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检测  
TESTING  
CNAS L1061



Report No. ETC25B370022

# Special Equipment Type Test Report (Lifts)

Category of equipment:	Lift main component
Type of equipment:	Lift machine
Name of product:	Lift machine for traction lifts
Model of product:	WYT-T
Manufacturer:	Shenyang Bluelight Drive Technology Co.,Ltd
Applicant:	Shenyang Bluelight Drive Technology Co.,Ltd
Category of type test:	Overall test at first
Test date:	2025-07-31

Shanghai Jiao Tong University Elevator Test Center

# NOTICES

- 1、 The report is the result of the type test according to the TSG T7007-2022 *Regulation for Type Test of Lifts*.
- 2、 The report shall be printed by computer and be invalid with any modification.
- 3、 The report will be invalid without the signature of approver、 verifier and tester .It will also be invalid without the approval certificate、 the cross-page official stamp of the type test entity.
- 4、 Type test report is only valid for the sample.
- 5、 Any dissents to the report must be put forward to the type test organ within 15 working days from receiving it. Otherwise, it is considered that the report is accepted.
- 6、 The test samples shall be handled according to relevant regulations except that they are not returned due to legitimate losses.
- 7、 Type test report and certificate should be subject to the Chinese version, while the English version is for reference only.
- 8、 The addresses of Elevator Test Center, Shanghai Jiaotong University are as follows:

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**Zip code: 201108**



Category of equipment	Lift main component	Type of equipment	Lift machine
Name of product	Lift machine for traction lifts	Model of product	WYT-T
Serial number of product	S25060006	Date of manufacture	2025.06.30
Applicable product model(s)	/		
Applicant	Shenyang Bluelight Drive Technology Co.,Ltd		
Registered address of applicant	NO.37, XINSHIJI ROAD, HUNNAN NEW DISTRICT, SHENYANG, CHINA		
Unified social credit code	91210112715754447D		
Manufacturer	Shenyang Bluelight Drive Technology Co.,Ltd		
Registered address of manufacturer	NO.37, XINSHIJI ROAD, HUNNAN NEW DISTRICT, SHENYANG, CHINA		
Unified social credit code	91210112715754447D		
Manufacturing address	NO.37, XINSHIJI ROAD, HUNNAN NEW DISTRICT, SHENYANG, CHINA		
Location of test	Dongchuan Road Laboratory		
State of sample	No abnormal	Test date	2025-07-31
Test conditions	No abnormal	Category of type test	Overall test at first
Test basis	TSG T7007-2022 <i>Regulation for Type Test of Lifts</i> , GB/T 7588.1-2020, GB/T 7588.2-2020, ISO 8100-1:2019, ISO 8100-2:2019, EN 81-20:2020, EN 81-50: 2020		
Test Conclusion	Certificated.		
Tested by:	Date:2025-08-15	Approval certificate of type test organ:  TS7610022-2029  Shanghai Jiao Tong University Elevator Test Center 2025.08.15	
Verified by:	Date:2025-08-15		
Approved by:	Date:2025-08-15		

**1. Technical parameters and configuration of sample**

Rated speed	4.0 m/s	Overall structure	No reduction device, horizontal, output wheel cantilever support, output shaft 2-point support	
Rated output torque	680N·m	Allowable radial load of driving shaft	3000Kg	
Height of output shaft center	270mm	Manual emergency operation device	Manual brake release + turning handwheel	
Motor	Model	WYT-TZ2.0EMS	Structure	AC three-phase permanent magnet synchronous outer rotor
	Rated power	15.5 kW	Rated rotation rate	218 r/min
	Rated voltage	380 V	Rated current	34.5 A
	Rated frequency	54.5 Hz	Insulation grade	F
	Duty	S5-40%	Protection grade	IP41
	Overload protection mode	Overheat protection	Start times per hour	240 times per hour
	Ex class	N/A	Ex type	N/A
	Manufacturer	Shenyang Bluelight Drive Technology Co.,Ltd		
Reduction gearbox	Structure	N/A	Ratio	N/A
	Reduction series	N/A	Center distance	N/A
	Shaft angle	N/A	Spec of lubricating oil	N/A
	Material of transmission interface	N/A		
Driving sheave	Number of Suspension means	6	Type of grooves / Shape of Traction surface (See attached drawing(s))	V groove with notch



	Diameter of Suspension means (rope)	Φ8mm	Heat treatment of groove surface	N/A
	The pitch diameter of sheaves	Φ350mm	Method of wrapping	Single winding
	Material grade of Traction surface (Applicable to coated steel belt)	N/A	Coating (plating) layer material grade of Traction surface (Applicable to coated steel belt)	N/A
	Range of hardness of traction surface(Applicable to coated steel belt)	N/A	Models of applicable coated steel belt	N/A
	Width of applicable coated steel belt	N/A	Thickness of applicable coated steel belt	N/A
	Outer cladding material of applicable coated steel belt	N/A		
Brake	Model	BLS	Working place	Traction sheave
	Number, Structure	2, disc	Insulation grade	F
	Rated voltage of electromagnet	DC 110V	Diameter of brake wheel or the inner and outer diameter of the friction part of the brake disc	Brake disc friction part Inner diameter Φ 228mm Outer diameter Φ 278mm
	Maintain voltage/current of electromagnet	DC110V	Rated working pressure of hydraulic brake release device	N/A
	Ex class	N/A	Ex type	N/A
Applicable drive system	Speed regulation mode	VVVF	Type of speed controller	Frequency inverter
	Type of speed feedback device	Encoder		

**2、Check for technical documents of the sample**

No.	Items No.	Check items	Check results	Conclusion
1	X5.1	Conformity certificate documents and Relative technical documents	Comply with requirements	Pass
2	X5.2	Calculation files	Comply with requirements	Pass
3	X5.3	Major design	Comply with requirements	Pass
4	--	Other necessary data	Comply with requirements	Pass

**3、Check and test of the sample**

No.	Items No.	Check and test items	Check and test results	Conclusion
1	X6.1.1	Insulation resistance of stator winding	Cold: $\geq 2000\text{M}\Omega$ Hot: $\geq 2000\text{M}\Omega$	Pass
2	X6.1.2	Withstand voltage test	The principal winding Load: AC1760V Leakage current: $\leq 15.7\text{mA}$ Sensor Load: AC500V Leakage current: $\leq 0.3\text{mA}$	Pass
3	X6.2.1	Type of the brake system	Comply with requirements	Pass
4	X6.2.2	Separate setting	Comply with requirements	Pass
5	X6.2.3	Braking pressure	Comply with requirements	Pass
6	X6.2.4	Braking torque of the drive machine	1984 N·m	Pass
7	X6.2.5	Activating voltage( $V_1$ ) and the highest release voltage( $V_2$ ), the lowest release voltage ( $V_3$ )	$V_1=74.2\text{V}$ $V_1/V_R=67.5\%$ $V_2=42.5\text{V}$ $V_2/V_R=38.6\%$ $V_3=42.5\text{V}$ $V_3/V_R=38.6\%$	Pass
8	X6.2.6	Delay-time of the brake	0.291s See the annex 1	Pass
9	X6.2.7	Withstand voltage test of the brake coil	Comply with requirements	Pass
10	X6.2.8	Requirements if belt is used	N/A	N/A



No.	Items No.	Check and test items	Check and test results	Conclusion
11	X6.2.9	Reliability test of the brake	Comply with requirements	Pass
12	X6.2.10	Noise of the brake	69.3dB(A)	Pass
13	X6.2.11	Manually release the brake	Comply with requirements	Pass
14	X6.3.1	Radial bounce of the brake wheel	0.10mm	Pass
15	X6.3.2	Diameter differences among the pitch circle of the grooves	0.06mm	Pass
16	X6.3.3	Hardness of the grooves of the traction sheave and the max. difference among them	226~235 (HBW) 9HBW	Pass
17	X6.4	Oil leakage of the reduction gearbox	N/A	N/A
18	X6.5.1	Temperature rise	Stator winding: 80.6K Brake coil:54.8K Reduction gearbox: /	Pass
19	X6.5.2	Noise of the drive machine with no load	64.3dB(A)	Pass
20	X6.5.3	Vibration speed of the drive machine with no load	Max: 0.3mm/s	Pass
21	X6.5.4	Speed of the drive machine with no load	3.997m/s Deviation:-0.1%	Pass
22	X6.5.5	Appearance	Comply with requirements	Pass
23	X6.5.6	Nameplate of the drive machine	Comply with requirements	Pass
24	X6.5.8	Requirements for explosion-proof environment	N/A	N/A

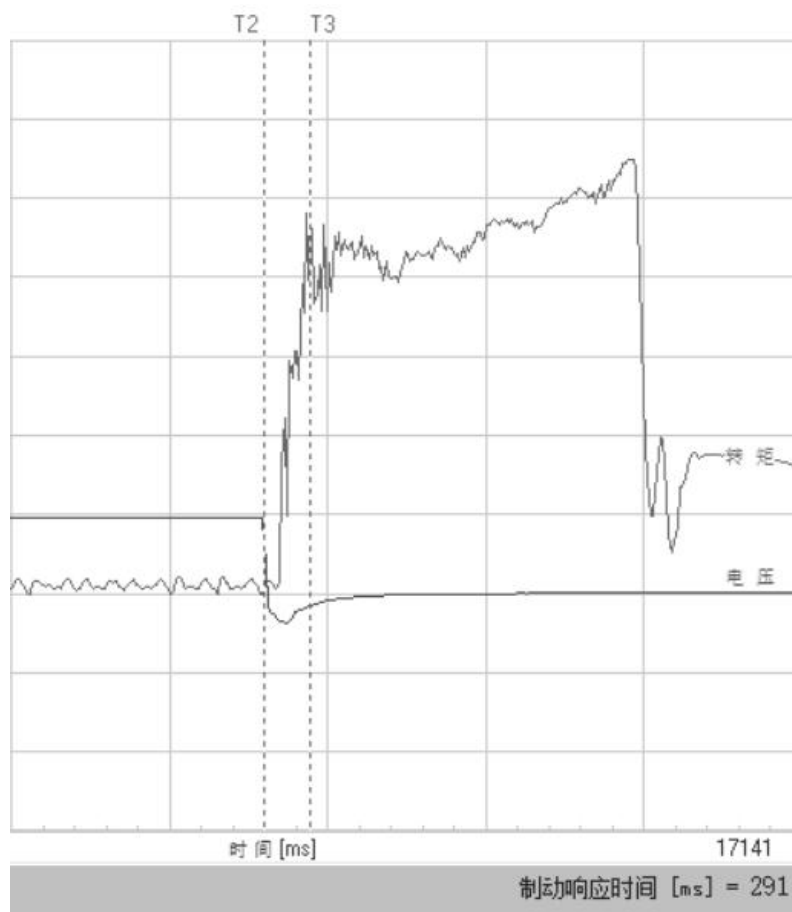


## Annex

### 1、 Shape of Traction surface of applicable coated steel belt

N/A

### 2、 Diagram of the delay-time of the brake



T2: Starting point of voltage drop when Power off

T3: Time to brake position





### 3. Photo of the sample



### 4. Other information

(1) This English report is a translated version of the Chinese report and is issued on the same date as the Chinese report.

### 5. Revise(s) of the type test report

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