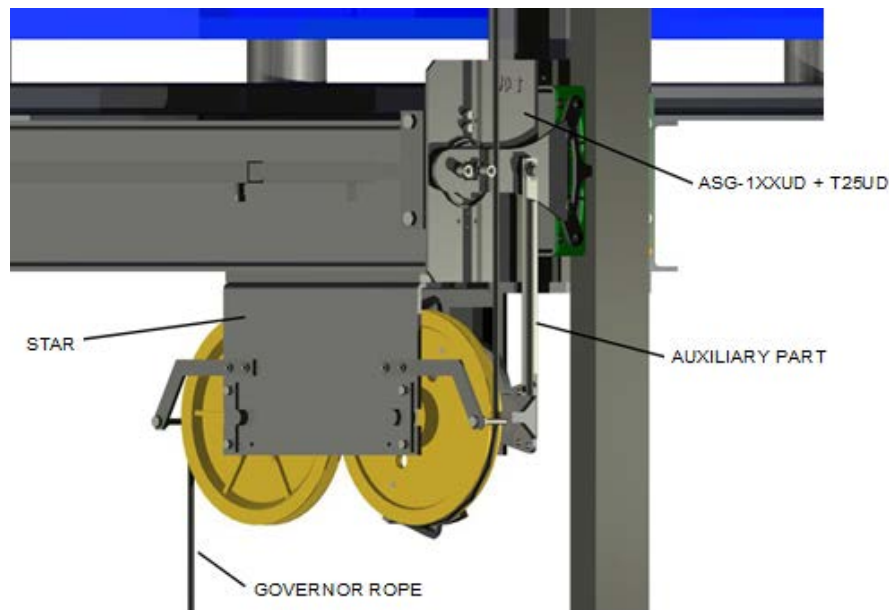


FIGURE 3: Star Governor + ASG 1 XX Safety Gear + T-25 Steering mechanism

FIGURE 4 displays the Star governor's Beta parking system. It is mainly made up of a coil, which operates the governor's interlocking system in case of UCM, and an inductive sensor, which indicates the interlocking system's positioning to the SD-BOX.

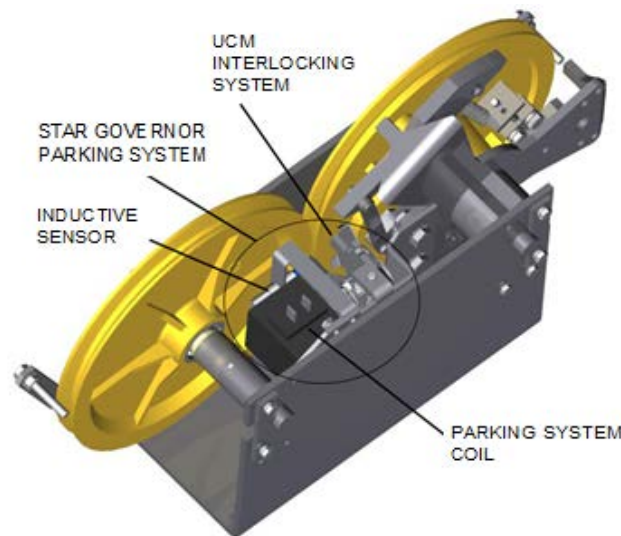


FIGURE 4: Star A3 Beta Governor

The protection of this system against UCM is as follows: The SD-BOX electronic system compares, at all times, the status of the car doors and the floor level via input signals from the installation. These signals are:

- Doors closed.
- Floor level or unlocking zone.
- Motor contactor signal.

N.B.: Please check the electrical characteristics in the SD-BOX manual in order to verify the voltage of the signals to be entered, as well as their nature.

By using these inputs, if the SD-BOX detects that the car leaves door level with doors open, the contactor in the safety line is activated, which causes the Star A3 Beta governor's parking system coil to de-energise. This will make

the parking system interlocking system operate on the governor's centrifugal systems, thus causing the governor to interlock. After that, the governor's main pulley will lock and the friction between the rope and the pulley will transfer the steering mechanism the power required, thus causing the safety gears to stop the car.

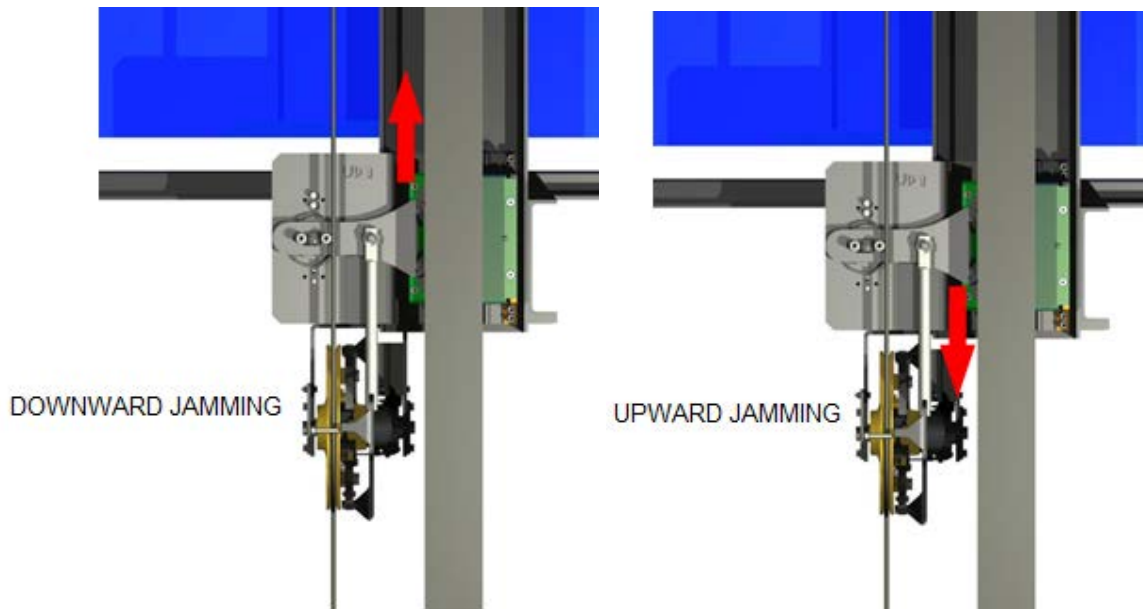


FIGURE 5: ASG 1 XX + T-25 Steering mechanism Operation

Under normal conditions, where no UCM is detected, the governor's parking system coil is energised, thus preventing the parking system from interlocking the Star governor. Therefore, the system operates with a fail-safe mechanism.

5 ASSEMBLY AND MAINTENANCE

5.1 ASSEMBLY

- SD-BOX:

Only specialised and duly trained staff must carry out the assembly, electrical wiring and start-up. For further information on assembly, the characteristics of the electrical wiring and wiring diagrams, please refer to the SD-BOX'S manual for use and maintenance.

- Star A3:

The Star A3 Beta governor will be assembled and adjusted in accordance with the Star overspeed governor's manual for use and maintenance.

Please check that the governor rope is correctly positioned and that the parking system is correctly operating, by checking that the coil is energised in normal operation.

- ASG-1XX /ASG 1XX UD+ T-25/T25 UD

The safety gear and steering mechanism will be assembled in accordance with the ASG-1XX/ ASG-1XX UD+ safety gear and the T-25/T-25UD steering mechanism's manuals for use and maintenance.

5.2 MAINTENANCE

Please check the distance from the safety gear brake shoe to the guide rail. Please also check that the auxiliary part connecting the Star A3 Beta governor to the T-25/ T-25 UD steering mechanism is suitably fitted and operates correctly.

Please check periodically that no damage has occurred, which may put the normal use of the lift at a risk. In case of excessive wear on the safety gear's friction components, they can be replaced. Visual inspection is enough.