



Industrie Service

Choose certainty.
Add value.

Test Report No. DL 046-2007-KOR

Applicant / Customer: Otis Elevator Korea / SIGMA Elevator Company
74, Seongsan-dong
Changwon-city
Gyeong-nam 641-714
KOREA

Manufacturer: Otis Elevator Korea / SIGMA Elevator Company
74, Seongsan-dong
Changwon-city
Gyeong-nam 641-714
KOREA

Testing laboratory: TÜV SÜD Industrie Service GmbH
Testing laboratory for Lifts and their Safety
Components
Westendstraße 199
D-80686 München

Date: 06.09.2007

Our reference:
TÜV SÜD IS-Korea/jws

Document:
70626_TR_DL 046-2007-KOR

Date of submission: 2007-08-10

This document consists of
3 Pages
Page 1 of 3

Product, type: Locking device with hook bolt for horizontally
moved, side or center opening single panel landing
door with power operation, type SILA1

Testing order: Verification of EC type-examination of a ascending car
overspeed protection means tested by Korea Testing
Laboratory according annex V A of directive 95/16/EC
and certified by the Notified Body Det Norske Veritas

Excerpts from this document may
only be reproduced and used for
advertising purposes with the
express written approval of
TÜV SÜD Industrie Service GmbH.

The test results refer exclusively
to the units under test.

Specifications:

- Directive 95/16/EC of 29th of June 1995
- Standard DIN EN 81-1:1998 + AC: 1999
- Annex F1 of the Standard DIN EN 81-1

Kind of examinations:

- Examination on correspondence with the check-
ing-basics

**Place and date of
examination:** Seoul, 2007-09-06





1. Description of the test object

Locking device with hook bolt for horizontally moved, side or center opening single panel landing door with power operation, type SILA1

2. Examinations and tests

The examinations and tests were carried out in Korea Testing Laboratory, Ansan, accredited by Korean Agency for Technology and Standards (KATS)

2.1. Examination of operation

It was verified

- that there is at least 7 mm engagement of the locking elements before the electric safety device operates and
- that it is not possible from positions normally accessible to persons to operate the lift with a door open or unlocked, after one single action, not forming part of the normal operation.

2.2. Mechanical tests

2.2.1. Endurance test

The locking device was submitted to 1150187(Center Opening) and 1060236(Side Opening) complete cycles; one cycle comprised one forward and return movement over the full travel possible in both directions.

2.2.2. Static test

In the locked position of the locking device it was tried to open the door by drawing on the door in opening direction with a force of 1000 N. Applied period:300 s

2.2.3. Dynamic test

The locking device, in the locked position, was submitted to a shock test in the opening direction of the door. The shock was realized by falling of a rigid mass of 4 kg in free fall of a height of 0.5 m.

2.3. Electrical test

2.3.1. Test of ability to break circuit

The required tests were carried out under following conditions:
110 V DC, 2.0 A DC

2.3.2 Electrical endurance test:

1000000 times DC 110 V, 2.0 A



2.3.3. Test for resistance to leakage currents

2.3.4. Examination of clearances and creeping distances: 7.7 mm for center opening and 7.8 mm for side opening

2.3.5. Examination of the requirements appropriate to safety contacts and their accessibility

3. Documents

The presented documents are corresponding to the requests concerning extent and contents.

4. Scope of application

- Rated Voltage : 110 VDC
- Rated current : 1 ADC
- Door Type : Centre or side opening single panel door
- Center opening width : 1100 mm
- Side opening width : 1100 mm

The permissible dimensions of doors shall be chosen only within the admissible scope in accordance with the table and the information in the approval drawings

5. Result

It can be confirmed, that the door locking device type SILA1 meets the requests of the specifications for the scope of application.

6. Documents on which the test report is based

- Drawing No. 2UF0205 rev 13 stamped with TÜV SÜD 0036 dated 2007-09-10
- Technical dossier of interlock for EC-type examination (SILA1 Landing door lock device)
- Test report of Korea Testing Laboratory no. 2002-008 dated 2002-08-20
- Test report of Korea Testing Laboratory no. ETE-LIFT-2006-002 dated 2007-02-21
- EC Type-examination certificate of Det Norske Veritas (DNV) no. 02-GOT-CL-0016 dated 2005-12-16

Expert engineer

A handwritten signature in black ink, appearing to be 'Jung W. Seo'.

Jung W. Seo