

Report No. 2021AF1324

Product category Lift Safety Protection Device

Equipment Type Lift Ascending Car Overspeed Protection Means
(speed reducing element)

Product name Traction machine brake

Model/Type DZE

Manufacturer SHENYANG BLUELIGHT DRIVE TECHNOLOGY CO., LTD.

Applicant SHENYANG BLUELIGHT DRIVE TECHNOLOGY CO., LTD.



TYPE-EXAMINATION REPORT of



**TYPE-EXAMINATION REPORT of
SPECIAL EQUIPMENT
(LIFT)**

CONTENTS

Conclusive report of the Type-Test Page 1

1. Sample Configuration and Technical Data Page 2

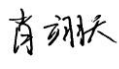
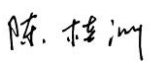
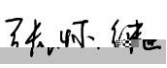
2. Technical Documents Review Page 2

3. Sample Check and Testing Page 3

4. Changes of the Type-Examination Report Page 10



**TYPE-EXAMINATION REPORT of
SPECIAL EQUIPMENT
(LIFT)**

Equipment Name	Lift Ascending Car Overspeed Protection Means (speed reducing element)		
Product Name	Traction machine brake	Product Model	DZE
Product No.	Z20211014	Manufacture Date	Aug- 2021
Name of Applicant	SHENYANG BLUELIGHT DRIVE TECHNOLOGY CO., LTD.	unified social credit identifier	91210112715754447D
Registered Address of Applicant	NO.37, XINSHIJI ROAD, HUNNAN NEW DISTRICT, SHENYANG, CHINA		
Manufacturer	SHENYANG BLUELIGHT DRIVE TECHNOLOGY CO., LTD.		
Manufacturing Address	NO.37, XINSHIJI ROAD, HUNNAN NEW DISTRICT, SHENYANG, CHINA		
Type of Examination	Consistency Verification	Inspection Date	18-Nov-2021
Sample No.	20211066	Sample Status	Normal
Inspection Place	LongHua QingHu Branch of Shenzhen Institute of Quality & Safety Inspection and Research		
Inspection Condition	Temperature: 20 Humidity: 50 %RH		
Standard for Inspection	《Regulation for Type Test of Lifts》 (TSG T7007-2016 ,Including No.1 amending list) GB 7588 – 2003 Safety Rules for the Construction and Installation of Electric Lifts (Including No.1 amending list) EN 81-20:2014 Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 20: Passenger and goods passenger lifts EN 81-50:2014 Safety rules for the construction and installation of lifts -Examinations and tests - Part 50: Design rules, calculations, examinations and tests of lift components		
Conclusion	Passed		
Note	Document ID No. XPSQ2021100037AZNBG.		
Inspected by: 	Date: 7-Dec-2021	Agency Approval Number: TS7610038-2025 (Stamp) Issued Date: 7-Dec-2021	
Reviewed by: 	Date: 7-Dec-2021		
Approved by: 	Date: 7-Dec-2021		



**TYPE-EXAMINATION REPORT of
SPECIAL EQUIPMENT
(LIFT)**

3. Sample check and test

1. Test item and results

No.	item code and name	item contents and requirements	Results	Conclusion
	Q6.1 Action Part	Speed reducing element shall act: (1) to the car; or (2) to the counterweight; or (3) on the rope system(suspension or compensating); or (4) traction sheave (e.g.on the traction sheave directly or on the same shaft in the immediate vicinity of the sheave) Note: Instantaneous safety gear cannot be used as speed reducing element of Ascending Car Overspeed Protection Means.	Action part: <u>(4)</u>	Passed
		Stopping test should be performed to Q6.2.4 on the entire elevator or simulation such as test bed. The stopping test must meet the following requirements: 2.1 When speed monitoring element acts, speed reducing element shall cause the car to stop, or at least reduce its speed to that for which the counterweight buffer is designed.	Meet the requirements	Passed
		2.2 The means shall not allow the retardation of the empty car in excess of $1 g_n$ during the stop phase.	Max. deceleration: <u>0.534</u> g_n	Passed
		2.3 After its release, the means shall be in condition to operate.	Meet the requirements	Passed
		2.4 After tests, there shall be no fracture, deformation and other changes(for example, cracks , deformation or wear of the gripping elements, appearance of the rubbing surface) 2.5 For Lift Ascending Car Overspeed Protection Means (speed reducing element) which apply to different weights, the type-test agency shall experiment 4 times respectively with both maximum weight and minimum weight. If it requires adjustment, the agency shall verify the availability of the formula or table provided by the applicant through appropriate approaches (if there is no better way, the median of the two weights can be used for testing), one-time verification is allowed; if adjustment is no required, verification is not necessary. 2.6 For Lift Ascending Car Overspeed Protection Means (speed reducing element) which apply to different speeds, the type-test agency shall experiment 4 times respectively with both maximum speed and minimum speed. If it requires adjustment, the agency shall verify the availability of the formula or table provided by the applicant through appropriate approaches (if there is no better way, the median of the two speeds can be used for testing), one-time verification is allowed; if adjustment is no required, verification is not necessary. 2.7 For Lift Ascending Car Overspeed Protection Means (speed reducing element) which apply to both different weights and different speeds, the type-test agency shall experiment 4 times respectively with maximum weight, maximum speed and minimum weight, minimum speed. If it requires adjustment, the agency shall verify the availability of the formula or table provided by the applicant through appropriate approaches (if there is no better way, the median of the two weights and two speeds can be used for testing), one-time verification is allowed; if adjustment is no required, verification is not necessary.	Meet the requirements	Passed
2	Q6.2 Stopping test			



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SPECIAL EQUIPMENT
(LIFT)**

No.	item code and name	item contents and requirements	Results	Concl usion
3	Q6.3 External Energy	If the means requires external energy to operate, the absence of energy shall cause the lift to stop and keep it stopp		



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SPECIAL EQUIPMENT
(LIFT)**

2. Test Data and Chart

2.1 Test 4 times with the rated speed 0.50m/s, rated load 450kg, system mass 1400kg.

Test No.	The maximum tripping speed (m/s)	The average deceleration (gn)	The maximum deceleration (gn)	The braking distance(mm)
1	0.592	0.243	0.491	74
2	0.636	0.260	0.470	79
3	0.593	0.248	0.441	72
4	0.598	0.263	0.480	69

2.2 Test once with the rated speed 0.50m/s, rated load 1250kg, system mass 4600kg.

Test No.	The maximum tripping speed (m/s)	The average deceleration (gn)	The maximum deceleration (gn)	The braking distance(mm)
1	0.617	0.312	0.534	62

2.3 Test once with the rated speed 4.0m/s, rated load 1250kg, system mass 4600kg.

Test No.	The maximum tripping speed (m/s)	The average deceleration (gn)	The maximum deceleration (gn)	The braking distance(mm)
1	4.932	0.331	0.487	3746

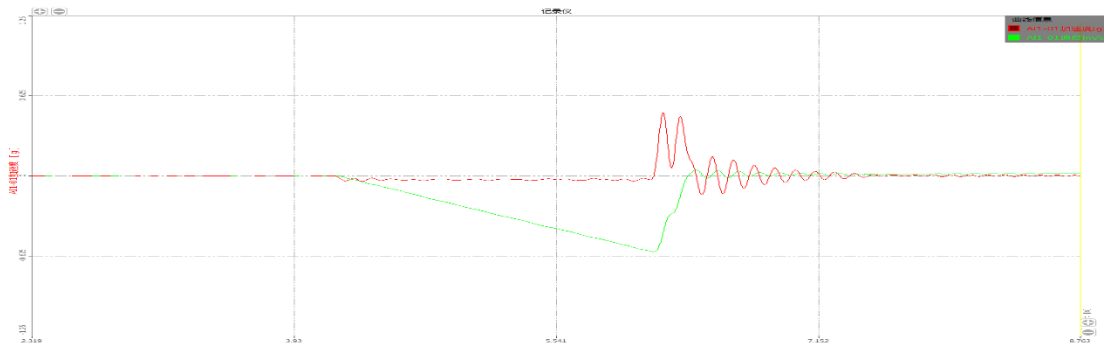
2.4 Test 4 times with the rated speed 4.0m/s, rated load 2000kg, system mass 7800kg.

Test No.	The maximum tripping speed (m/s)	The average deceleration (gn)	The maximum deceleration (gn)	The braking distance(mm)
1	4.932	0.234	0.371	5298
2	5.023	0.242	0.406	5314
3	5.264	0.240	0.418	5885
4	4.883	0.252	0.410	4823

2.5 Stopping Test Curves

1 Test 4 times with the rated speed 0.50m/s, rated load 450kg, system mass 1400kg.

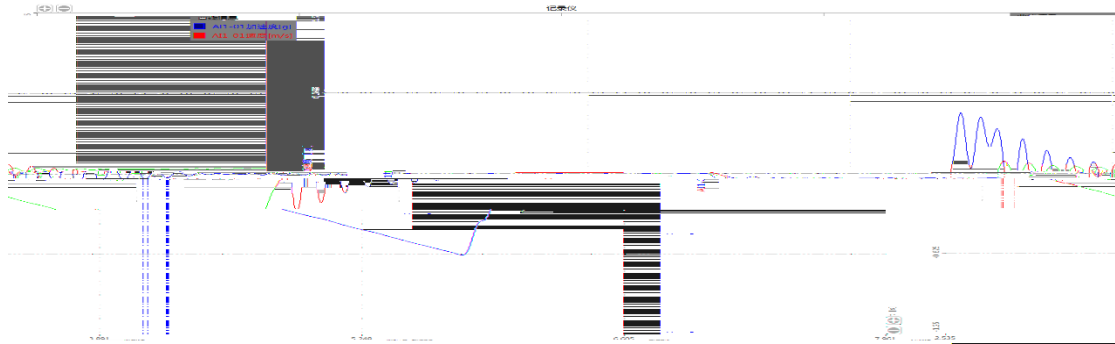
The 1st test



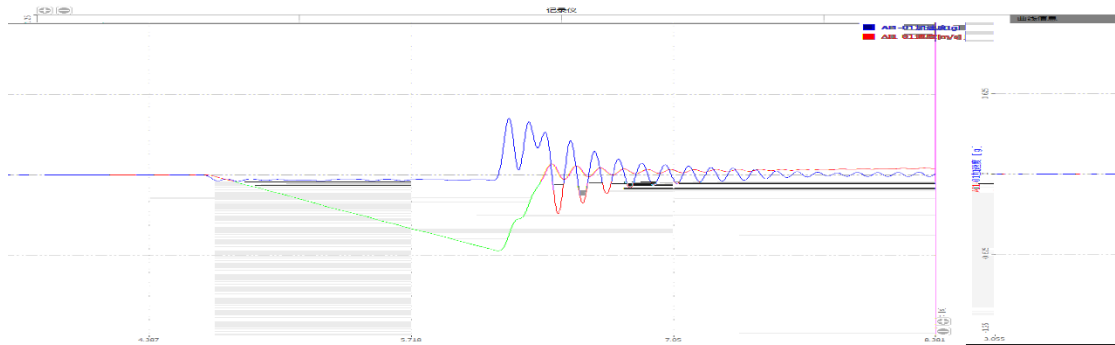


TYPE-EXAMINATION REPORT of SPECIAL EQUIPMENT (LIFT)

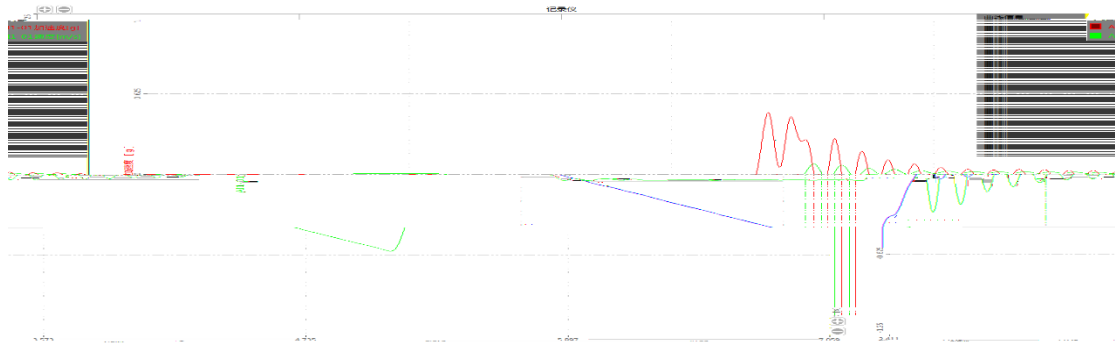
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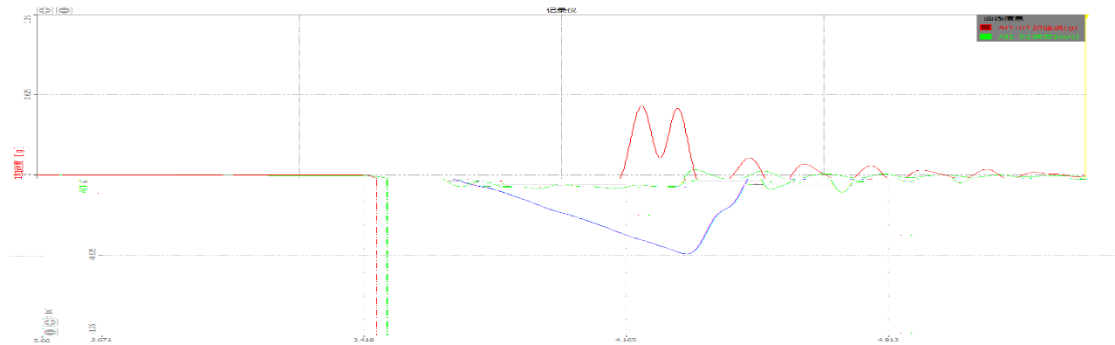
The 3rd test



The 4th test



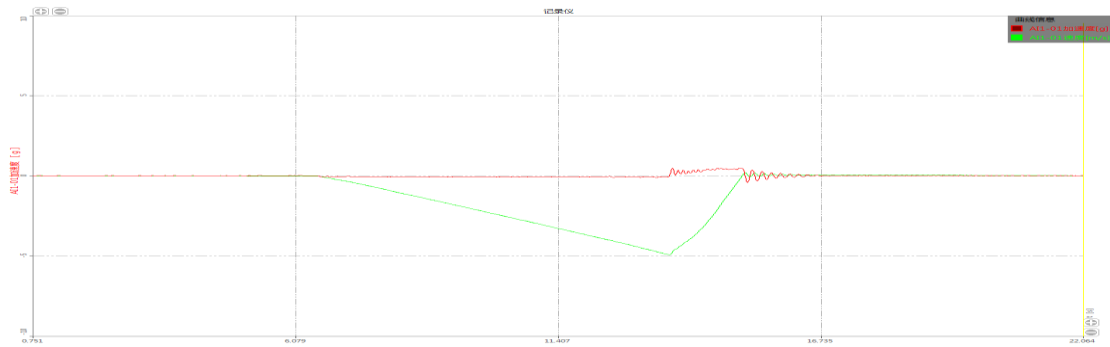
2 Test once with the rated speed 0.50m/s, rated load 1250kg, system mass 4600kg.





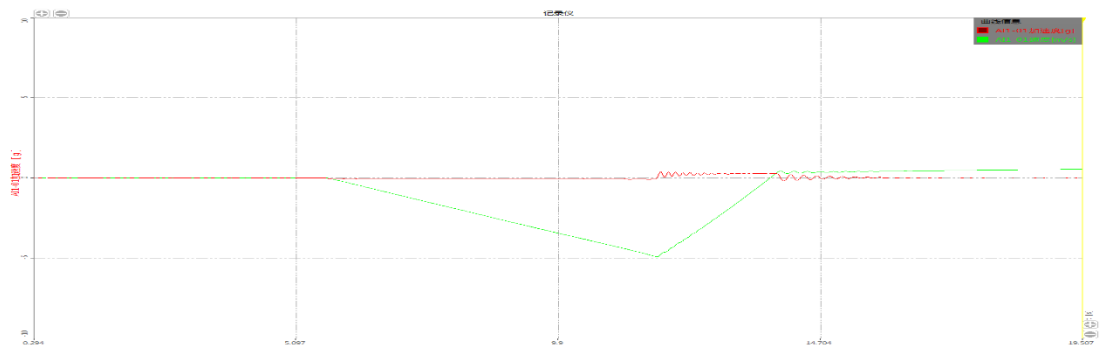
TYPE-EXAMINATION REPORT of SPECIAL EQUIPMENT (LIFT)

3 Test once with the rated speed 4.0m/s, rated load 1250kg, system mass 4600kg.

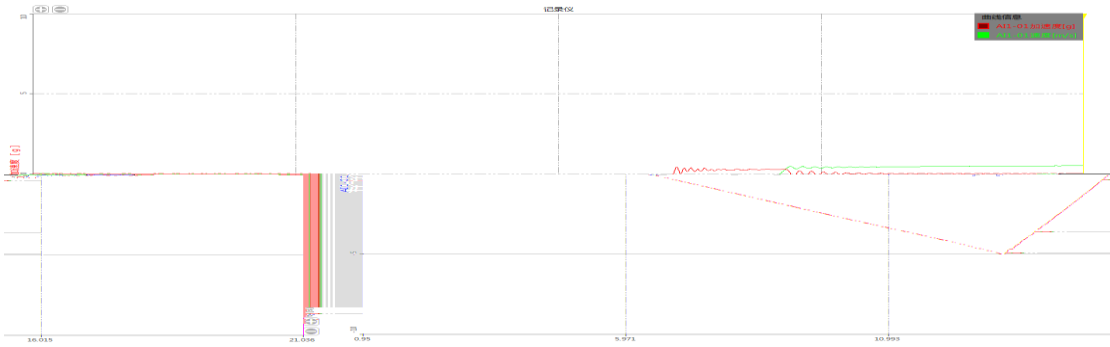


4 Test 4 times with the rated speed 4.0m/s, rated load 2000kg, system mass 7800kg.

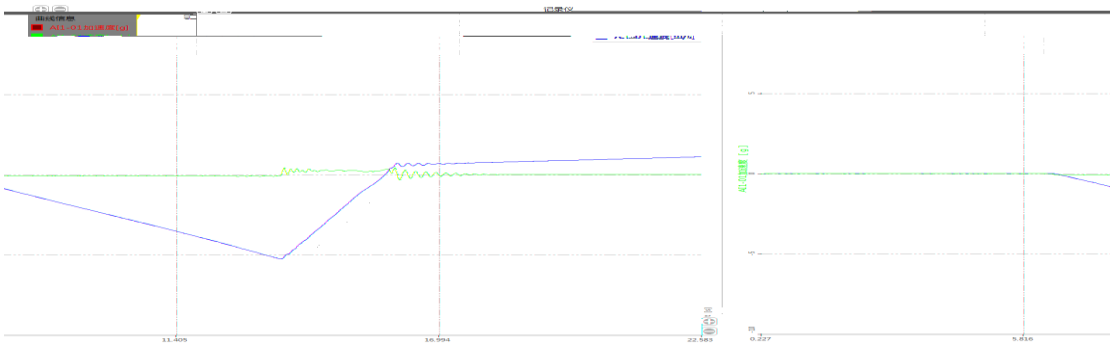
The 1st test



The 2nd test



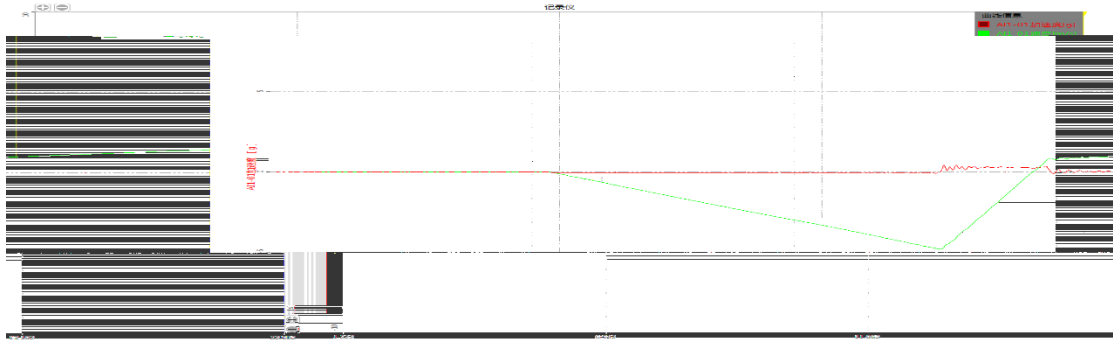
The 3rd test





TYPE-EXAMINATION REPORT of SPECIAL EQUIPMENT (LIFT)

The 4th test



3. Sample Photo and drawing

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>备注/零件登记</td></tr> <tr><td>制图</td></tr> <tr><td>校核</td></tr> <tr><td>审核/签字</td></tr> <tr><td>日期</td></tr> </table>	备注/零件登记	制图	校核	审核/签字	日期	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>设计</td> <td>审核</td> <td>校对</td> <td>制图</td> <td>材料</td> <td>重量</td> <td>比例</td> <td colspan="3" style="text-align: center;">DZE制动器外形图</td> </tr> <tr> <td>工艺</td> <td>日期</td> <td>共</td> <td>张</td> <td>第</td> <td>张</td> <td>日</td> <td colspan="3"></td> </tr> </table>											设计	审核	校对	制图	材料	重量	比例	DZE制动器外形图			工艺	日期	共	张	第	张	日			
备注/零件登记																																				
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(LIFT)**



4 .Additional Information

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**TYPE-EXAMINATION REPORT of
SPECIAL EQUIPMENT
(LIFT)**

4. Changes of The Type-Examination Report

If the name or address of the applicant (or oversea manufacturer) has any change, please submit a change request with related supporting evidence to the previous type-test agency. After confirmation, the agency will indicate the change on the change record page.

The change record see the attached page (If any).

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