ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ ΈΡΤΙΦΙΚΑΤ ◆ CERTIFICADO ◆ CERTIFICAT

EC type-examination certificate

TÜV SÜDDEUTSCHLAND

Certificate no.:	ABV 545
Notified body:	TÜV Süddeutschland Bau und Betrieb GmbH Zertifizierungsstelle für Aufzüge und Sicherheitsbauteile Westendstraße 199, D-80686 München
Applicant/ Certificate holder:	OTIS Elevator Company 5 Farm Springs Road Farmington, CT 06032-2567 USA
Date of submission:	1999-09-23
Manufacturer:	OTIS Elevator Company 5 Farm Springs Road Farmington, CT 06032-2567 USA
Product, type:	Optimus Brake, AAA20236Q Braking device, as part of the protection device against overspeed for the car moving in upward direction
Test Laboratory:	TÜV Süddeutschland Bau und Betrieb GmbH Abteilung Aufzüge und Sicherheitsbauteile Westendstraße 199, D-80686 München
Date and number of the test report:	1999-12-22 545
EC-directive:	95 / 16 / EG
Statement:	The safety component conforms to the directive`s safety requirements for the respective scope of application on page 1 of the Annex to this EC type-examination certificate
Certificate date:	1999-12-22

Zertifizierungsstelle für Aufzüge und Sicherheitsbauteile
EU-Kennnummer: 0635

P. Tkalec

Peter Tkalec

TÜV
SÜDDEUTSCHLAND

Annex to the EC type-examination certificate No. ABV 545

1. Scope of Application

1.1 Permissible masses of Duty load, car and counterweight:

Duty load	900 - 1000 kg
Car	893 - 1507 kg
Counterweight	1359 - 1973 kg

1.2 Maximum tripping speed of the overspeed governor 2.0 m/s

2. Conditions

2.1 Since the brake device represents only a part oft the protection device against overspeed for the car moving in upwards direction an overspeed governor as per EN 81-1, paragraph 9.9 must be used to monitor the upward speed and the brake device must be triggered (engaged) via the overspeed governor`s electric safety device.

2.2 The mechanical movement of each brake circuit is to be monitored separately and directly (e.g. Brake status sensors). If a brake circuit fails to engage (close) while the lift machine is at standstill, next movement of the lift must be prevented.

2.3 In cases where the lift machine moves despite the brake being engaged (closed), the lift machine must at the latest be stopped and the next movement of the lift must be prevented, when the braking force has been reduced by more than half due to wear.

3. Remarks

3.1 The permissible braking moments must be applied to the lift system in such a manner that they do not decelerate more than 1 $_{gn}$, if the empty car is moving upwards.

3.2 The brake device type Optimus AAA20236Q, as part of the protection device against overspeed for the car moving in upwards direction, also functions as a brake for normal operation.

The type examination only refers to the requirements pertaining to brake devices as per EN 81-1, paragraph 9.10, which stipulates that the component decelerate and stop the car in normal operation and that it be designed as a redundant system.

Checking whether the requirements as per paragraph 12.4 have been complied with is not part of this type examination.

3.3 In order to provide identification and information about the basic design and its functioning and to show the environmental conditions and connection requirements pertaining to the tested and approved type, and to define which parts have been tested, drawing „Brake for 1000 kg Machine" dated 1999-09-01 is to be enclosed with the EC type-examination certificate and the Annex thereto.

3.4 The EC type-examination certificate may only be used in connection with the pertinent annex.