









Special Equipment

Type Test Report (Lifts)

Classification	 ZheJiang MATO Drive Equipment Co.,Ltd. ZheJiang MATO Drive Equipment Co.,Ltd. 			
Varieties	:	Unintended car movement protection means		
Product name	:			
Product name Unintended car movement protection means(Subsystem of stopping) MEKB Manufacturer ZheJiang MATO Drive Equipment Co.,Ltd. ZheJiang MATO Drive Equipment Co.,Ltd.				
Manufacturer	TVIDITO			
Applicant	: Unintended car movement protection means : Unintended car movement protection means(Subsystem of stopping) model : MEKB : ZheJiang MATO Drive Equipment Co.,Ltd. : ZheJiang MATO Drive Equipment Co.,Ltd. : First verification			
Unintended car movement protection means(Subsystem of stopping) MEKB ZheJiang MATO Drive Equipment Co.,Li ZheJiang MATO Drive Equipment Co.,Li ZheJiang MATO Drive Equipment Co.,Li Sategory of test: First verification	First verification			
Test date	:	2019-04-03		

Shanghai Jiao Tong University Elevator Test Center

NOTICE

- 1. The report is the result of the type test according to the "Regulation for type test of elevators" (TSG T7007-2016).
- 2. The report is printed by computer and will be invalid with any modification.
- 3. The report will be invalid without the signature of approve, verify and compile person. It will also be invalid without the certification number, the official and cross-page stamp of the testing unit.
- 4. In the entrusted test, we are only responsible for the sample.
- 5. It is forbidden to copy the report partly without the permission of the testing unit. The partly copied report will be invalid.
- 6. Any dissent to the report must be put forward to the testing unit within 15 working days from receiving it, otherwise, it is considered that you have accepted the report.
- 7. The sample will not be handed back because of normal wear, the others will be dealt with according to the regulation concerned.
- 8. One of the quadruplicated reports is saved by the testing unit, the other three are saved by the applicant.
- 9. The contact addresses of Shanghai Jiaotong University Elevator Test Center are as follows:
 - (1)Dongchuan Road Test Base

Room B210, School of Mechanical Engineering, Shanghai Jiaotong University

No.800, Dongchuan Road, Minhang District, Shanghai, P.R. China

Tel: +86-21-34207035/34207036

Fax: +86-21-34207035/34207036-814

Zip code: 200240

(2) Jindu Road Test Base

Room 1001, Comprehensive Building, South Urban Park

No.123, lane 1165, Jindu Road, Minhang District, Shanghai, P.R. China

Tel: +86-21-61267037

Fax: +86-21-61267037 to 812

Zip code: 201108



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Classification		Safety device	Varieties	Unintended car movement protection means			
Product name		Unintended car movement protection means(Subsystem of stopping)	Product type	МЕКВ			
Serial n	umber	M5A18000358R	Date of manufacture completion	2018-11-05			
Applicable	-						
Appli	cant	ZheJiang MATO Drive Equipment Co.,Ltd.					
Registered of appl		workshops 1#, building 3, No.2688 West Nianfeng Road, Nanxun District, Huzhou City, Zhejiang Province					
Manufa	cturer	ZheJiang MATO Drive E	quipment Co.,Ltd.				
Registered address of manufacturer Address of manufacturing		workshops 1#, building 3, No.2688 West Nianfeng Road, Nanxun District, Huzhou City, Zhejiang Province workshops 1#, building 3, No.2688 West Nianfeng Road, Nanxun District, Huzhou City, Zhejiang Province					
Testing a	ddress	Shanghai Jiao Tong University Elevator Test Center					
Status of	sample	OK	Test date	2019-04-03			
Test cond	ditions	OK	Test items	First verification			
Test rules	TSG T70	007-2016,GB7588-2003+X	G1-2015、EN 81-20:2	2014、 EN 81-50:2014			
Test conclusion	Tests pass	sed					
Experimente	r:] []	P Date: 2017047}	Approved certificate	申模之			
Verifier:	芸荣凯	Date: 2-19-04-23	TS761002	nghai Jiao Tong University Elevator Test Center			
Approver: The Date: Date of issue: 2019-04-23							



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1. Main technical parameter and configuration

	Applied envi	ronment	Indo	oors	Explosion-proc	of type	/	
	System co	mposition		Synchronous motor brake				
		Range of system mass permitted	1350	0~3600(kg)	Range of rated load	320-10	050(kg)	
		Range of balance coefficient		0.4~0.5	Range of weight of car	550~1500(kg)		
_		Highest speed a	nticipate	ed before d	eceleration occurs	1.84~2.40 (m/s)		
			Test tr	action ratio		2:1		
-	Scope of application	Test-speed with r for Final Inspecti		0.50m/s	Verification distest-spec		≤0.5m	
		Name of stopping element		nchronous otor brake	Driving mode			
	-	Acting position o	f stoppi	ng element	On the shaft o	f the traction sheave		
S		Action	method	l ₃	Stopping when power supply loss			
Subsystem of stopping		Response time	<	≨138ms	Maximum average retardation	2.5m/s ²		
	Actuator	Name		/	Туре	/		
toppin		Hardware model and version		/	Software model and version	/		
90		Main component of hardware		/	Action method	Action method /		
		Rated power		/-	Working voltage	ge /		
-	Synchrono us motor brake	Name		Brake	Туре	MEKB		
		Manufacturer		ZheJian	g MATO Drive Equi	pment Co.,Ltd.		
		Type of structure		Block	Quantity	2		
		Material of friction element		bestos-free bon fibers	Type of elastic element	Compressed cylindrical helical spring		
		Length of brake arm		/ m	Leverage ratio	/		
		Diameter of brake	er of brake wheel		Spring of brake& quantity	Ф9.7× 10 рі	0.50	



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2. Technical documents review of the example

No.	Item number	Review item	Result	Conclusion
1	T5.1	Copies of certificates or test reports	Pass	Ok
2	T5.2	Technical documents	Pass	Ok
3	T5.3	Design documents in covered scope	Pass	Ok
4		Any other necessary	Inapplicability	/

3. Examines and tests of the example

	The state of the champie								
No.	Item number	Review item	Result	Conclusion					
1	T6.1.1	Subsystem of stopping(Single mass or torque)	Pass	Ok					
2	T6.1.2	Subsystem of stopping(Differentmass or torque)	Inapplicability	/					
3	T6.1.3	Brake test	Pass	Ok					
4	T6.1.4	Distance of test speed	Pass	Ok					
5	T6.2	Subsystem of detection	Inapplicability	/					
6	T6.3	Subsystem of self monitoring	Inapplicability	1					
7	T6.4	Nameplate	Pass	Ok					



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Annex

1.Data Sheet

Condition	Free fall acceleration (m/s2)		Average deceleration (m/s2)		Max deceleration	Max speed	Response time of braking element (ms)		Total distance travelled (mm)			
On .	Measur ement	Average a ₂	Measure ment	Average a ₃	(m/s2)	(m/s)	Measure ment	Average t ₂	Measu rement	Average	Deviation (%)	
	/		/	/	/	1	/	/	/	/	/	
Min	/		/		/	/	/		/		/	
mass:	/	/	/		/	/	/		/		/	
load	/		/		/	/	/		/		/	
	/		/		/	/	/		/		/	
	/		/	/ / / /	/	/	/	/	/	/	1	
Min	/		/		/	/	/		/		/	
mass: Full	/	/	/		/	/	/		/		1	
load	/		/		/	/	/		/		/	
	/		/		/	/	/		/		/	
	0.78		1.43		2.26	1.61	138		997		0.44	
Max	0.78		1.38		2.12	1.61	138		998		0.55	
mass: No	0.78	0.78	1.34 1.35	2.11	1.61	138	138	993	993	0.05		
load	0.78		1.33		2.16	1.61	138		980		-1.27	
	0.78		1.29		2.10	1.61	138		995		0.23	
	/		/	/		1	/	/		/		1
Max	/		/		1	/	/		/		/	
mass: Full	/	/	/		/	/	/	/	/	/	1	
load	/		/		/	/	/		/		/	
	/		/		/	/	/		/		/	
	/		/		/	/	/		/		/	
Test -speed	/	/	/	/	/	/	/	/	/	1	1	
	/		/		1	/	/		/		/	

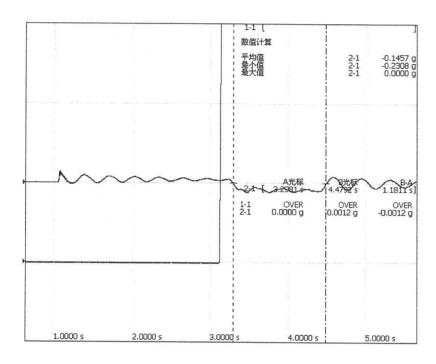


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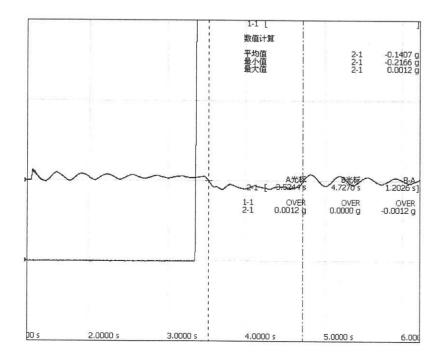
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2.Test curve

2.1 Traction ratio 2:1,System mass3600kg,car mass 1500kg,counterweight 2000kg,corresponding rated load 1050kg,No load 1st:

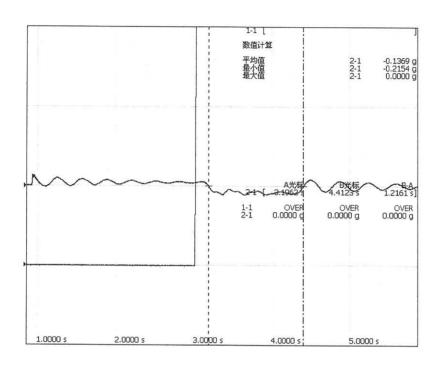


2.2 Traction ratio 2:1,System mass3600kg,car mass 1500kg,counterweight 2000kg,corresponding rated load 1050kg,No load 2nd:

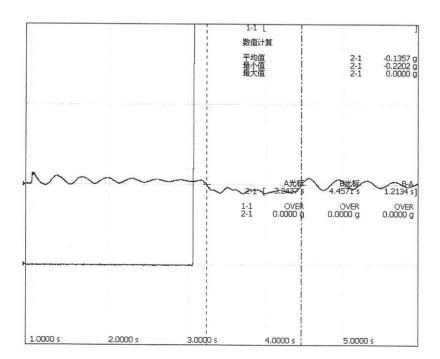


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2.3 Traction ratio 2:1,System mass3600kg,car mass 1500kg,counterweight 2000kg,corresponding rated load 1050kg,No load 3rd:



2.4 Traction ratio 2:1,System mass3600kg,car mass 1500kg,counterweight 2000kg,corresponding rated load 1050kg,No load 4th:

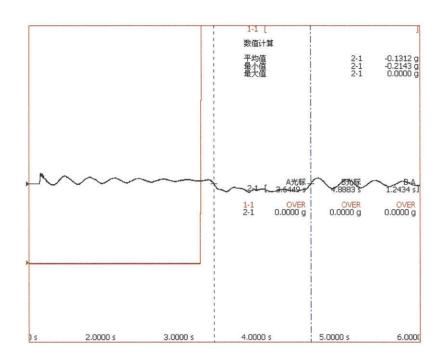




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2.5 Traction ratio 2:1,System mass3600kg,car mass 1500kg,counterweight 2000kg,corresponding rated load 1050kg,No load 5th:





3.Photograph of the sample



4.Note:

- 4.1 The system mass includes not only the mass of the car and the counterweight, but also the mass of traction rope, compensation chain /rope and traveling cable. In the test, their total mass are 100kg.
- 4.2 This type is a consistency verification, selected the rules of elevator type test(TSG T7007-2016). The provisions of part of the project were tested.
- 5. Explanation of modification: No.