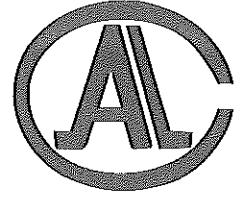




2008000708Z



(2008)国认监认字(134)号

# Special Equipment Type Test Report

No. T3-311-07-014

**Category of Equipment:** Passenger Lifts

**Type of Equipment:** Traction Passenger Lifts

**Name of Product:** Passenger Lifts

**Model of Product:** MMR


**Applicant:** Sigma Elevator Co., Ltd.

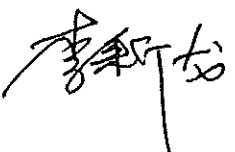


**Manufacturer:** Sigma Elevator Co., Ltd.



National Elevator Inspection and Testing Center

**NETEC**National Elevator Inspection and  
Testing Center**Type Test Report**No.T3-311-07-014  
Page 1 of 16

Name of product		Passenger lifts	
Model of product		MMR	
Serial No. of sample		2006F6014E07	Production date 2006-07-03
Main technical parameter		Rated speed	2.50m/s
		Rated load	1000kg
Applicant	Name	Sigma Elevator Co., Ltd.	
	Address	No.2 Songlan Street, Economic & Technical Development Zone, Dalian, Liaoning	
Manufacturer	Name	Sigma Elevator Co., Ltd.	
	Address	No.2 Songlan Street, Economic & Technical Development Zone, Dalian, Liaoning	
Installation place	19 #, Xiangzhou Garden Hotel, Dalian, Liaoning		
Test place	19 #, Xiangzhou Garden Hotel, Dalian, Liaoning		
Sample state	Normal		
Test date	2007-03-22	Test category	Type test
Test condition	Comply with requirement	Test item	All application items
Test basis	<i>Rules for Type Test of Elevators (tryout)</i> <i>Rule for Type Test of Traction and Positive Drive Lifts (tryout)</i> GB 7588—2003, EN 81-1:1998		
Test conclusion	The type test is certificated. <div style="text-align: right; margin-top: 20px;">  </div>		
Note	First issued date of the Chinese version: Apr. 22, 2007		

Reported by:  Verified by:  Issued by: 

No.	Items No.	Test items	Test results	Conclusions
1	1.1	Mounting of main switches	Comply with requirements	Pass
2	1.2	Model, markings, install position of main switches	Comply with requirements	Pass
3	1.3	Safeguard of main switches in the open position, to ensure no inadvertent operation	Comply with requirements	Pass
4	1.4	(In the case of a group of lifts)After the opening of the main switcher, parts of circuits remain live	/	/
5	1.5	Connection of any capacitors to correct the power factor	/	/
6	2.1	The electric lighting supplies to the car, the well, the machine and pulley rooms	Comply with requirements	Pass
7	2.2	The supply and type to socket outlets required on the car roof, in the machine and pulley rooms and in the pit	/	/
8	2.3	A switch for lighting and socket outlets of the lift car	Comply with requirements	Pass
9	2.4	Lighting switches in the machine or pulley rooms	Comply with requirements	Pass
10	2.5	Lighting switch in the well	Comply with requirements	Pass
11	2.6	Short circuit protection of each circuit controlled by the switches laid down in 2.3~2.5	Comply with requirements	Pass
12	3.1	Phase break and reversal protection device	Comply with requirements	Pass
13	3.2	Stopping device	Comply with requirements	Pass
14	3.3	Stopping device in the car(in the car of lifts with docking operation)	/	/
15	3.4	Type of stopping device	Comply with requirements	Pass
16	4.1	Motor supplied and controlled directly from a.c or d.c. mains	/	/
17	4.2	A.c. or d.c. motor supplied and controlled by static elements	Comply with requirements	Pass
18	4.3	Motor supplied and controlled using a "Ward-Leonard" system	/	/
19	4.4	Check device of drive machine stopping state	Comply with requirements	Pass
20	5.1	Working state of the brake	Comply with requirements	Pass
21	5.2	Controlling of the brake	Comply with requirements	Pass
22	5.3	Brake without supplementary delay	Comply with requirements	Pass
23	5.4	When the motor of the lift is likely to function as a generator, protecting against electric device operating the brake to be fed by the driving motor	Comply with requirements	Pass
24	6.1	Protecting against overloads of motors (directly connected to the mains)	/	/
25	6.2	Protecting against overloads of motors basis of increase of the temperature of the motor windings	Comply with requirements	Pass

56	10.8	Marks of some connection terminals remain live after the opening of the main switch or switches of a lift	Comply with requirements	Pass
57	10.9	Connectors and devices of the plug-in type placed in safety circuits	/	/
58	11.1	Control of lift operations	Comply with requirements	Pass
59	11.2	Type test of lift control cabinets	Comply with requirements	Pass
60	12	Control of leveling and re-leveling with doors open	/	/
61	13.1	Control of inspection operation	Inspection speed: 0.30m/s Comply with requirements	Pass
62	13.2	Special switches for controlling the mechanism of doors from the car roof	Comply with requirements	Pass
63	14.1	Control device to prevent overload in the car	Comply with requirements	Pass
64	14.2	State of the lift in the event of overload	Comply with requirements	Pass
65	15.1	Priorities and signal for lifts with manual doors	/	/
66	15.2	Priorities of no-collective control	/	/
67	15.3	Landing signal in the case of collective control	Comply with requirements	Pass
68	16.1	Control of docking operation	/	/
69	16.2	Height between the landing door header and the floor of the car or landing door state in the case of docking operation	/	/
70	17.1	Device for manual emergency movement	Comply with requirements	Pass
71	17.2	Mark of device for manual emergency movement	Comply with requirements	Pass
72	17.3	Electric safety device of the removable wheel	Comply with requirements	Pass
73	17.4	Mark checking easily from the machine room whether the car is in an unlocking zone	Comply with requirements	Pass
74	17.5	Control of emergency electrical operation	/	/
75	18.1	Emergency alarm device in the car	Comply with requirements	Pass
76	18.2	Power for emergency device	Comply with requirements	Pass
77	18.3	Type of emergency alarm device in the car	Comply with requirements	Pass
78	18.4	An intercom system, or similar device between inside the car and the machine room if the lift travel exceeds 30m	Comply with requirements	Pass
79	18.5	Alarm device for persons working in the well being trapped	Comply with requirements	Pass
80	19.1	One machine of each lift own	Comply with requirements	Pass
81	19.2	Drive methods	Traction drive	Pass
82	19.3	This brake on its own shall be capable of stopping the machine when the car is travelling downward at rated speed and with the rated load plus 25 %	Average retardation: 1.251m/s <sup>2</sup> Comply with requirements	Pass
83	19.4	Rated load one set braking action test	Average retardation: L: 1.542m/s <sup>2</sup> R: 1.561m/s <sup>2</sup> Comply with requirements	Pass

110	26.2	Tripping speed of an overspeed governor for a counterweight or balancing weight safety gear	/	/
111	26.3	Tensile force in the overspeed governor rope produced by the governor, when tripped	Pull force: 300~350N	Pass
112	26.4	Tensioning of overspeed governor rope or guiding of tensioning pulley(or its tensioning weight)	Comply with requirements	Pass
113	26.5	Electric safety device for breakage or excessive rope stretch of the governor rope	Comply with requirements	Pass
114	26.6	Seal of adjustable parts or mark of rotation direction on the overspeed governor	Comply with requirements	Pass
115	26.7	Electric safety device for overspeed governor does not automatically reset itself	Comply with requirements	Pass
116	26.8	Accessibility and reachability for overspeed governor	Comply with requirements	Pass
117	26.9	Overspeed governor located in the well	/	/
118	26.10	Type test of overspeed governor	Comply with requirements	Pass
119	27.1	Safety gear capable of operating in the car downward direction	Comply with requirements	Pass
120	27.2	Type of safety gear	Progressive	Pass
121	27.3	Type of safety gears, if the car carries several safety gears	/	/
122	27.4	Safety gear of counterweight weight or balance weight	/	/
123	27.5	Control for tripping safety gear of the car, counterweight weight or balance weight	Comply with requirements	Pass
124	27.6	Inclination of the car floor, when the car safety gear operates	Comply with requirements	Pass
125	27.7	Release of safety gear has tripped	Comply with requirements	Pass
126	27.8	Electric safety device of safety gear on the car	Comply with requirements	Pass
127	27.9	Safety gears shall not be used as guide shoes	Comply with requirements	Pass
128	27.10	Seal of adjustable safety gear	Comply with requirements	Pass
129	27.11	Matching of parameter between the safety gear and the lift	Comply with requirements	Pass
130	27.12	Type test of safety gear	Comply with requirements	Pass
131	28.1	Position of buffers	Comply with requirements	Pass
132	28.2	Type of buffers	Energy dissipation buffers	Pass
133	28.3	Stroke of reduced buffers	/	/
134	28.4	Monitoring the normal slowdown of the machine in case of reduced buffer stroke	/	/
135	28.5	Matching of parameter between buffer and lift	Comply with requirements	Pass
136	28.6	Type test of buffer	Comply with requirements	Pass
137	29.1	Ascending car overspeed protection means	Comply with requirements	Pass
138	29.2	Action place of ascending car overspeed protection means	Traction sheave	Pass

165	33.1	Fixing of glass door panels, dimensions of glass, pendulum shock test of glass door	/	/
166	33.2	Fixing of glass in doors	/	/
167	33.3	Type test of glass door	/	/
168	34.1	Request to avoid the risk of shearing during operation in case of automatic power operated sliding doors	Comply with requirements	Pass
169	34.2	Force to prevent the door closing in case of automatic power operated horizontally sliding landing doors or car door	80N	Pass
170	34.3	Re-opening protective device of landing doors and car door	Comply with requirements	Pass
171	34.4	Opening force for folding landing doors and car door of automatic power operated horizontally sliding	/	/
172	34.5	Conditions of power closing of vertically sliding landing doors and car door	/	/
173	34.6	Prevent of other types of doors	/	/
174	34.7	Reversal of closing movement of car door of automatic power operated	Comply with requirements	Pass
175	34.8	Request of landing doors with manual opening	/	/
176	34.9	Striking stops of hinged doors	/	/
177	34.10	Distance between any outer edge of the folding door and the recess	/	/
178	35.1	Operation with landing doors open in normal operation or unlocking zone	Unlocking zone: $\pm 0.270m$ Comply with requirements	Pass
179	35.2	Safety prevention of landing doors open or operation permitted	Comply with requirements	Pass
180	35.3	Effective locking of the landing door preceding the movement of the car or electric safety device of proving locking	Comply with requirements	Pass
181	35.4	Engaged length of the locking elements	Engaged length: 10mm Comply with requirements	Pass
182	35.5	Element of the electric safety device proving the locked condition of the door panels or connection of locking element	Comply with requirements	Pass
183	35.6	Locking request for hinged doors	/	/
184	35.7	Effect and maintained of the locking action of landing doors	Comply with requirements	Pass
185	35.8	Protection and inspection of lock device	Comply with requirements	Pass
186	35.9	Type request of the fixing screws for the cover in the case where the lock contacts	Comply with requirements	Pass
187	35.10	Open or automatic closing of landing doors locks	Comply with requirements	Pass
188	35.11	Electrical safety device for proving the closed condition of the landing door	Comply with requirements	Pass
189	35.12	Devices for proving the locked condition and the closed condition of the landing door coupled with car door	Comply with requirements	Pass
190	35.13	Place of electrical safety device for proving the closed condition of the hinged landing door	/	/

216	40.5	Fitting of apron of car sill	Width: 1000mm Angle: 65° Projection: 45mm Vertical height: 760mm	Pass
217	40.6	In the case of a lift with a docking operation, the height of the vertical portion of apron	/	/
218	41.1	Dimension of an emergency trap door in the car roof	/	/
219	41.2	Dimension of emergency doors in the car	/	/
220	41.3	Request for emergency trap doors or doors	/	/
221	42.1	Request for glass roof	/	/
222	42.2	Clear area for standing	1.50×0.60m <sup>2</sup>	Pass
223	42.3	Balustrades of car roof	Comply with requirements	Pass
224	42.4	Composing or height of balustrades	Comply with requirements	Pass
225	42.5	Place of handrail and balustrades	Comply with requirements	Pass
226	42.6	Protection of pulleys fixed to the car	Comply with requirements	Pass
227	42.7	Gap between the car roof and the header of a landing door	/	/
228	43.1	Ventilation area of cars with imperforate doors	Comply with requirements	Pass
229	43.2	Place of ventilation apertures	Comply with requirements	Pass
230	43.3	Lighting and light intensity of the car	Light intensity: 50lx Comply with requirements	Pass
231	43.4	Request for the incandescent type	Daylight lamp	/
232	43.5	Condition to switch off car lighting	Comply with requirements	Pass
233	43.6	Capacity of emergency lighting supply	Comply with requirements	Pass
234	44.1	Balancing weight	/	/
235	44.2	Fixing for filler weights	Comply with requirements	Pass
236	44.3	Protection of pulleys fixed to the counterweight	Comply with requirements	Pass
237	44.4	Distance of the car and its associated components and the counterweight (or balancing weight) and its associated components	100mm	Pass
238	45.1	Guidance of car, counterweight or balancing weight	Comply with requirements	Pass
239	45.2	Type of guide rail	Machined	Pass
240	45.3	Selection of guide rails for counterweight or balancing weight without safety gear	T-type	Pass
241	45.4	Adjustment of fixing of guide rails to their brackets and to the building, compensation of effects due to normal setting of the building or shrinkage of concrete	Comply with requirements	Pass
242	45.5	Max. calculated permissible deflections for T-profile guide rails	Comply with requirements	Pass
243	45.6	Type test of guide rails	Comply with requirements	Pass
244	46.1	Partition of lift well and around area	Comply with requirements	Pass
245	46.2	Exclusive use of the lift well	Comply with requirements	Pass

268	52.2	Method to enter pit	Comply with requirements	Pass
269	52.3	Space between the bottom of the pit and car when the car rests on its fully compressed buffers	Comply with requirements	Pass
270	53	Intensity and lighting of the well	50lx	Pass
271	54.1	Setting for lift machines, their associated equipment and pulleys	Comply with requirements	Pass
272	54.2	Condition for installing traction sheave in the well	/	/
273	54.3	Headroom of the well or diverter pulleys be installed above the car roof	/	/
274	54.4	Temperature of the machine room	Comply with requirements	Pass
275	54.5	Metal supports or hooks in the machine room	Comply with requirements	Pass
276	54.6	Temperature of the pulley room, measure for preventing frost or condensation	/	/
277	55.1	Access to the interior of the machine and pulley rooms	Comply with requirements	Pass
278	55.2	Safety access for persons to machine and pulley rooms	Comply with requirements	Pass
279	55.3	Doors and trap doors of machine room	Machine room door: Width: 1.000m Height: 1.600m	Pass
280	55.4	Doors and trap doors of pulley room	/	/
281	55.5	Dimensions of holes in the slab, machine and pulley rooms floor	Ferrules height: 80mm	Pass
282	56.1	Clear height at working areas or clear horizontal area for manual emergency operation	Comply with requirements	Pass
283	56.2	Clear height in machine room or width of the access ways	Height: 2.500m Width: 1.200m	Pass
284	56.3	Clear vertical distance above the rotation parts of the machine	Vertical distance: 1.200m	Pass
285	56.4	Dimensions of pulley room	/	/
286	56.5	Height or working area of pulley room	/	/
287	57.1	Ventilation of machine room	Comply with requirements	Pass
288	57.2	Lighting of machine room	240lx	Pass
289	57.3	Lighting of pulley room	/	/
290	58.1	Total requests for labels, notices, markings and operating instructions	Comply with requirements	Pass
291	58.2	Labels in the car	Comply with requirements	Pass
292	58.3	Operating directions or display in the car	Comply with requirements	Pass
293	58.4	Permanent markings of walls or doors with glass	/	/
294	58.5	Especial function or instructions in the car	/	/
295	58.6	Operating instructions on the car roof	Comply with requirements	Pass
296	58.7	Notices of the main switch(es) several lifts and light switch (es)	Comply with requirements	Pass
297	58.8	Program or explaining about emergency operation in the machine room	Comply with requirements	Pass
298	58.9	Max. permissible load on the lifting beam or hooks in the machine room	Comply with requirements	Pass
299	58.10	Stopping device in the pulley room	/	/



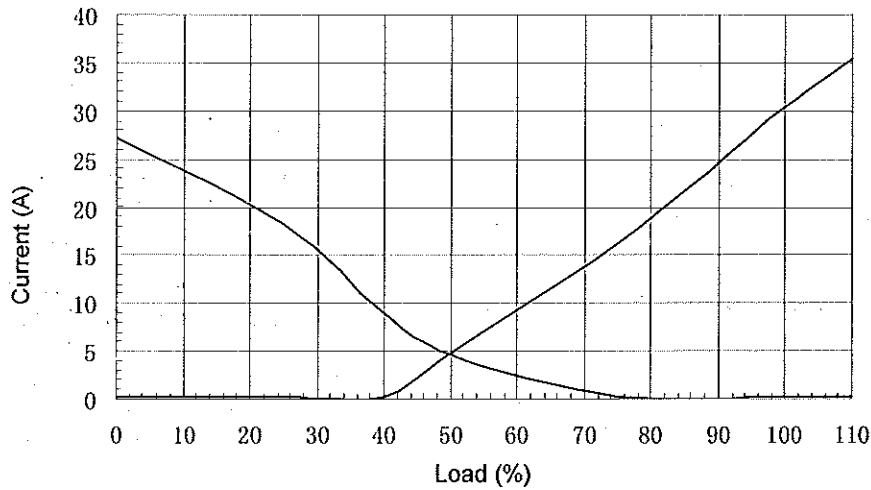
Appendix 1 Test data of running speed and balance coefficient

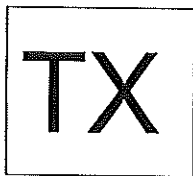
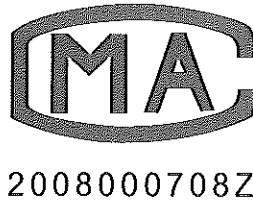
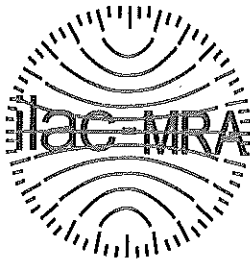
1.1 Running speed

Direction Items		Up		Down		Up		Down		Up		Down		Up		Down	
		Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down		
Load	%	0		24		40		50		74		100		110			
	kg	0		240		400		500		740		1000		1100			
Voltage V		393	390	393	391	392	392	392	392	391	392	389	392	389	392		
Current A		0.3	27.2	0.2	18.3	0.2	9.1	4.8	4.7	16.3	0.2	30.3	0.2	35.3	0.2		
Motor speed <i>n</i> r/min		/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Running speed <i>v<sub>f</sub></i> m/s		2.45	2.47	2.47	2.46	2.48	2.48	2.47	2.48	2.48	2.47	2.47	2.48	2.47	2.47		

1.2 Balancing coefficient

Balance coefficient: 0.49





# Certificate of Type Test For Special Equipment

No. TX 3110-003-07 0014

Applicant's name and address:	Sigma Elevator Co., Ltd. No.2 Songlan Street, Economic & Technical Development Zone, Dalian, Liaoning
Manufacturer's name and address:	Sigma Elevator Co., Ltd. No.2 Songlan Street, Economic & Technical Development Zone, Dalian, Liaoning
Name of product:	Passenger lifts
Model and specifications:	MMR v=2.50m/s    Q=1000kg
Configuration of product:	See annex
Type test report No.:	T3-311-07-014

This certificate is valid for products of the models and specifications below (without change of the configuration of the product):

Model: MMR

For passenger lifts, observation lifts and hospital lifts whose rated speeds are not more than 2.50m/s and rated loads are not more than 1600kg.

After type test, this product is accord with the *Rules for Elevator Type test (tryout)*, GB 7588—2003 and EN 81-1:1998.

Issue date: 2010-11-15

First issued date of the Chinese version: Apr. 22, 2007

## NETEC

### National Elevator Inspection and Testing Center

Note:

1. This certificate is to confirm the products on type and the tested sample on conformity, only valid for the products that are in conformance with the tested sample mentioned above.
2. The holder of this certificate has responsibilities to ensure that the products conform to the requirements of the codes and regulations, and to ensure that the products are consistent with the tested sample mentioned above.

