

# Annex

## Configuration of Escalators

No. TX 3500-003-13 0009

Arrangement mode of drive machine	In the top machinery spaces(return station)
Transmission mode	Chain
Working condition	Indoor

Service type

Common service

Issue date



Appendix Speed, retardation and stopping distances testing

M2.6.2 Rated speed testing

Operating condition		Testing results					Speed m/s	Deviation %	Conclusion
		Length of step chain m	Running time s						
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Avg.			
No-load	Upward	5.2	10.28	10.38	10.32	10.33	0.503	+0.6	Pass
	Downward		10.25	10.29	10.29	10.28	0.506	+1.2	Pass
Standard		±5%							

M2.8.1 Testing for deviation between handrail speed and step speed

Operating condition			Testing results					Handrail avg. speed m/s	Step avg. speed m/s	Deviation %	Conclusion
			Length of handrail m	Running time s							
				1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Avg.				
No-load	Upward	L	5.2	10.13	10.16	10.13	10.14	0.513	0.503	+1.99	Pass
		R		10.14	10.17	10.15	10.15	0.512		+1.79	
	Downward	L		10.10	10.12	10.13	10.12	0.514	0.506	+1.58	Pass
		R		10.11	10.13	10.11	10.12	0.514		+1.58	
Standard			0~+2%								

M2.6.8 Stopping distances testing

Operating condition	1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>		Avg. m	Conclusion
	Stopping distances m	Retardation m/s <sup>2</sup>	Stopping distances m	Retardation m/s <sup>2</sup>	Stopping distances m	Retardation m/s <sup>2</sup>		
No-load upward	0.33	/	0.30	/	0.30	/	0.310	Pass
No-load downward	0.29	0.793	0.30	0.781	0.30	0.789	0.297	Pass
Loaded downward	0.36	0.710	0.38	0.709	0.36	0.738	0.367	Pass
Standard	Stopping distances: 0.20m~1.00m(not including the end points)							

M2.6.10 Test data of auxiliary brake deceleration

/	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Conclusion
Deceleration m/s <sup>2</sup>	0.846	0.729	0.599	Pass
Note	/			

No.	Items No.	Test items	Test results	Conclusion
31	M2.6.5	Stopping the machine and checking its stopped position	Comply with requirements	Pass
32	M2.6.6	General requirements for operational brake	Comply with requirements	Pass
33	M2.6.7	Electro-mechanical brake	Comply with requirements	Pass
34	M2.6.8	Stopping distances for the escalator	Comply with requirements (See appendix)	Pass
35	M2.6.10	Auxiliary brake	Comply with requirements (See appendix)	Pass
36	M2.6.11	Protection against risks of excessive speed and unintentional reversal of the direction of travel	Comply with requirements	Pass
37	M2.6.12	Steps and pallets drive	Comply with requirements	Pass
38	M2.7.1	General requirements for balustrade	Comply with requirements	Pass
39	M2.7.2	Dimensions of balustrade	Comply with requirements	Pass
40	M2.7.3	Skirting	Comply with requirements	Pass
41	M2.7.4	Newel	Comply with requirements	Pass
42	M2.7.5	Clearance between steps, pallets or belt and skirting	Comply with requirements	Pass
43	M2.8.1	General requirements for handrail system	Comply with requirements (See appendix)	Pass
44	M2.8.2	Profile and position of the handrail	Comply with requirements	Pass
45	M2.8.3	Distance between the handrail centre lines	Comply with requirements	Pass
46	M2.8.4	Handrail entry	Comply with requirements	Pass
47	M2.8.5	Guiding of the handrail	Comply with requirements	Pass
48	M2.9.1	Surface properties of landings	Comply with requirements	Pass
49	M2.9.2	Configuration of steps, pallets and belts	Comply with requirements	Pass
50	M2.9.3	Design of the combs	Comply with requirements	Pass

No.	Items No.	Examination items	Examination results	Conclusion
		Analysis report and type test reports and certificates of fail safe circuit	Comply with requirements	Pass
3	M2.1.3	Layout drawings	Comply with requirements	Pass
		Requirements for all building interfaces of escalator and moving walk	Comply with requirements	Pass
4	M2.1.4	Type test reports and certificates of components	Comply with requirements	Pass
		Quality certificate of components	Comply with requirements	Pass
		Proof of sliding coefficients for skirting Proof of anti-slip properties of tread surfaces (steps, pallets, floor and comb plates without combs) (if any)	Comply with requirements	Pass
		Proof of electromagnetic compatibility (if any)	Comply with requirements	Pass
		Proof of electric devices	Comply with requirements	Pass

## 2 Test items and test results

No.	Items No.	Test items	Test results	Conclusion
1	M2.2.1	General requirements for electric installations and appliances	Comply with requirements	Pass
2	M2.2.2	Contactors, relay contactors, components of fail safe circuits	Comply with requirements	Pass
3	M2.2.3	Protection of motors	Comply with requirements	Pass
4	M2.2.4	Main switches	Comply with requirements	Pass
5	M2.2.5	Electric wiring	Comply with requirements	Pass
6	M2.3.1	General requirements for protection against electric faults	Comply with requirements	Pass
7	M2.3.2	General requirements for electric safety devices	Comply with requirements	Pass
8	M2.3.3	Safety switches	Comply with requirements	Pass
9	M2.3.4	Fail safe circuits	Comply with requirements	Pass

## ESCALATOR SAMPLE'S TECHNICAL PARAMETERS AND CONFIGURATION

Rated speed	0.50m/s	Rise	7.20m	Angle of inclination	30°	
Service type	Common service	Working condition	Indoor	Transmission mode	Chain	
Specific function	/					
Drive machine	Model	EC-W1	Arrangement mode	In the top machinery spaces(return station)		
	Gear mode	Worm wheel and worm	Ratio	49:2		
	Motor model	HX-YFD180-4	Rated power	15.0kW		
	Rated voltage	AC380V	Rated current	32A		
	Rated speed	59.59r/min	Insulation class	F		
	Drive machine manufacturer	Tianjin Huaxing Motor Manufacture Co., Ltd.				
	Motor manufacturer	Tianjin Huaxing Motor Manufacture Co., Ltd.				
Control system	Start mode	Manual	Power-saving mode	/		
	Control cabinet model	GECS-C2	Manufacturer	Sigma Elevator Co., Ltd.		
	Variable speed device model	/	Manufacturer	/		
	Controller model	DBA26800AH5	Manufacturer	Jabil Circuit (Guangzhou) Ltd.		
Electrical safety devices	Fail safe circuit model	DBA26800Y	Function	Monitoring of electric safety chain and unintentional reversal of the direction of travel.		
	Manufacturer	Jabil Circuit (Guangzhou) Ltd.				
	PESSRAE model	MESD				
	Manufacturer	Otis Elevator Management (Shanghai) Co., Ltd.				
Truss	Material	Q345B	Profile type	Rectangle		
	Distance between supports	17.923m	Manufacturer	Dalian Jingang Metallic Products Co., Ltd.		
Drive chain	Model	20A-2	Design tensile strength	≥174kN		
	Manufacturer	Hangzhou Donghua Chain Group Co., Ltd.				
Step chain	Model	DAA26150F	Design tensile strength	≥123kN		
	Manufacturer	Suzhou Guoguang Machinery & Electrical Co., Ltd.				
Handrail	Model	DSA3000628	Design tensile strength	≥25.0kN		
	Manufacturer	Shanghai Nanlong Rubber Handrail Co., Ltd.				
Step	Width	1011mm	Material	Stainless steel		
	Mode	Separable assembly	Anti-slip assessment groups	R10		
	Manufacturer	Ningbo Huaxun Electromechanical Co., Ltd.				
Roller	Main roller	φ76.2×22	Manufacturer	Suzhou Faigle Engineering Plastics Co., Ltd.		
	Assistant roller		Manufacturer			
Skirting	Surface material	SUS430	Surface treatment	Low Friction Black Coating		
Comb plate	Surface material	SUS430	Anti-slip assessment groups	R10		
Floor plates	Surface material	SUS430	Anti-slip assessment groups	R10		

---

# NOTICE

1. Each type test certificate issued by National Elevator Inspection and Testing Center (abbreviation NETEC) is corresponding to one type test report. The issue of type test certificate is based on the test conclusions of type test report.
2. Type test report is invalid without stamping the *Test Report Specialized Stamp* or issue date.
3. Type test certificate is invalid without stamping the *Test Report Specialized Stamp* or issue date.
4. Type test report is invalid without signatures of chief test, verification and approval.
5. Type test report or certificate can not be reproduced except in full, without written approval of NETEC.
6. Type test report or certificate including annex is invalid if altered.
7. NETEC is only responsible for the test items and test conclusions of the sample. The test results and test conclusions just indicate sample statue at the time of test. Applicant is responsible for the authenticity of the information and technical documents of the sample.
8. Different opinions about type test report or certificate should be reported to NETEC within 15 days since receiving of type test report and certificate. NETEC will refuse after the time.
9. Type test report and certificate are invalid from the issue date. The term of validity is according to *TSG T7001 Rules for Type Test of Elevators(tryout)* promulgated by *General Administration of Quality Supervision Inspection and Quarantine of the People's Republic of China*.
10. ~~It should be subject to the Chinese version, while the English version is for reference only.~~

Add.: 61 Jinguang Avenue, Langfang City, 065000 Hebei, P. R. China  
Tel.: 0316-2311414, 2311411, 2311412  
Fax: 0316-2057334  
Email: [netec@chinaelevators.org](mailto:netec@chinaelevators.org)  
Web site: [www.chinaelevators.org/center](http://www.chinaelevators.org/center)