



CONJUNTO UCM/  
UCM UNIT/  
ENSEMBLE UCM/  
BAUGRUPPE UCM/

**D-BOX + VEGA 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 N°.: TRI/DAS.IV-A/000020-R5/19**

*Certificate-No.:*

**Organismo Notificado**  
*Notified Body:*

**TÜV Rheinland Ibérica Inspection, Certification & Testing, S.A.**  
Parc de Negocis Mas Blau  
Ed. Océano c/ Garrotxa, 10-12  
E-08820 El Prat de Llobregat

**Propietario del Certificado:**  
*Certificate holder:*

**DYNATECH DYNAMICS & TECHNOLOGY S.L.U**  
Pol. Ind. Pina de Ebro, Sector C, P-9  
50750 - Zaragoza  
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  
50750 - Zaragoza  
España (Spain)

**Descripción:**  
*Description:*

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

**Tipo:**  
*Type:*

**VEGA+ASG+DBOX**

**Componentes:**  
*Components:*

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

**Informe n° y Fecha:**  
*Test report No. and Date:*

**33210062 (14.02.2012)**  
**33432391 (10.05.2016)**

**Directiva UE aplicada**  
*EU Directive:*  
**Norma de Referencia**  
*Reference Standard*

**Directiva 2014/33/UE (Anexo IV-A)**  
*Directive 2014/33/UE (Annex IV-A)*  
**EN 81-1/2:1998+A3:2009**  
**EN 81-20/50:2014**

**Documentos Anexos a este certificado:**  
*Documents annexed to this certificate:*


**Anexo I – Datos básicos**  
*Annex I – Basic Data*

**Este certificado consta de esta portada, y el anexo técnico (2 hojas). Su reproducción carece de validez si no se realiza totalmente.**  
*This certificate consists of this main page, and technical annex (2 pages). It shall be reproduced with all its pages to be considered valid.*  
**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*

**Nota:** Este sistema de protección contra movimientos incontrolados de la cabina con Num de Certificado TRI/DAS.IV-A/000020-R5/19 puede usarse como parte del sistema de preaccionamiento 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 with Certificate No TRI/DAS.IV-A/000020-R5/19 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 es la adaptación del certificado CM/040/12 emitido por TÜV Rheinland con fecha 11.07.2012 a la referencia de las normas EN 81-20/50 y a la Directiva 2014/33/UE**  
*This certificate is the adaptation of the certificate with number CM/040/12 issued on 11.07.2012 by TÜV Rheinland, to the standards EN 81-20/50 and 2014/33/EU Lifts Directive.*

**Este Certificado es válido hasta el 31.12.2020**  
*This certificate is valid until 31.12.2020*



**Javier Mediavilla / Armand Hernández**  
Organismo Notificado N° 1027  
*Notified Body, ID-No. 1027*

**El Prat del Llobregat, 03.12.2019**

## INSTRUCTIONS FOR USE AND MAINTENANCE

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# 1 INTRODUCTION

## 1.1 DESCRIPTION

This system is made up of a D-Box signal control box, VEGA 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 D-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
D-BOX + VEGA + ASG 1XX + T-25	TRI/DAS.IV-A/000020-R4/18
D-BOX	CM/029-1/11
VEGA	ATI/ LV/010
ASG 1XX UD/ASD 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 D-Box's electrical power supply.
	Electrical hazard	Never handle the VEGA 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.
- The D-Box + Vega 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 series and for the system to be operative again.

- D-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 D-Box + Vega 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 D-Box is set at the correct operation mode for each of these situations so as to prevent unwanted jamming in the safety wears.
- The parking or anti-creep system, Beta model, incorporated in the Vega governor to detect uncontrolled movements, must always include a 24V coil in order to operate correctly along with the D-Box.

### **3 DESCRIPTION OF THE UNIT**

#### **3.1 COMPONENTS OF THE SYSTEM**

The components making up the system are:

- CONTROL SYSTEM

The D-Box operates as a control system.

- GOVERNOR

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

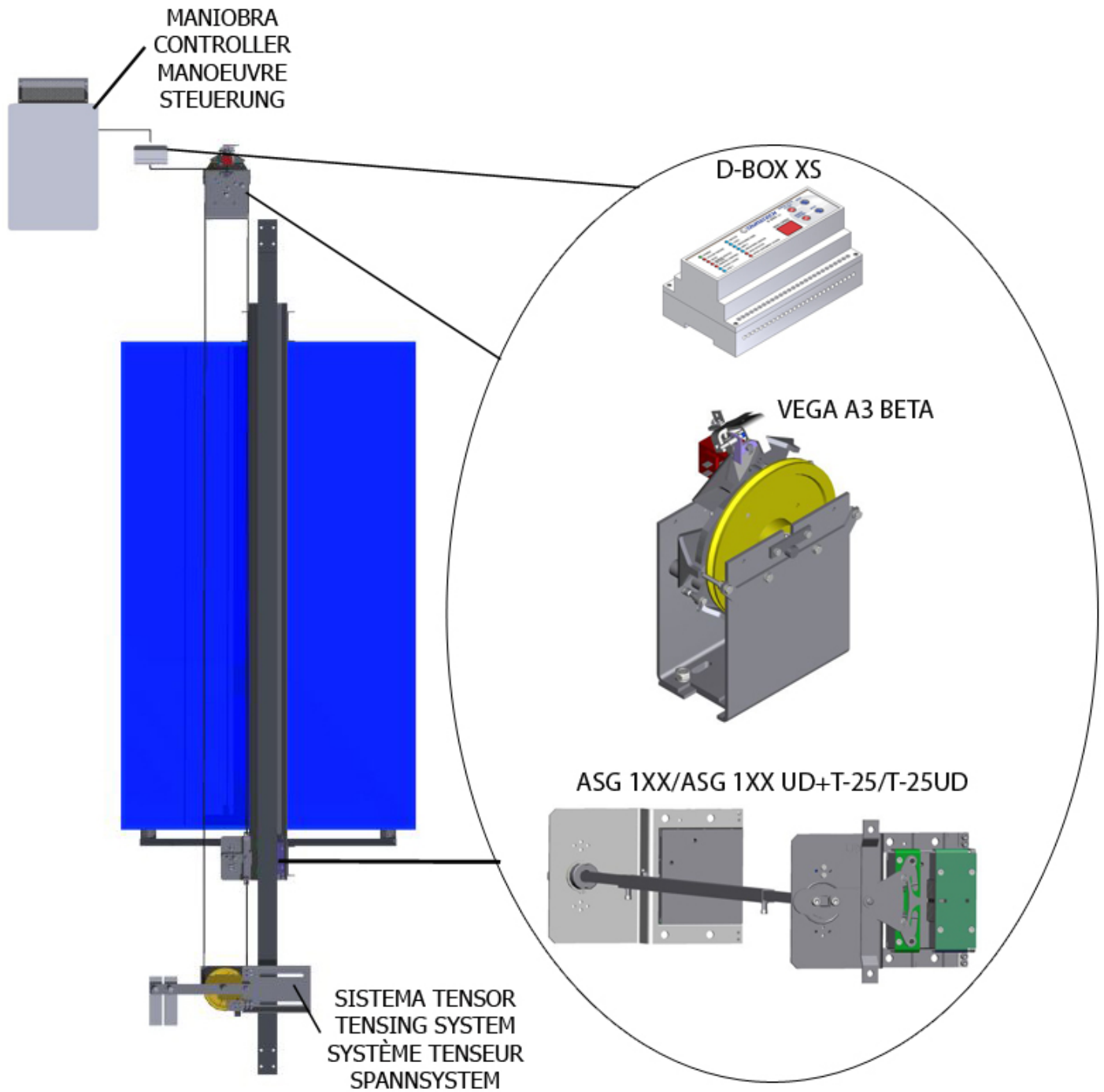
- SAFETY GEAR AND STEERING MECHANISM

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 D-Box electronic device is connected to the installation controller and the Vega governor's parking system. D-Box connection is described in the D-Box's manual for use and maintenance.

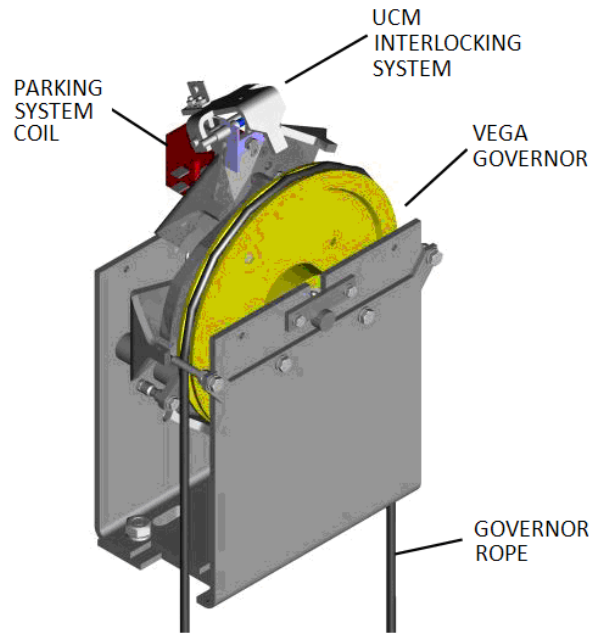
The governor is directly anchored to the slab in the machine room or to the upper part of the lift shaft, linked to its tensioning pulley in the pit via the rope. This tensioning pulley is anchored to the guide rail b means of clamps.



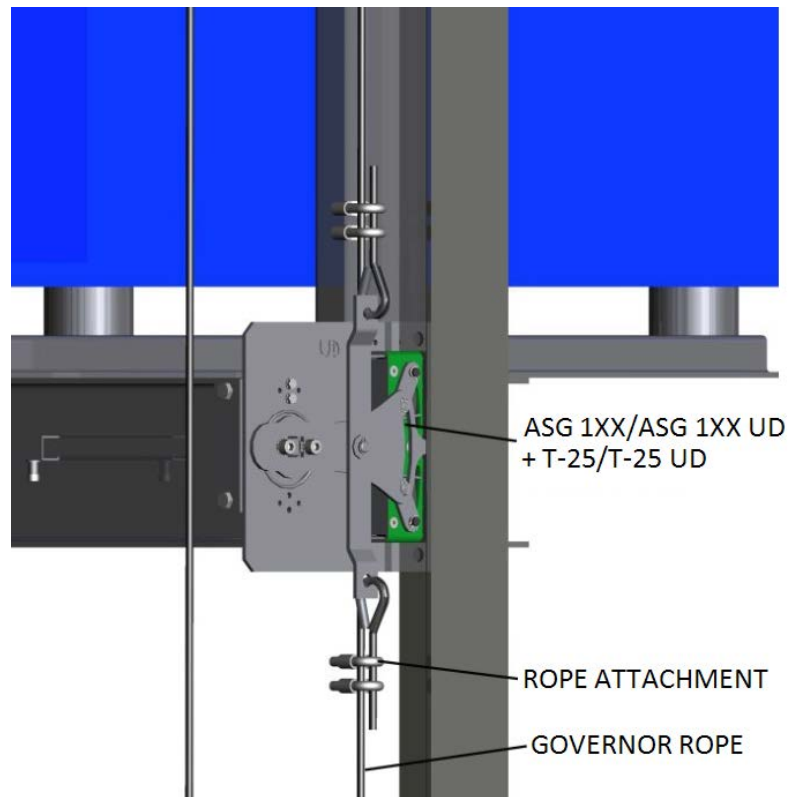
**Figure 2: Components of the system**

The rope runs along the governor and the tensioning pulley's grooves. The ends of the rope are attached to the T-25 steering mechanism's handle by means of rope attachments as can be seen in figure 4. This steering mechanism will operate the ASG-1XX safety gear in case of interlocking. This way, when the car reaches the tripping speed, the movement concerning the governor rope will cause it to lock and operate the safety gears.

Figure 3 displays the Vega governor's 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 D-Box.



**Figure 3: Vega Governor**



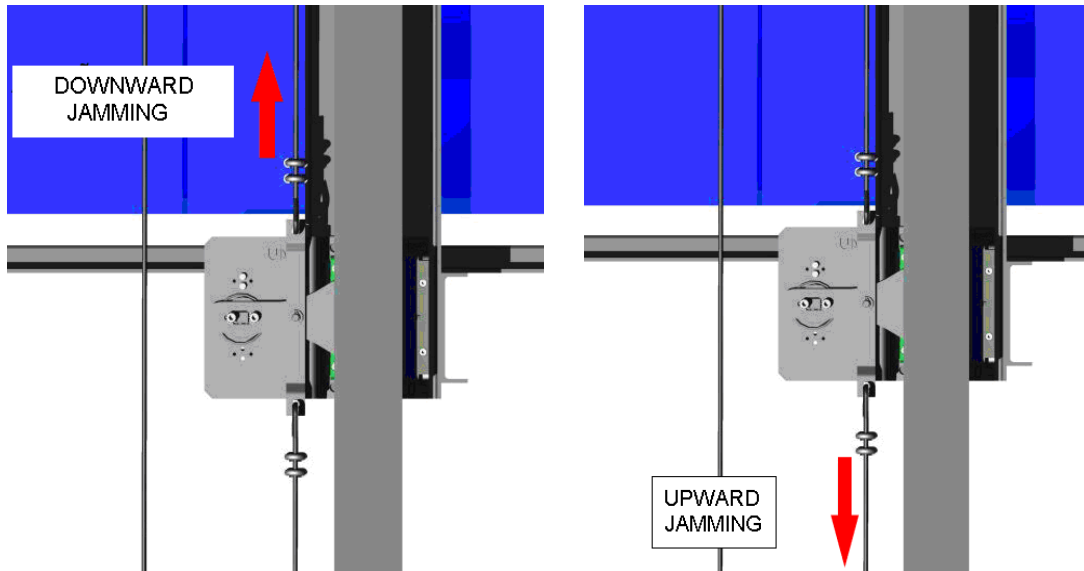
**Figure 4: ASG 1 XX Safety Gear + T-25 Steering mechanism**

The protection of this system against UCM is as follows: The D-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,
- Motor contactor

*N.B.: Please check the electrical characteristics in the D-Box manual in order to verify the voltage of the signals to be entered.*

By using these inputs, if the D-Box detects that the car leaves door level with doors open, the contactor in the safety line is activated, which causes the Vega 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. When this occurs, the rope linking the governor to the steering mechanism will lock, thus pulling the T-25 handle upwards or downwards and, therefore, the ASG-1XX safety gear will jam and the car will brake.



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

Under normal conditions, where no UCM is detected, the governor's parking system 24V coil is energised, thus preventing the parking system from interlocking the Vega governor. Therefore, the system operates in positive safety.

## 4 ASSEMBLY AND MAINTENANCE

- D-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 D-Box's manual for use and maintenance.

- Vega A3 Beta:

The Vega A3 Beta governor will be assembled and adjusted in accordance with the Vega 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 24V 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.

Please check the distance from the safety gear brake shoe to the guide rail. Please also check that the governor rope is correctly secured and operating onto the T-25/T-25UD steering mechanism's handle.

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