

Type Test Certificate for Special Equipment (Lift)

Certificate No. TSX F38001420230146

Applicant: Shenyang Bluelight Drive Technology Co., Ltd.

Address of applicant: NO.37 Shiji Road, Hunnan New District, Shenyang,

China

Manufacturer: Shenyang Bluelight Drive Technology Co., Ltd.

Address of NO.37 Shiji Road, Hunnan New District, Shenyang,

manufacturer: China

Category of equipment: Lift safety protection component

Type of equipment: Unintended car movement protection means

Name of product: Traction machine brake

Model of product: DZE

Type test report No.: T14-F380-23-146

After type test, it is confirmed that the product complies with the requirements of Regulation for Type Test of Lifts (TSG T7007—2022), GB/T 7588.1—2020, GB/T 7588.2—2020, EN 81-20: 2020 and EN 81-50: 2020.

Applicable product model of the certificate: DZE.

See appendix for applicable product parameters and configuration of the certificate.

Issue date: 2023-08-14

Review date: before 2027-08-14

NETEC Inspection and Testing (Beijing) Co., Ltd. National Elevator Inspection and Testing Center

Note:

¹ The applicant has responsibilities to ensure that the products conform to the requirements of the safety technical specifications and relative standards, and to ensure that the quality and safety performance of products are consistent with the tested sample mentioned above.

^{2.} This certificate is not applicable to product manufactured after the review date.

Appendix

Applicable Parameters Range and Configuration of Unintended Car Movement Protection Means (Traction Machine Brake)

Structure type			Brake arm drum type	
Number			2 sets	
Material of friction element			Non asbestos rubber sheet carbon fiber	
Type of elastic element			Helical spring	
System mass range			1400 kg~7800 kg	
Rated load range			450 kg~2000 kg	
Type of stopping parts			Traction machine brake	
Drive mode			Traction drive	
Action site			Traction sheave	
Tripping mode			Trigger when losing power	
Anticipated highest speed before deceleration occurs			≤1.32 m/s	
Response time			≤200 ms	
Test speed for final inspection			0.25 m/s	
Response time of detecting subsystem			≤40 ms	
Hardware composition of trigger device (except when electromechanical service brake is used as braking part)			1	
The distance	Not more than 0.8 m	Not considered		
corresponding to the test speed under the condition that the	Not more than 1.0 m	< 0.102 m (stopping distance, excluding moving distance before deceleration); Or: < 0.200 m (including the moving distance within the response time of the cut-off brake power supply device); Or: < 0.210 m (including the moving distance within the response time of the detecting subsystem and the cut-off brake power supply device).		
moving distance of the lift car does not more than 0.8 m, 1.0 m and 1.2 m	Not more than 1.2 m			
Range of inclination angle applicable to electric lifts with inclined path /				

Note 1: The suspension ratio during type testing is 2:1. When used for other suspension ratios, the applicable system mass and lift rated load capacity can be converted based on the actual suspension ratio using the following formula:

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⁽¹⁾ System quality application range=Type test system quality range \times Actual suspension ratio \div Type test suspension ratio;

⁽²⁾ Applicable range of rated load capacity=Type test rated load capacity range \times Actual suspension ratio \div Type test suspension ratio.

Note 2: The power supply device for cutting off the brake can be a contactor, a safety circuit containing electronic components, etc., and its response time should be \leq 60 ms.

Note 3: The method of triggering the braking component at the test speed during the final inspection: the lift goes up with no load, and when the lift reaches the test speed used for the final inspection, the power supply to the brake electromagnet is cut off, triggering the traction machine brake.

Note 4: The permissible movement distance corresponding to the test speed is the calculated value for the empty upward working condition of the car, excluding the distance between the detection device and the installed landing station.