



Report No. 2020AF0016

Type -Examination Report of Special Equipment LIFT

Product category Lift Safety Protection Device

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

Product name Traction machine brake

Model/Type BLS

Manufacturer SHENYANG BLUELIGHT DRIVE TECHNOLOGY CO., LTD.

Applicant SHENYANG BLUELIGHT DRIVE TECHNOLOGY CO., LTD.

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

Notes

1.This report is obtained based in the type-examination compliance with Regulation for Type Tests of Elevators (2016)(TSG T7007-2016)

2.This report must be printed or filled out in fountain pens/sign pens with neat and clear handwriting, no alternation.

3.The report is invalid if not signed by signature, and it is also invalid without approval number of the type testing organization, special seal for report and paging seal.

4. There will be two versions of the report: electronic and printed formats. They are equal in authorities.

5.Any discrepancy about the report from applicant should be raised within 15 working days af

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1. Sample configuration and technical data

Equipment Name		Lift ascending car overspeed protection means (speed reducing element)		
Product Name		Traction Machine Brake	Model/Type	BLS
Working condition		Indoor	Explosive-proof type	Not applicable
No-load system mass range		900kg-4800kg	Rated load range	320kg-1275kg
Type of action Part		Traction machine brake	Car-side Mass Range	386kg-2081kg
Range of Balance Factor		0.4-0.5	Suspension Ratio	2:1
Tripping Speed Range of braked part		1.16m/s-5.26m/s	Using of Balance Chain or Rope	Yes
Overspeed Monitoring device	Name	Overspeed governor	Model	/
	Rated speed range	0.50m/s-2.0m/s	Triggering speed range	0.58m/s-2.63m/s
Traction machine brake	Type	BLS	Structure Type	Complete electromagnetic disc
	Action part	Traction Sheave Shaft	Quantity	2
	Friction element material	Non-asbestos rubber carbon fiber	Triggering Mode	Electric Trigger
	Elastic element type	Cylindrical helical compression spring		
<p>Car- means the sum of no-load car mass and the extra mass of in the car side; Extra mass refers to the total of the mass of trailing cable, suspension cable and possibly that of the compensation cable or chain.</p>				

2. Technical documents check and results

No.	Item No.	Items	Results	Conclusions
1	Q5.1	Certificate and related technical documents	Completed	Passed
2	Q5.2	Technical data	Completed	Passed
3	Q5.3	Main design drawing	Completed	Passed

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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>0.620</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

2 Q6.2
Stopping test

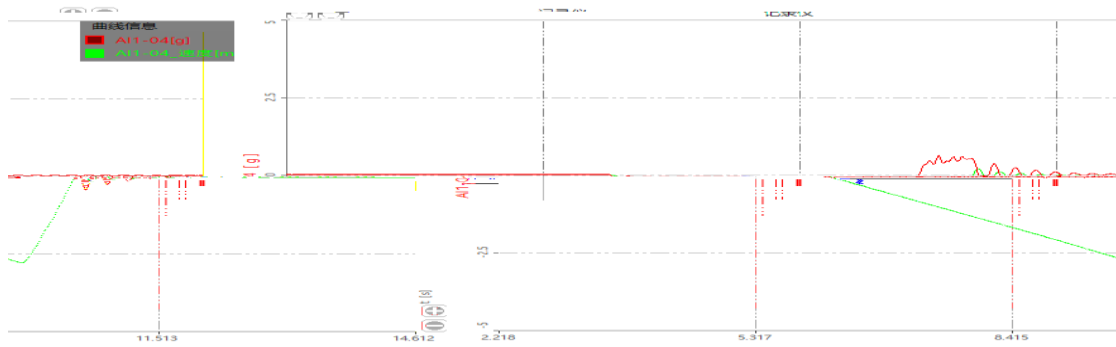
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No.	item code and name	item contents and requirements	Results	Conclusion
3	Q6.3 External Energy	If the means requires external energy to operate, the absence of energy shall cause the lift to stop and keep it stopped. This does not apply for guided compressed springs.	Energy of the brake part <u>guided compressed spring</u>	Passed
4	Q6.4 Electric Safety Device	The means shall operate an electric safety device if it is engaged. Note Q-4: When counterweight overspeed governor-safety gear system is adopted, the electrical safety device can be installed on the counterweight overspeed governor. When traction machine brake is taken as speed reducing element of ascending car overspeed protection means, the electrical safety device can be installed on the speed monitoring element.	Meet the requirements	Passed

5 Q6.5
Release The release of the means shall not require the access to the car or the counterweight.

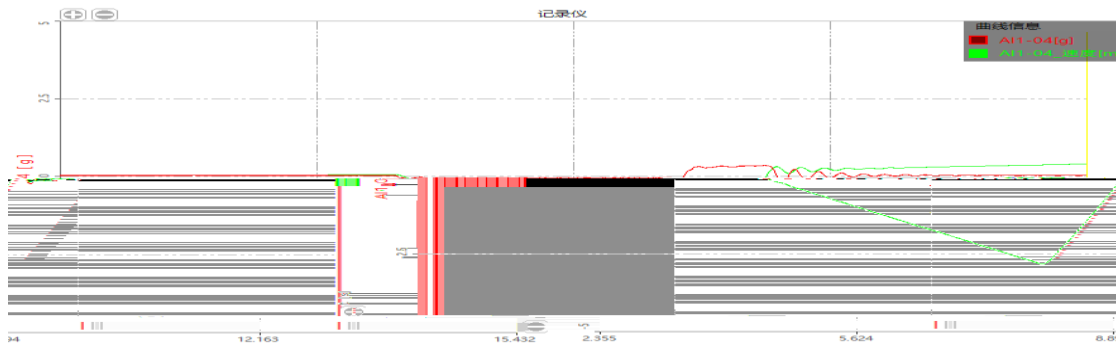
TYPE-EXAMINATION

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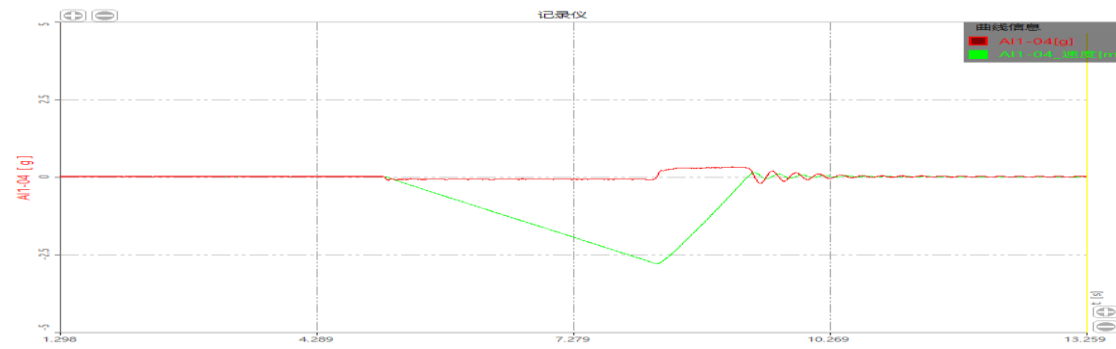


4 Test 4 times with the rated speed 2.0m/s, rated load 1275kg, system mass 4800kg.

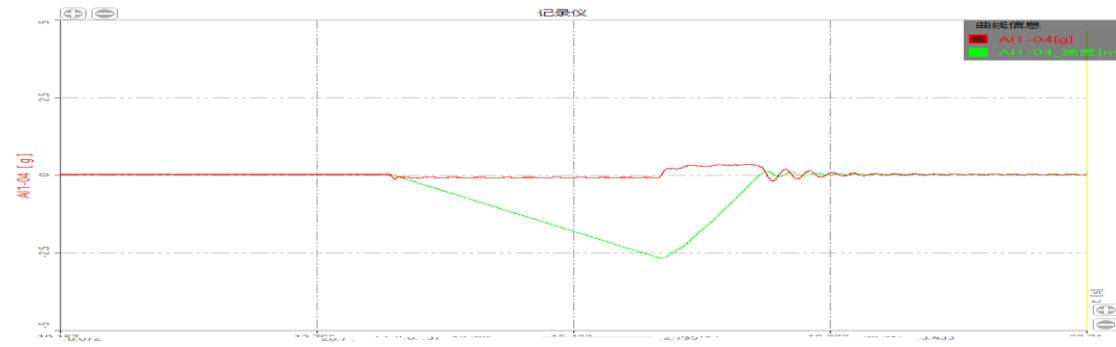
The 1st test



The 2nd test

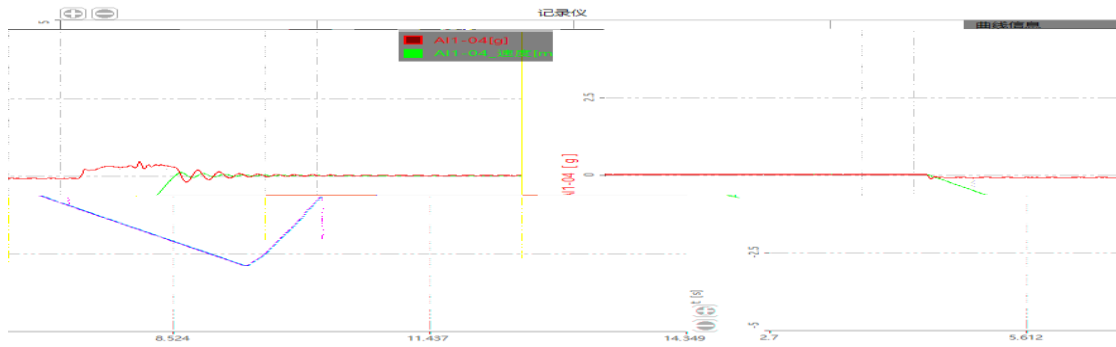


The 3rd test

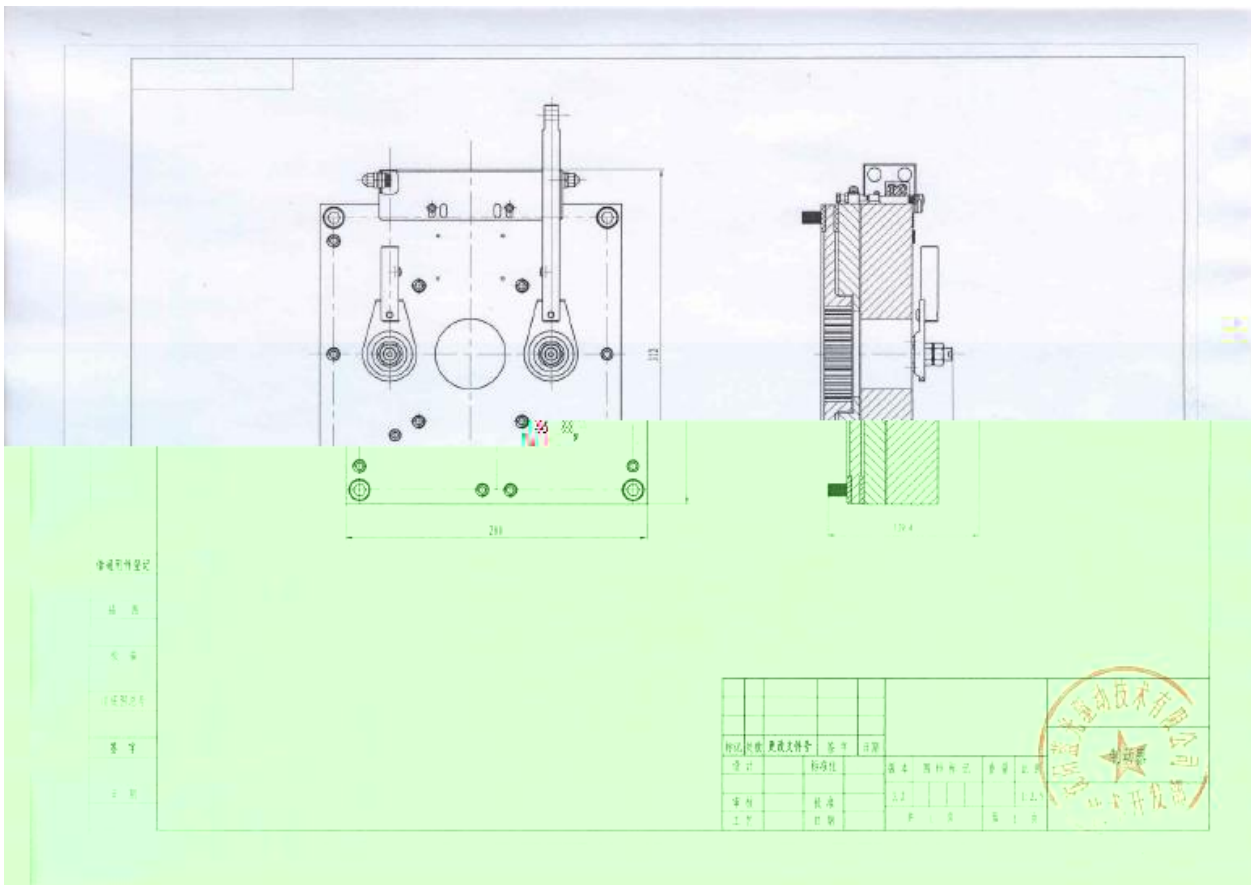


The 4th test

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3. Sample Photo and drawing



4 .Additional Information

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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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