

*Handwritten initials*

**CERTIFICATE of CONFORMITY to TYPE**  
According to Directive 2014/33/EU (Module C2, Annex IX)

**Certificate No: LF/KSA/A-C-0129A/17**

Name & Address of the Certificate Holder of the Manufacturer:	<b>NINGBO AODEPU</b> ELEVATOR COMPONENTS CO., LTD. NO. 296, LONGZHEN AVENUE, LONGSHAN INDUSTRIAL AREA, CIXI, NINGBO, ZHEJIANG, P.R.CHINA.
Date of sampling Examination:	03/06/2017
Number of EU Type-Examination Certificate:	MIRTEC, LF/KSA/A-C-0129/17
Number & Date of Report:	LF/KSA/A-R-0129A/17, 03/06/2017
Product Type of Safety Component:	<b>OVERSPEED GOVERNOR</b> Type: OX-240
Test Laboratory:	SHANGHAI JIAOTONG UNIVERSITY ELEVATOR TEST CENTER (EU Type-examination)
Surveillance Place:	NINGBO AODEPU ELEVATOR COMPONENTS CO., LTD. (Production Surveillance)
Documents Annexed to this Certification:	Product Description, Drawings, Installation & Maintenance Instructions, Material List, Material Certificates.

**DECLARATION**

*The manufacturer is -after examination of the prerequisites- authorized to provide his safety components (overspeed governor OX-240) manufactured within the scope of the type examination our identification number to the CE mark as illustrated:*

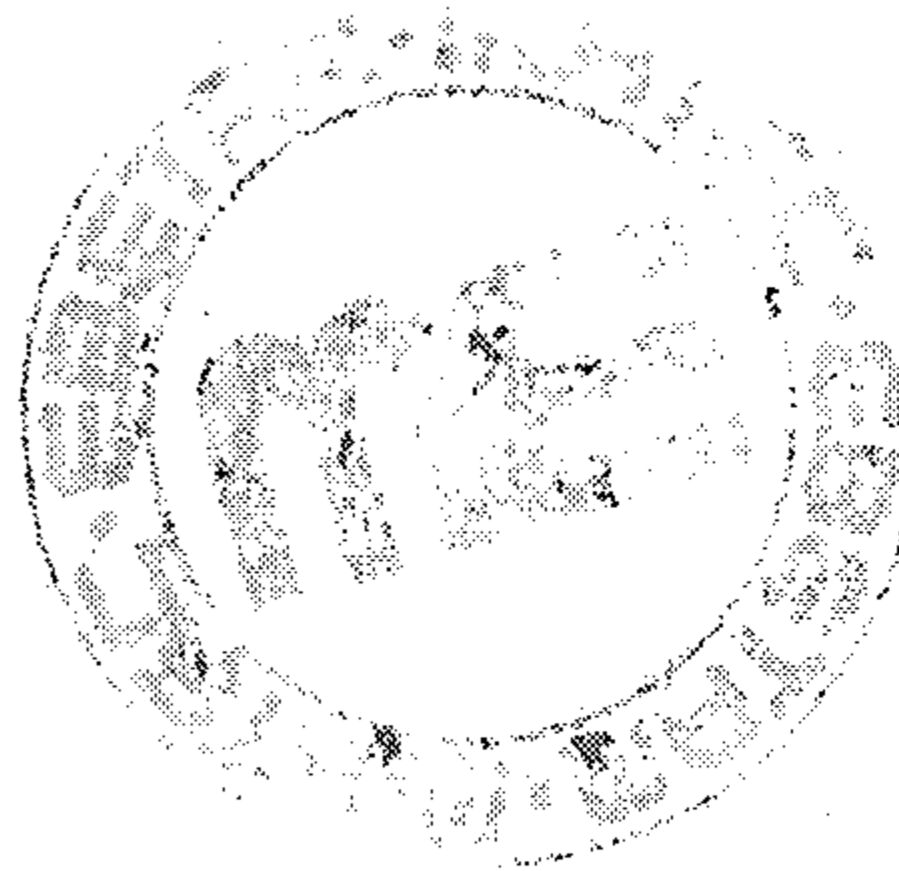


Date of issue: 28.06.2017

Validity of the certificate: 28.06.2018

For MIRTEC S.A.

*Signature of I. Dimitriadis*  
I. DIMITRIADIS  
Director of Athens Office



Certification department for lifts

*Signature of C. Spiliotopoulos*  
C. SPILIOPOULOS  
Inspector of Lifts

EBETAM A.E.  
www.ebetam.gr  
CERT - safecomp / EN 03 (5.0 / 24.10.2016)  
AET:28031



EUROPEAN INSPECTION AND CERTIFICATION COMPANY S.A.

**CERTIFICATE OF CONFORMITY TO TYPE WITH RANDOM CHECKING  
EUROPEAN LIFT DIRECTIVE 95/16/EC ANNEX XI (MODULE C)**

<b>Certificate Number:</b>	CN.CE.0384.02-06/14
<b>Certificate Expiry Date:</b>	17.06.2016
<b>Applicant/Certificate Holder (Name &amp; Address):</b>	NINGBO AODEPU ELEVATOR COMPONENTS CO., LTD. / Longzhen Avenue, Longshan Industrial Area, Cixi, Ningbo, Zhejiang
<b>Manufacturer (Name &amp; Address):</b>	Same as applicant
<b>Date of Submission:</b>	24.07.2014
<b>Test Laboratory (Name &amp; Address):</b>	Shanghai Jiao Tong University Elevator Test Center / No.800, Dongchuan Road, Minhang District, Shanghai, China
<b>Date and Number of Test Report:</b>	24.07.2014 – TX F310-022-14 0206
<b>Approved Type of Product:</b>	OVERSPEED GOVERNOR
<b>Approved Model of Product:</b>	OX-240
<b>Directive (s) &amp; Standard(s):</b>	95/16/EC, EN 81.1/2:1998+A3:2009
<b>EC Type Examination Certificate (Module B) No.:</b>	CN.CE.0384.01-07/09

EUROCERT SA, aforementioned notified body with identification number 1128, ascertains and certifies that above safety component satisfy the safety requirements of the European Directive 95/16/EC.

The manufacturer is authorized to provide the safety component described above with the CE Mark as displayed below:

**CE 1128**

Preconditions:

It is required that the above safety equipment must always come with a declaration of conformity and the relevant instructions of use.

INSPECTOR

*Lande Bai*  
LANDE BAI

Athens 18/06/2015



FOR EUROCERT SA

*George Nikolopoulos*  
GEORGE NIKOLOPOULOS  
Technical Manager

Please check the validity of the certificate from our website using the password **C1M7ZR10**

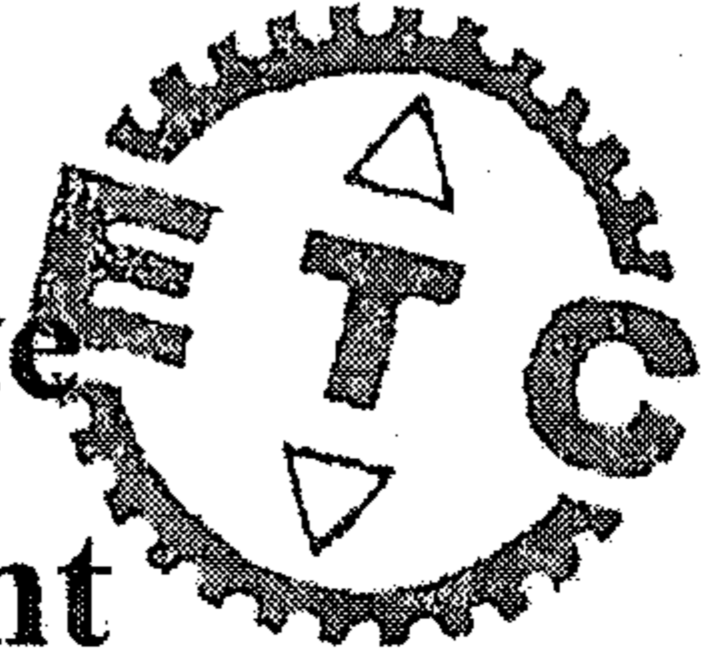
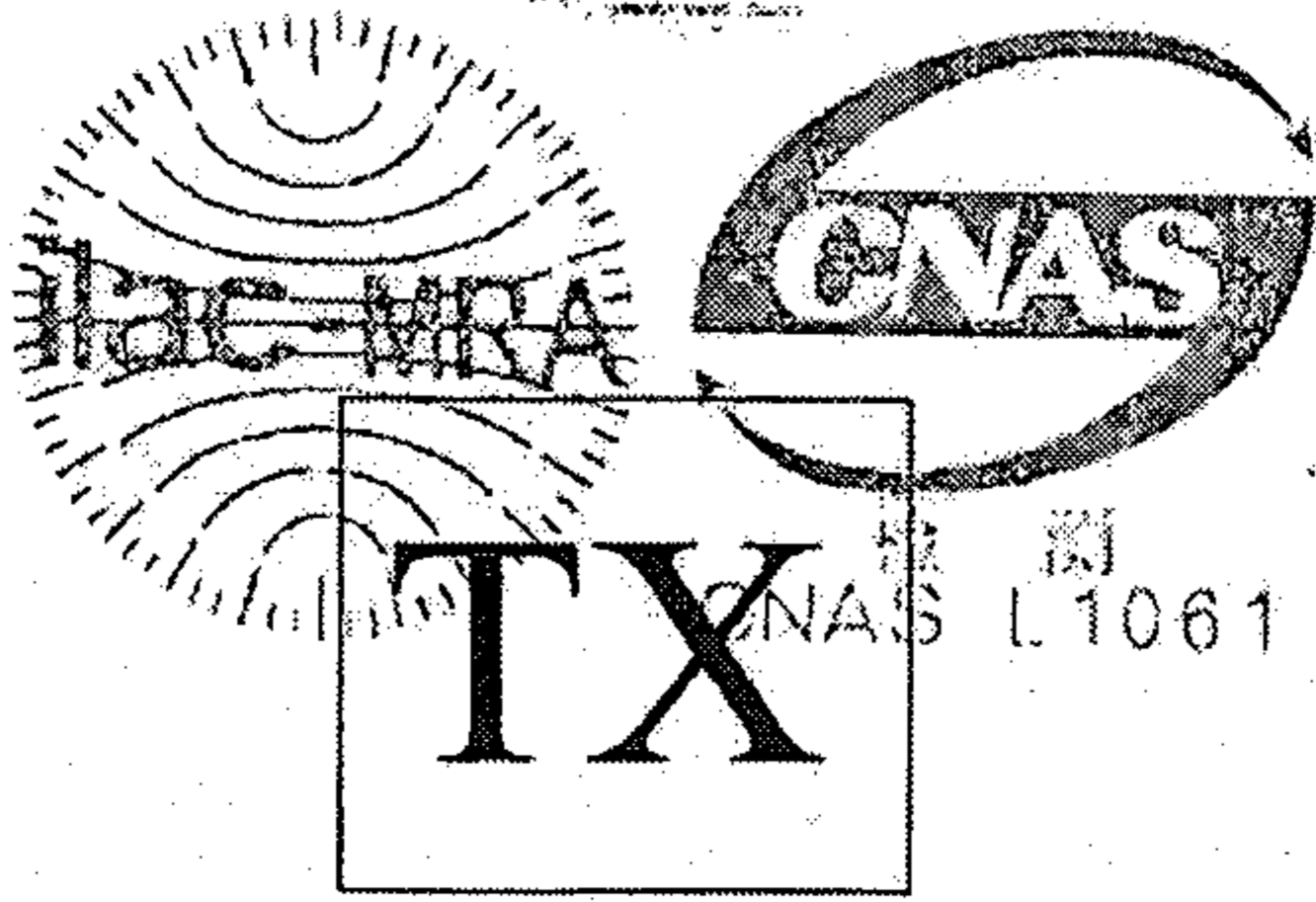


Inspections

Cert No.: 53-3

89, CHLOIS STR. & LIKOVRISEOS, 144 52 METAMORFOSI, ATHENS, GREECE  
Tel.: ++30 210 62.52.495, 30 210 62.53.927 - Fax: ++30 210 62.03.018  
Internet site: www.eurocert.gr - e-mail: eurocert@otenet.gr





# Type Tests Certificate for Special Equipment

No. TX F310-022-16 0220

**Name and address of manufacturer:** NINGBO AODEPU ELEVATOR COMPONENTS CO.,LTD  
Longzhen Avenue, Longshan Industrial area ,Cixi,Ningbo,  
Zhejiang

**Name of product:** Overspeed Governor

**Type of product:** OX-240

**Product configuration:** See the annex

**Number of type examination report:** TX F310-022-16 0220

**Certificate issued on the basis of the requirements:** GB7588-2003, EN81-50:2014

The certificate covers the following scope (The product shall be configured as the annex)

**Name of product:** OX-240  
**Rated speed(v):** 1.5~1.6m/s

**Date of submission:** 2016-06-29

**Shanghai Jiao Tong University Elevator Test Center**

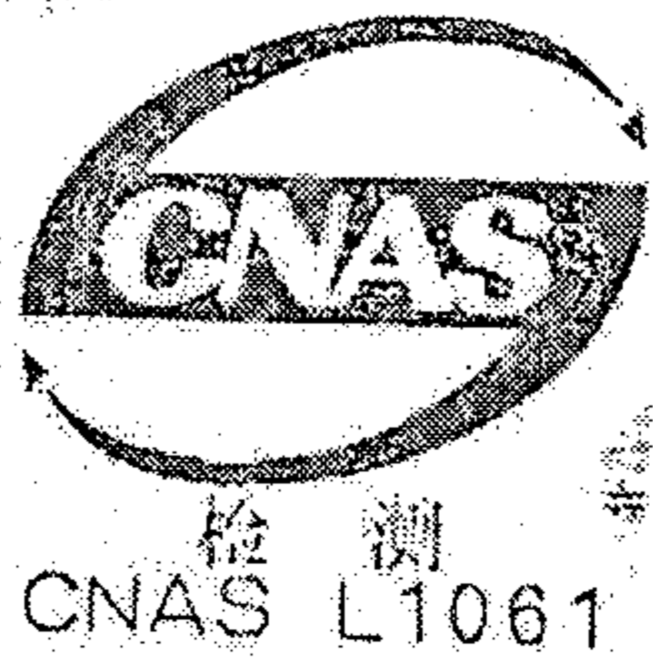
- Note:
1. This certificate is used to confirm the type of product with definite scope and only responsible for the test result of the sample.
  2. The owner of this certificate is responsible for confirming that the products comply with their standard specifications and are in accordance with the sample for type examination.
  3. Period of validity of this certificate is always calculated from the date of submission even if the certificate is modified.

**Annex:**

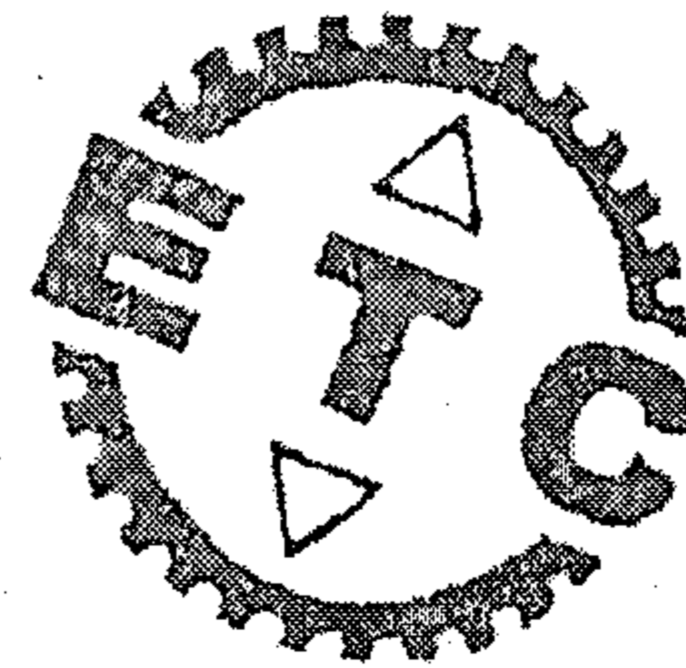
**Product Configuration Table**

No. TX F310-022-16 0220

Working Area	Car side or counterweight side	Applicative Environment	Normal, Indoor
Type of safety gear fitted		Progressive safety gear	
Type of ascending car overspeed protection means fitted		Brakes of PM motor , Counterweight safety gear	



2014090850L



# Special Equipment

# Type Tests Report

No: TX F310-022-16 0220

Product Kind: Safety Devices

Product Model: Overspeed Governor

Product Name: Overspeed Governor

Product Type: OX-240

Applicant: NINGBO AODEPU ELEVATOR COMPONENTS CO.,LTD

Manufacturer: NINGBO AODEPU ELEVATOR COMPONENTS CO.,LTD

**Shanghai Jiao Tong University  
Elevator Test Center**



水




SJTUETC

## Type Tests Report

No: TX F310-022-16 0220

page 1 of 7

Product Name	Overspeed Governor		
Sample Type	OX-240		
Serial Number	16070638	Date of Production	2016.06
Design Specifications	Structure	Centrifugal	
	Type of safety gear fitted	Progressive	
	Rated speed(m/s)	1.5~1.6	Structure and diameter of the rope fitted(mm) Φ6 6×19S+FC Φ8 8×19S+FC
	Minimum quality of tension device	18kg	Suspension mode Vertical Cantilever
Applicant	Name	NINGBO AODEPU ELEVATOR COMPONENTS CO.,LTD	
	Address	Longzhen Avenue,Longshan Industrial area ,Cixi,Ningbo, Zhejiang	
Manufacturer	Name	NINGBO AODEPU ELEVATOR COMPONENTS CO.,LTD	
	Address	Longzhen Avenue,Longshan Industrial area ,Cixi,Ningbo, Zhejiang	
Date of Sample arrived	2016.06.03	Sample Number	20160220
Date of Testing	2016.06.28	Product Status	OK
Kind of test	Type Tests	Test Items	All Applied Testing Items
Testing Place	Shanghai Jiao Tong University Elevator Test Center		
Test Conditions	OK		
Basis of Testing	GB7588-2003,EN81-50:2014		
Test Conclusion	Type Tests Passed		
Compiler: 王超杰	Approved Certificate serial number: TS7610022-2017  Shanghai Jiao Tong University Elevator Test Center Date of issue: 2016-06-29		
Verifier: 张松景			
Approver: 张松景			

王超杰



## Sample Design Specifications

Sample Type	OX-240		
Structure	Centrifugal		
Type of safety gear fitted	Progressive		
Rated speed(m/s)	1.5~1.6	Structure and diameter of the rope fitted(mm)	Φ6 6×19S+FC Φ8 8×19S+FC
Minimum quality of tension device(kg)	18kg	Suspension mode	Vertical Cantilever
Special for applicative environment	/		
Overspeed operation and trip	Tripping speed (m/s)	2.00	Overspeed operation (m/s) 1.88
	Tensile force (N)	≥500	
Ascending car overspeed operation and trip	Brakes of PM motor fitted	Overspeed operation (m/s)	1.93
	Bi-directional safety gears fitted	Tripping speed (m/s)	/
		Tensile force (N)	/
	Mechanical triggered rope gripper fitted	Tripping speed (m/s)	/
		Tripping force (N)	/
		Tripping distance (mm)	/
	Electrical triggered rope gripper fitted	Overspeed operation (m/s)	/
Other	/	/	

## 1. Technical documents Review

No.	Item Number	Review Item	Result	Conclusion
1	N2.1	General technical documents	Pass	OK
2	N2.2	Information of structure design	Pass	OK
3	N2.3	Special for applicative environment	Inapplicability	/
4	N2.4	Any other necessary	Inapplicability	/

## 2. Test items, result and conclusion

No.	Item Number	Test Item	Result	Conclusion	
1	N3.1	Tripping speed	Control car safety gears tripping speed (m/s)	2.01~2.03	OK
2			Control counterweight safety gears tripping speed (m/s)	2.01~2.03	OK
3			Mechanical triggered Ascending car overspeed operation (m/s)	Inapplicability	/
4			Electrical triggered Ascending car overspeed operation (m/s)	Inapplicability	/
5	N3.2	Overspeed operation	Positive electrical triggered speed (m/s)	1.91~1.94	OK
6			Opposite electrical triggered speed (m/s)	1.89~1.92	OK
7			Electrical safety device used for electrical triggering device	Inapplicability	/
8			Electrical safety device check	Pass	OK
9	N3.3	Tensile force	Positive tensile force	842~894	OK
10			Opposite tensile force	Inapplicability	/
11			Wire rope deformation check	Pass	OK
12	N3.4	Rope of overspeed governor*	Structure and diameter of the rope fitted(mm)	Φ8 8×19S+FC	OK
13			Safety factor	Max:894N 26	OK



No.	Item Number	Test Item		Result	Conclusion
14	N3.5	Mechanical triggered means	Tripping force (N)	Inapplicability	/
15			Tripping distance (mm)	Inapplicability	/
16			Safety factor	Inapplicability	/
17	N3.6	Rope groove tension device	The governor rope pulley rope diameter and nominal diameter should not be less than 30	30	OK
18			Governor sheave groove manufacturing requirements check	Inapplicability	/
19			Governor should stipulate the minimum quality of tension device	Pass	OK
20	N3.7	Restoration	Nonautomatic reset governor should set an electrical safety device to stop in the elevator movement condition during the start of the governor	Pass	OK
21			The electrical safety device should be installed firmly, its function should not change because the operation and movement	Pass	OK
22	N3.8	Accessibility of remote control		No remote contrl	/
23	N3.9	Special for applicative environment	Special for outdoor elevator applicative environment	Inapplicability	/
24			Special for explosion proof elevator applicative environment	Inapplicability	/

\* The calculation of safety factor ignores the quality of ropes.

## Annex: Special Instructions

### 1. Test Data:

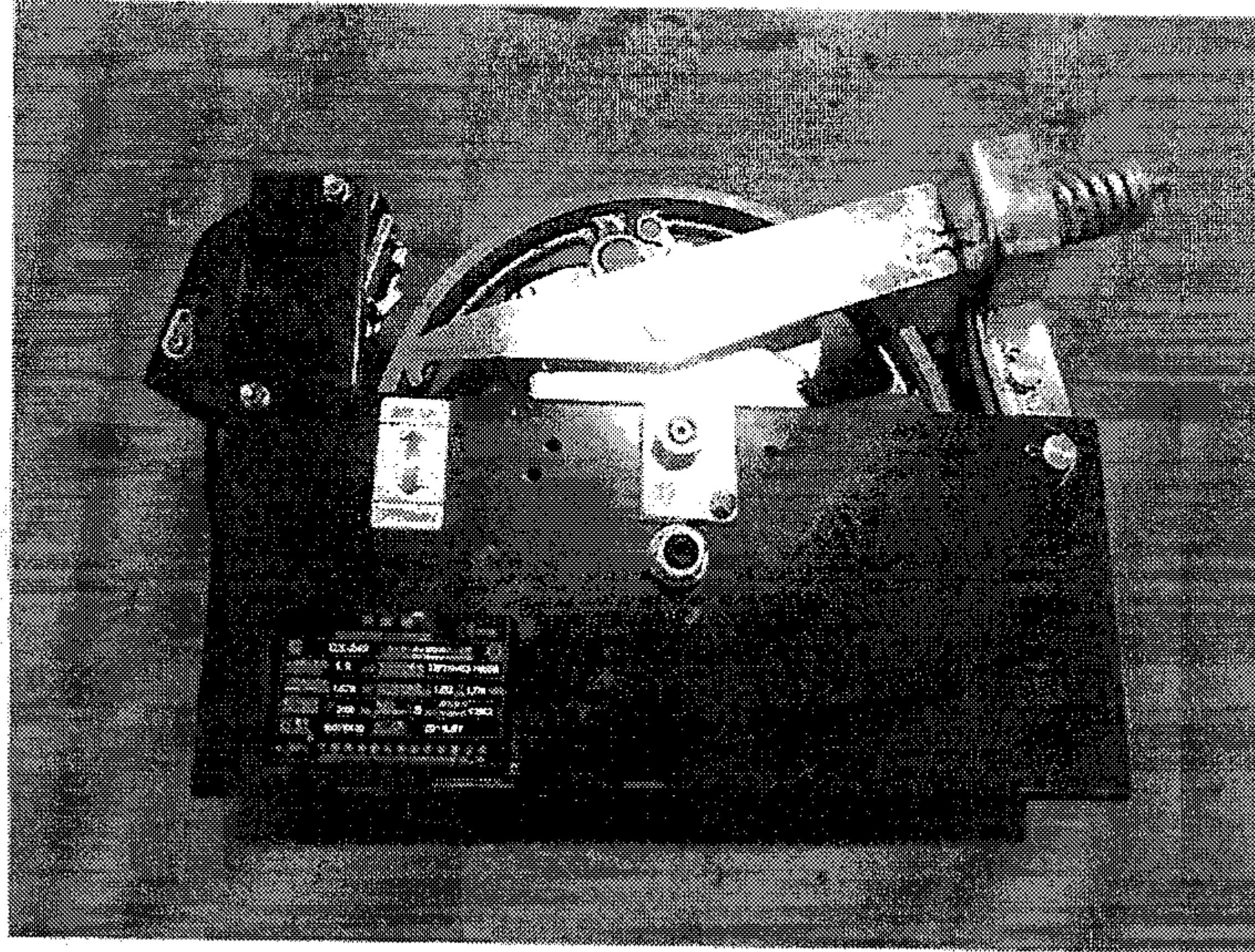
Overspeed operation and tripping speed of the overspeed governor (Downward):

No.	Overspeed operation (m/s)	Tripping speed (m/s)	No.	Overspeed operation (m/s)	Tripping speed (m/s)
1	1.94	2.02	11	1.94	2.02
2	1.92	2.01	12	1.93	2.02
3	1.92	2.02	13	1.93	2.03
4	1.94	2.02	14	1.94	2.03
5	1.91	2.02	15	1.92	2.02
6	1.91	2.02	16	1.92	2.03
7	1.91	2.02	17	1.91	2.02
8	1.93	2.03	18	1.91	2.03
9	1.92	2.02	19	1.92	2.02
10	1.94	2.02	20	1.92	2.02

Overspeed operation and tripping speed of the overspeed governor (Upward):

No.	Overspeed operation (m/s)	Ascending car overspeed operation and tripping speed (m/s)	No.	Overspeed operation (m/s)	Ascending car overspeed operation and tripping speed (m/s)
1	1.91	Same as left	11	1.90	Same as left
2	1.91	Same as left	12	1.91	Same as left
3	1.91	Same as left	13	1.91	Same as left
4	1.91	Same as left	14	1.89	Same as left
5	1.89	Same as left	15	1.90	Same as left
6	1.91	Same as left	16	1.91	Same as left
7	1.91	Same as left	17	1.91	Same as left
8	1.89	Same as left	18	1.91	Same as left
9	1.90	Same as left	19	1.90	Same as left
10	1.90	Same as left	20	1.92	Same as left

2. Photograph of the sample:



TX F310-022-16 0220



### 3.Special Instructions

1) The second part test items and results presented in this report are the serial number for the test data of governor 16060638 with diameter  $\Phi 8\text{mm}$   $8 \times 19\text{S}+\text{FC}$  governor rope.

For the requirement of manufacturer, the center do tensile force and rope of overspeed governor test on the serial number for the 16062349 of this type of speed governor with  $\Phi 6\text{mm}$   $6 \times 19\text{S}+\text{FC}$  governor rope, test data are as follows:

No.	Item Number	Test Item		Result	Conclusion
1	N3.3	Tensile force	Positive tensile force	886~917	OK
2			Opposite tensile force	Inapplicability	/
3			Wire rope deformation check	Pass	OK
4	N3.4	Rope of overspeed governor*	Structure and diameter of the rope fitted(mm)	$\Phi 6$ 6×19S+FC	OK
5			Safety factor	Max: 917N 16	OK
6	N3.6	Rope groove tension device	The governor rope pulley rope diameter and nominal diameter should not be less than 30	40	OK
7			Governor sheave groove manufacturing requirements check	Inapplicability	/
8			Governor should stipulate the minimum quality of tension device	Pass	OK