



Warner Electric Europe
7, rue Champfleury
CS 20095
FR 49182 - St Barthélemy d'Anjou

DECLARATION DE CONFORMITE A LA LIFTS REGULATIONS 2016

DECLARATION OF CONFORMITY TO LIFTS REGULATIONS 2016

KONFORMITÄTSEKTLÄRUNG ZUR LIFTS REGULATIONS 2016

Par la présente, nous déclarons que le composant de sécurité suivant, devant répondre à la réglementation Lifts Regulation 2016 Schedule 16 (module C2):

This is to declare that the following safety device having to answer the Lifts regulations 2016 Schedule 16 (module C2) :
Hiermit erklären wir, dass das folgende Sicherheitsbauteil den Lifts Regulations 2016 Schedule 16 (module C2) entsprechen muss :

Produit / Product / Produkt	Système de freinage / Braking System/ Bremseinrichtung	
Fonction / Function / Funktion	ACOP (Ascending Car Overspeed Protection) + UCMP (Unintended Car Movement protection)	
Type / Type / Typ	ERS VAR10 SZ1010/ _ _ _ _	
	ERS VAR10 SZ2500/ _ _ _ _	
	ERS VAR10 SZ5000/ _ _ _ _	

Année de fabrication / Year of manufacturing / Baujahr :	2022 - Date code K
Fabriqué par / Manufactured by / Hergestellt von :	Warner Electric Europe

Ayant obtenu l'attestation d'examen

UK de Type N°

That has obtained the EK type examination N°

Nach aushändigung UK Baumusterprüfbescheinigung-Nr

UK-BD 592

délivrée par l'organisme notifié :

by the following notified body:

von folgende Zertifizierungsstelle

NB 0168

Organisme notifié / Notified body / folgende Zertifizierungsstelle :

TUV SUD BAPT UNLIMITED
Octagon House Concorde Way
Segensworth North Fareham Hampshire

Couvert par les attestations, Lifts Regulations 2016 Schedule 16 (module C2) N° S-FTT-STG/Ja, délivrées par les organismes suivants:

Covered by the attestations, Lifts Regulations 2016 Schedule 16 (module C2) N° S-FTT-STG/Ja, delivered by the following bodys:

Abgedeckt durch Lift Regulation 2016 Schedule 16 (module C2) N° S-FTT-STG/Ja, ausgestellt von den folgenden Zertifizierungsstellen:

TUV SUD BAPT UNLIMITED
Octagon House Concorde Way
Segensworth North Fareham Hampshire

Est conforme à la LIFTS REGULATIONS 2016

Complies with the LIFTS REGULATIONS 2016

Entspricht der LIFTS REGULATIONS 2016

Fonction / Function / Funktion :

Nom / Name / Name:

Date / Date / Datum :

Signature / Visa / Unterschrift :

Operation Quality Manager

Lucie Godicheau

15/11/2022

WARNER ELECTRIC EUROPE
CS 20095
49182 ST-BARTHELEMY D'ANJOU CEDEX
Tél. 02 41 21 24 24
Fax. 02 41 21 24 00
E-mail : warnerelectric-eu.com



EU TYPE-EXAMINATION CERTIFICATE

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

Certificate No.:	EU-BD 592
Certification Body of the Notified Body:	TÜV SÜD Industrie Service GmbH Westendstr. 199 80686 Munich - Germany Identification No. 0036
Certificate Holder:	WARNER Electric Europe 7, rue de Champfleür BP 20095 49124 Saint Barthélemy d'Anjou - France
Manufacturer of the Test Sample: <small>(Manufacturer of Serial Production – see Enclosure)</small>	WARNER Electric Europe 7, rue de Champfleür BP 20095 49124 Saint Barthélemy d'Anjou - France
Product:	Braking device acting on the shaft of the traction sheave, as part of the protection device against overspeed for the car moving in upwards direction and braking element against unintended car movement
Type:	Type: ERS VAR10 Size: SZ1010/_____, SZ2500/_____, SZ5000/_____
Directive:	2014/33/EU
Reference Standards:	EN 81-20:2014 EN 81-50:2014 EN 81-1:1998+A3:2009
Test Report:	EU-BD 592 of 2016-02-29
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:	2016-02-29
Date of Validity:	from 2016-04-20

Werner Rau

Werner Rau
Certification Body "lifts and cranes"



Annex to the EU Type-Examination Certificate No. EU-BD 592 of 2016-02-29



Industrie Service

1 Scope of application

1.1 Use as braking device – part of the the protection device against overspeed for the car moving in upwards direction – permissible brake torques and tripping rotary speeds

1.1.1 Permissible brake torques and maximum tripping rotary speeds of the traction sheave when the brake device acts on the shaft of the traction sheave while the car is moving upward

Size	Permissible brake torque [Nm]	Max. tripping rotary speed of the traction sheave [rpm]
SZ1010/____	728 - 1288	400
SZ2500/____	1900 - 3568	250
SZ5000/____	3385 - 6335	250

1.1.2 Maximum tripping speed of the overspeed governor and maximum rated speed of the lift

The maximum tripping speed of the overspeed governor and the maximum rated speed of the lift must be calculated on the basis of the traction sheave's maximum tripping rotary speed as outlined above taking into account traction sheave diameter and car suspension.

$$v = \frac{D_{TS} \times \pi \times n}{60 \times i}$$

v = Tripping (rated) speed (m/s)
 D_{TS} = Diameter of the traction sheave from rope's centre to rope's centre (m)
 π = 3,14
 n = Rotary speed (rpm)
 i = Ratio of the car suspension

1.2 Use as braking element – part of the protection device against unintended car movement (acting in up and down direction) – permissible brake torques, tripping rotary speeds and characteristics

1.2.1 Nominal brake torques and response times with relation to a brand-new brake element

Size	Min. nominal brake torque* [Nm]	Intermediate nominal brake torque* [Nm]	Max. nominal brake torque* [Nm]	Max. tripping rotary speed [rpm]	Maximum response times** [ms]		
					without / with overexcitation		
					t_{10}	t_{50}	t_{90}
SZ1010/____			1000	400	70	160	250
SZ2500/____	2200			250	70	108	145
SZ2500/____		2500		250	70	120	170
SZ2500/____			3000	250	70	150	230
SZ5000/____	4250			250	125	170	215
SZ5000/____		5000		250	125	190	255
SZ5000/____			5800	250	130	215	300

Interim values can be interpolated

Explanations:

* **Nominal brake torque:** Brake torque assured for installation operation by the safety component manufacturer.

** **Response times:** t_x time difference between the drop of the braking power until establishing X% of the nominal brake torque, t_{50} optionally calculated $t_{50} = (t_{10} + t_{90})/2$ or value taken from the examination recording

**Annex to the EU Type-Examination Certificate
No. EU-BD 592 of 2016-02-29**



Industrie Service

1.2.2 Assigned execution features

Size	Type of powering / deactivation	Nominal air gap [mm]	Damping elements / adhesive foil integrated	Overexcitation
SZ1010/_ _ _ _	Continuous current / continuous current end	0.6	yes / no	at double non-release voltage
SZ2500/_ _ _ _	Continuous current / continuous current end	0.65	yes / yes	at double non-release voltage
SZ5000/_ _ _ _	Continuous current / continuous current end	0.65	yes / yes	at double non-release voltage

2 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 detecting and triggering component in accordance with the standard (two separate components also possible), which must be subjected to an own type-examination, can the system created fulfil the requirements for a protection device.
- 2.2 The installer of a lift must create an examination instruction to fulfil the overall concept, add it to the lift documentation and provide any necessary tools or measuring devices, which allow a safe examination (e. g. with closed shaft doors).
- 2.3 The triggering of the braking device is not caused positive mechanically but electrically resp. electromagnetically by interruption of the energy supply to the magnetic coin of the braking device. However, the mechanically engagement of the braking device has to be absolutely guaranteed after the electrical safety device has responded.
In light of the above, the braking device must be made to engage at regular intervals e. g. once daily, so that the anchor plates can be checked for correct closing (e.g. micro switches resp. proximity switch). If the anchor plates do not perform correctly (anchors fail to close) the lift must be kept at standstill.
- 2.4 Appropriate measures must ensure that it is evident in the machine room whether the braking device has responded in line with its intended use as a safety component (following failure of an item of operating equipment such as breakage of a gearing element or shaft) or whether the response was caused by other reasons (e. g. loss of power supply). It must also have to be provided a instruction sheet how to proceed in emergency operation (moving the car through manual operation or return motion control) after the braking device has responded. Once the braking device has responded in the intended way as a safety component, it should never be possible to move the lift machine via the return motion control.
- 2.5 The manufacturer of the drive unit must provide calculation evidence that the connection traction sheave – shaft – brake disc and the shaft itself is sufficiently safe, if the brake disc is not a direct component of the traction sheave (e. g. casted on). The shaft itself has to be statically supported in two points.
An evidence must be enclosed with the technical documentation of the lift.
- 2.6 The setting of the brake torque has to be secured against unauthorized adjustment (e. g. sealing lacquer).
- 2.7 The respective identification drawing according to the following table shall be included to the EU type-examination certificate for the identification and information of the general construction and operation and distinctness of the approved type:

Size	No. of the identification drawing	Date of stamp
SZ1010/_ _ _ _	1 12 107250	2009-11-05
SZ2500/_ _ _ _	1 12 106582	2010-11-29
SZ5000/_ _ _ _	1 12 106602	2011-02-23

**Annex to the EU Type-Examination Certificate
No. EU-BD 592 of 2016-02-29**



Industrie Service

2.8 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 The brake moment effectively adjusted will be marked at the blank after the type designation ERS VAR10 SZXXXX/_ _ _ _.

3.2 Checking whether the requirements as per section 5.9.2.2 of EN 81-20:2014 (D) have been complied with is not part of this type examination.

3.3 Other requirements of the standard, such as reduction of brake moment respectively brake force due to wear or operational caused changes of traction are not part of this type examination.

3.4 This EU type-examination certificate was issued according to the following standards:

- EN 81-1:1998 + A3:2009 (D), Annex F.7 and F.8
- EN 81-20:2014 (D), part 5.6.6.11, 5.6.7.13
- EN 81-50:2014 (D), part 5.7 and 5.8

3.5 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-BD 592 of 2016-02-29**



Industrie Service

Authorised Manufacturer of Serial Production – Production Sites (valid from: 2016-01-22):

Company WARNER Electric Europe
Address 7, rue de Champfleür
BP 20095
49124 Saint Barthélemy d'Anjou - France

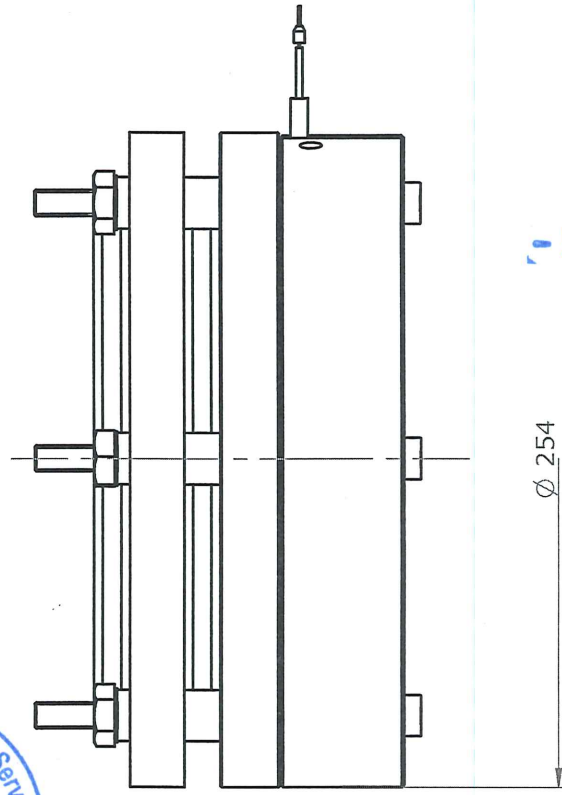
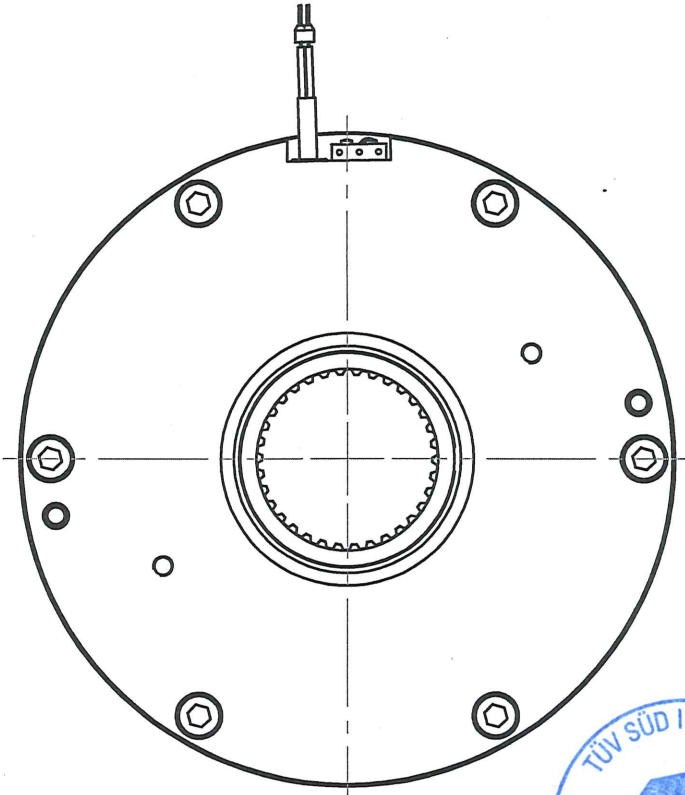
Company Altra Industrial Motion Shenzhen Co. Ltd.
Address Dabo Industry Zone
18 Huanzhen Road
Bogang County, Shajing Town
Baoan District, Shenzhen City
518104 Guangdong province - China (PRC)

- END OF DOCUMENT -

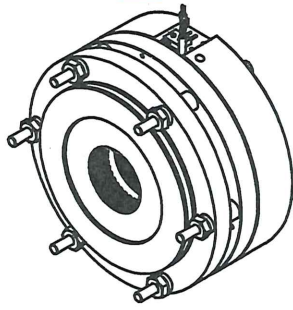
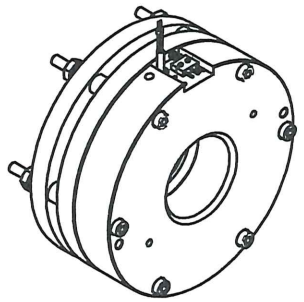
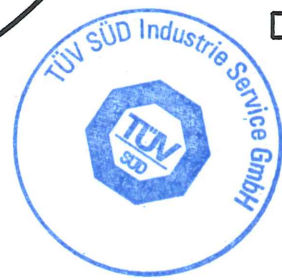
Les cotes sans indication de tolérances sont des cotes nominales.
 Untoleranced dimensions are nominal dimensions.

NOTES

- 5. Nov. 2009 - **GEPRÜFT** -
 TÜV SÜD Industrie Service GmbH
 Zentralbereich Fördertechnik-Sonderbauten
 Abteilung Aufzüge und Sicherheitsbauteile
 Westendstr. 199, D-80686 München
 Der Sachverständige

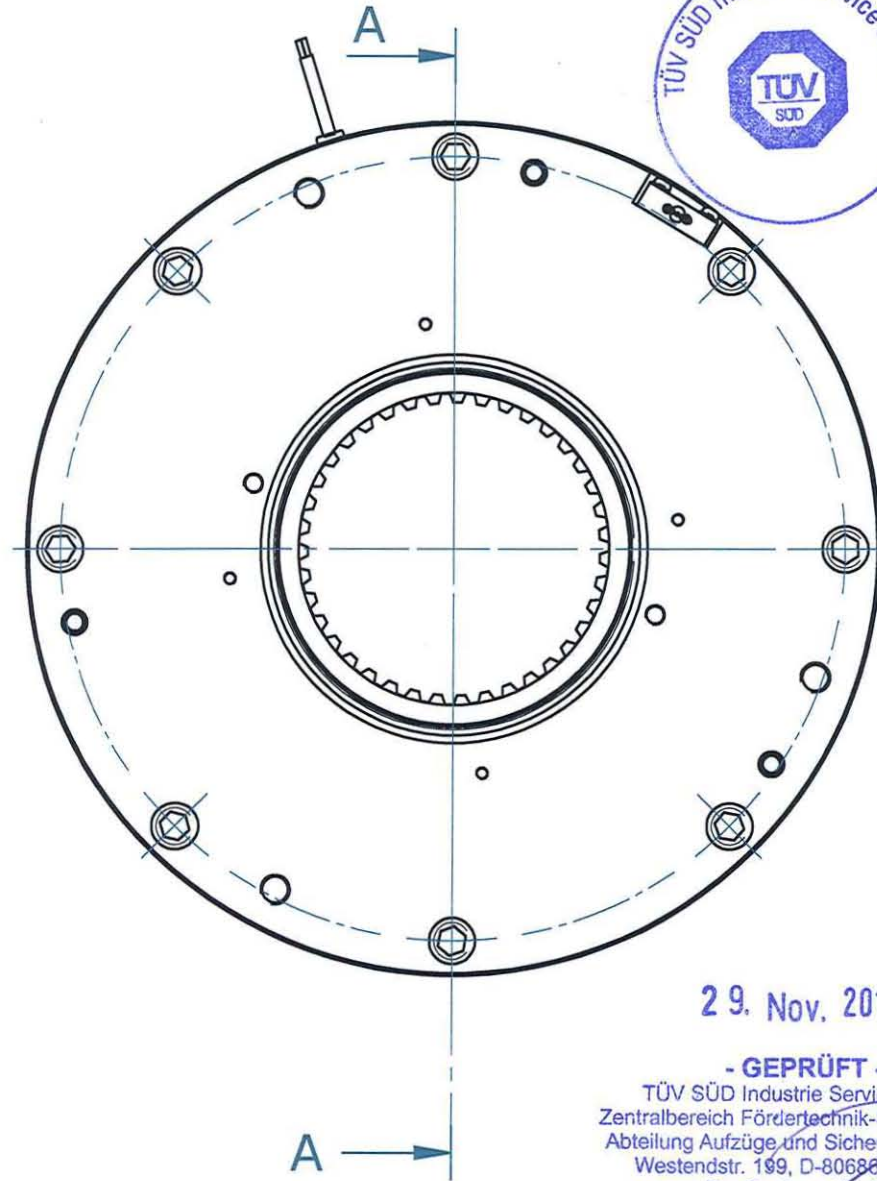



Ø 254



TUV DIFFUSION

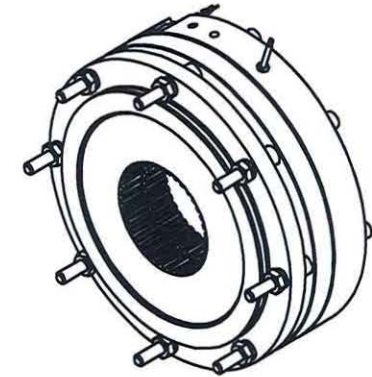
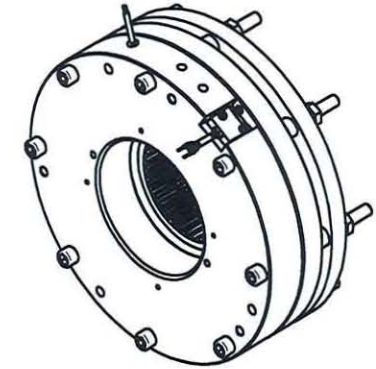
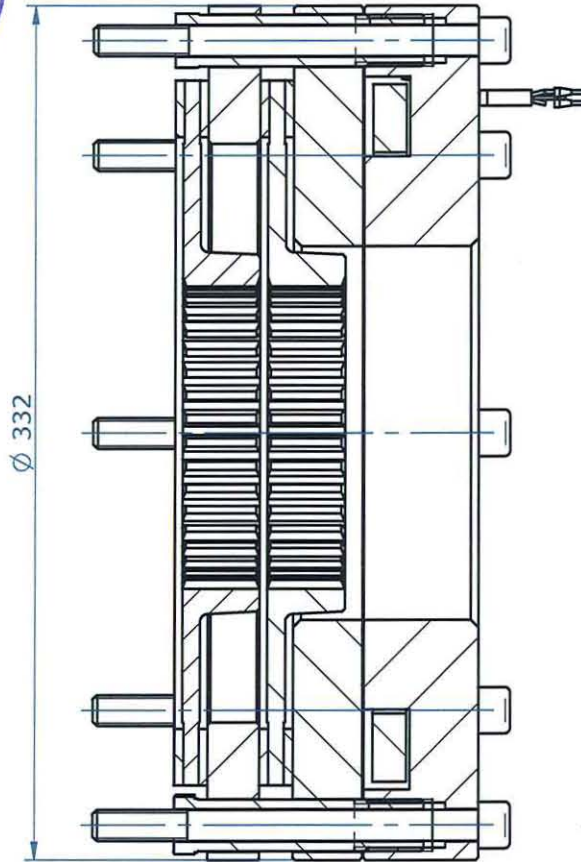
Client/customer:		Customer ref :							
Ms (Nm) :		Dimensions in mm							
Md (Nm) :			FM	LT	REVISION		DATE	By	Ch.
n Md (min-1) :		Manual/Notice :							
n max (min-1) :		SM							
U (Vdc) :		Mass :	Scale :						
P20°C (W) :			1:1						
Insulation class (°C):		Design.: Frein électromagnétique Electromagnetic brake							
Ce plan est la propriété de Warner Electric Europe, il ne peut être divulgué ni reproduit entièrement ou partiellement, sans autorisation écrite.		Warner Electric Europe		Type: ERS VAR10 SZ1010					
This document is the property of Warner Electric Europe, it is not to be disclosed or reproduced totally or partially, without written permission.				N° 1 12 107250					



SECTION A-A

Les cotes sans indication de tolérances sont des cotes nominales.
 Untoleranced dimensions are nominal dimensions.

NOTES



29. Nov. 2010

- GEPRÜFT -
 TÜV SÜD Industrie Service GmbH
 Zentralbereich Fördertechnik-Sonderbauten
 Abteilung Aufzüge und Sicherheitsbauteile
 Westendstr. 199, D-80688 München
 Der Sachverständige

TUV Diffusion

Client/customer:		Customer ref:							
Ms (Nm) :		Dimensions in mm		A	Up to date	17.11.10	GFE	MP	
Md (Nm) :		FM	LT	REVISION		DATE	By	Ch.	
n Md (min-1) :		Manual/Notice : SM				Drawn : M. Poiraud	Date: 12.07.01		
n max (min-1) :		Mass :	Scale :			Checked: B. Pitto	Date: 12.07.01		
U (Vdc) :		Design.: Frein électromagnétique Electromagnetic brake							
P20°C (W) :		Type: ERS VAR10 SZ2500/----							
Insulation class (°C):		Warner Electric Europe						N° 1 12 106582	
<p>Ce plan est la propriété de Warner Electric Europe, il ne peut être divulgué ni reproduit entièrement ou partiellement, sans autorisation écrite.</p> <p>This document is the property of Warner Electric Europe, it is not to be disclosed or reproduced totally or partially, without written permission.</p>									

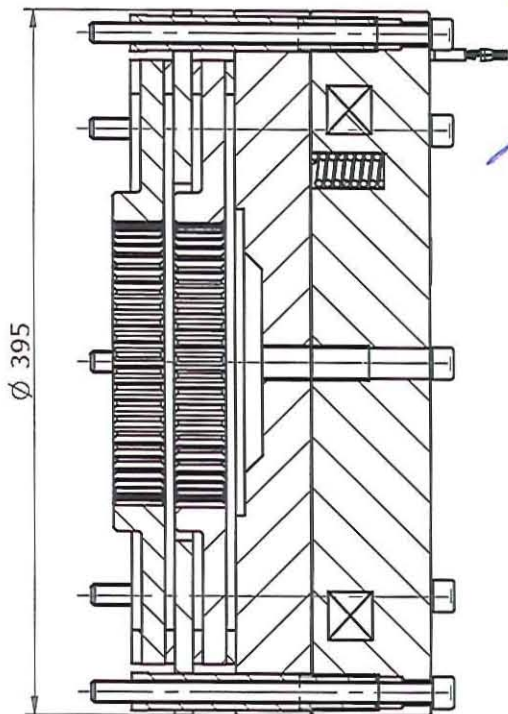
A3 CAD SE

23. Feb. 2011

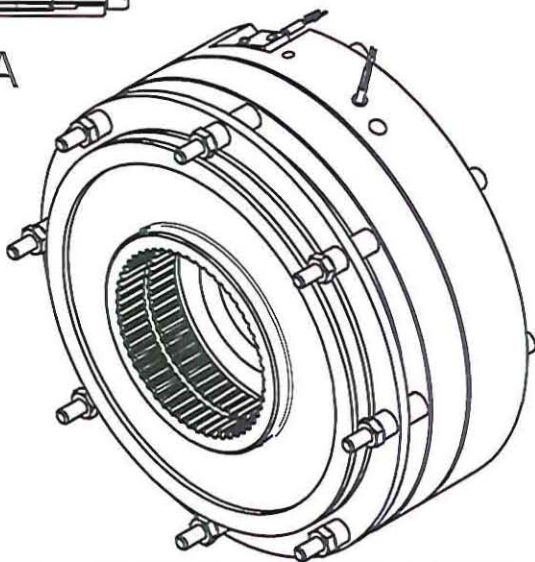
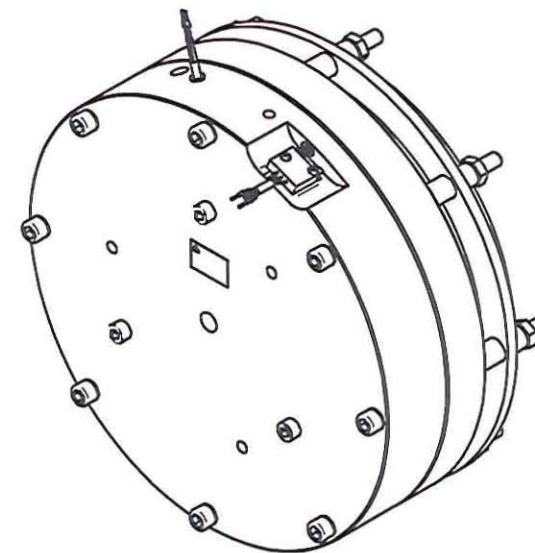
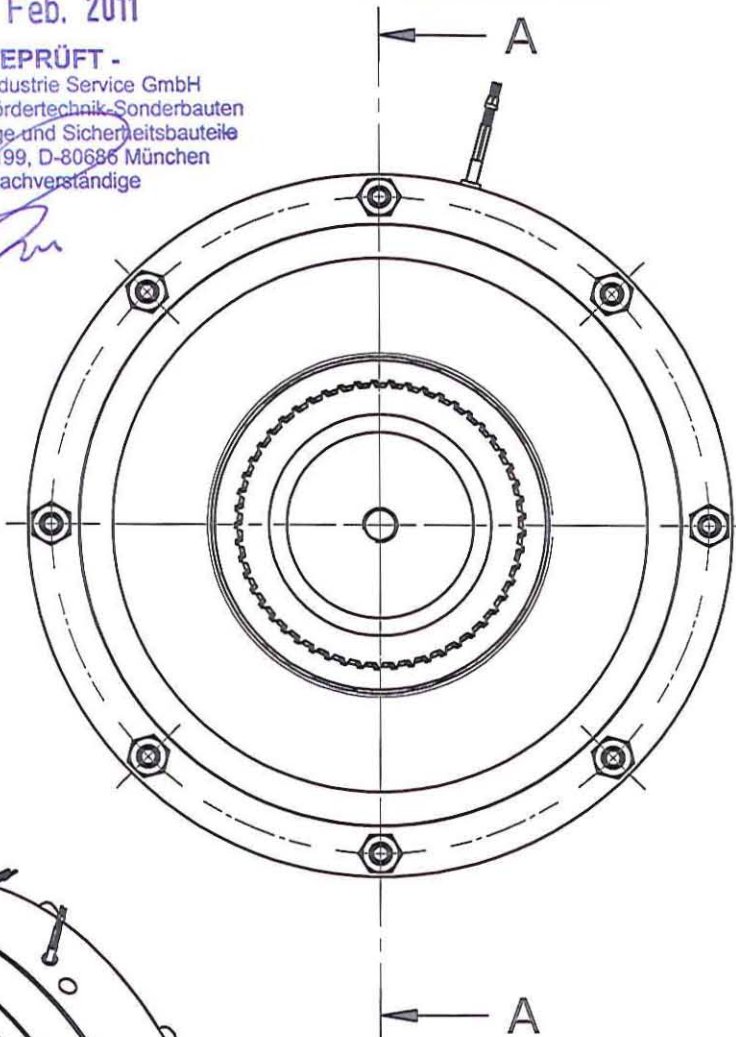
- GEPRÜFT -
 TÜV SÜD Industrie Service GmbH
 Zentralbereich Fördertechnik-Sonderbauten
 Abteilung Aufzüge und Sicherheitsbauteile
 Westendstr. 199, D-80686 München
 Der Sachverständige

Les cotes sans indication de tolérances sont des cotes nominales.
 Untoleranced dimensions are nominal dimensions.

NOTES



A-A



Client/customer:									
Ms (Nm) :		Customer ref :							
Md (Nm) :		Dimensions in mm		A	Up to date	16.12.10	GFE	le.J	
n Md (min-1) :		FM	LT	REVISION		DATE	By	Ch.	
n max (min-1) :		Manual/Notice : SM366		Drawn : V. Cochelin Date:29.10.01		Checked: G. Ferrand Date:29.10.01			
U (Vdc) :		Mass :	Scale :	Design.: ELECTROMAGNETIC BRAKE FREIN ELECTROMAGNETIQUE					
P20°C (W) :				Type: ERS VAR10 SZ5000/----					
Insulation class (°C):				N° 1 12 106602					
Ce plan est la propriété de Warner Electric Europe, il ne peut être divulgué ni reproduit entièrement ou partiellement, sans autorisation écrite.		This document is the property of Warner Electric Europe, it is not to be disclosed or reproduced totally or partially, without written permission.		Warner Electric Europe				A	

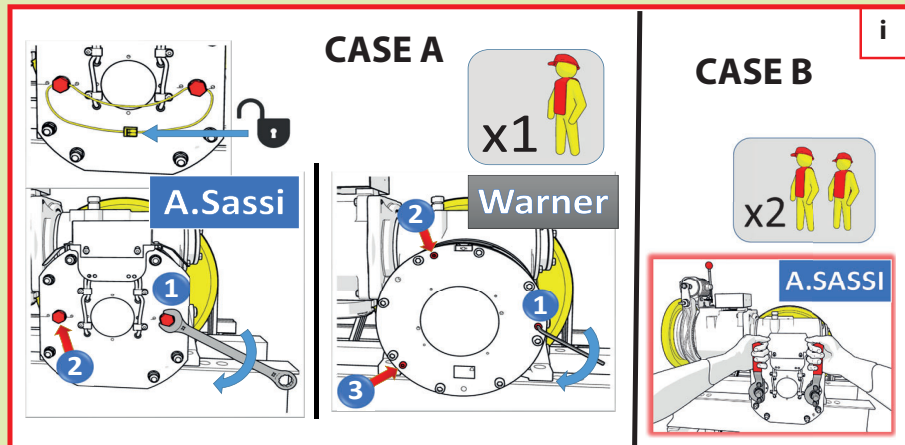
CAD SE A3

1 Close and block doors at floor – Switch off the mains switch - **The service brake must be closed and no oil must be present in drum brake**

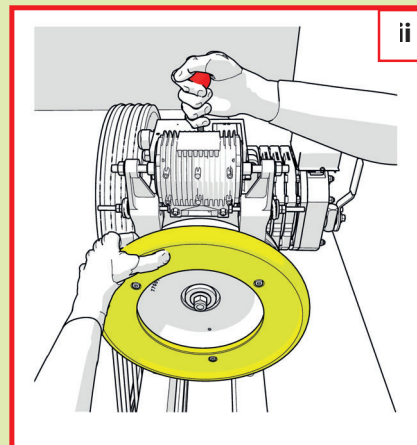
2 Reassure passengers and inform them that they **should not attempt to leave the cabin before the system has been secured**

3 HOW TO OPERATE MANUAL RELEASE OF THE BRAKE

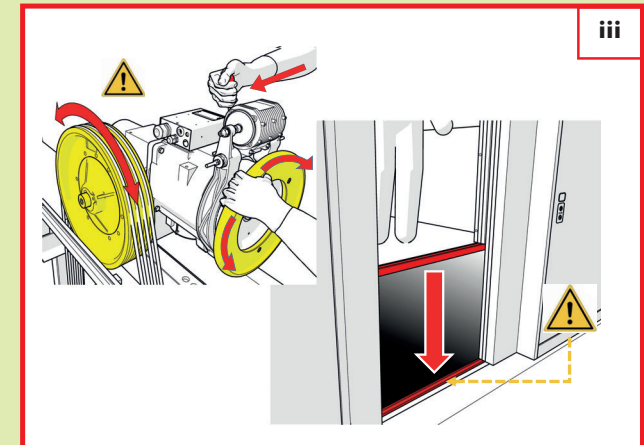
Release the emergency brake (if present)



Release the service brake



Rotate the flywheel in the most favorable direction



ATTENTION: THE CABIN COULD MOVE UPWARDS OR DOWNWARDS DEPENDING ON THE LOAD

Open the service brake carefully and intermittently (Fig. iii) and move the cabin slowly.

ATTENTION: IN CASE OF SUDDEN ACCELERATION OF THE CABIN , LEAVE THE LEVER FOR BRAKE OPENING IMMEDIATELY

4 **EXIT OF PASSENGERS** Manually open the doors at the floor where the cabin is positioned and let passengers get out

5 RESTART OF THE INSTALLATION

CASE A: unscrew the 2 or 3 nuts and position them at a distance of 4 mm from coil's body

CASE B: restore the initial position of brake levers

IF UNABLE TO MOVE THE CABIN MANUALLY, NOTIFY THE RESCUE SERVICE IMMEDIATELY