



**DOKUMENTACJA
TECHNICZNA
DŹWIGU**

Park Naukowo Technologiczny

AM 400721

4. Świadectwo badania typu dźwigu Isis

APAVE

ORGANISATION NOTIFIED AS THE BODY OF INSPECTION FOR THE CONFORMITY OF LIFTS
N° 0077

APPLICANT: THYSSENKRUPP ELEVATOR MANUFACTURING FRANCE
Rue de Champfleür – ZI St Barthélémy
BP 126
49001 ANGERS CEDEX 01

EC CERTIFICATION OF TYPE INSPECTION N° 0077-V-B-069-08-2006

This CE certificate of type inspection is issued to the applicant for the lift model defined below in application of point 5 of paragraph B of appendix V (module B) of directive 95/16/CE of 29 June 1995 with respect to the convergence of lift legislation of member states.

Lift model	:	ISIS – Version 2/A Lift with no machine room (Trademark "ISIS" or "SYMPHONY")
Spécificities	:	Live load 450 kg to 1050 kg Speed : ≤ 1.60 m/s Gearless motor
Engineering characteristics and extension limits	:	See appendix to certificate : Sheet : DAM 6 - CTCS 5 - DCE 5 (06/06) Drawings : PI 14/A - PI 15 - PI 16/A - PI 17 – PI 18/A – PI 19/A (06/06)
Date of issue	:	03 / 08 / 2006
Validity expiry	:	03 / 08 / 2009
File references	:	APAVE – 06.201.102.13081.00.1 THYSSENKRUPP - Certification File - ISIS - Version 2/A (06/2006)

The lift model defined in the appendices enclosed with the certificate meets the essential conditions of health and safety as defined in appendix 1 of Directive 95/16/EC of 25 June 1995.

Paris, 03/08/2006
Chief Engineer of dept. "handling and hoist machines"
D. FERRIER-CANA

N.B.: In conformity with point 6 of paragraph B of appendix V of Directive 95/16/EC, the applicant undertakes to inform the notified organisation of any modifications, even minor, that he/she has made or envisages making to the approved lift, including any new extensions or variations unspecified in the initial engineering file. Two copies of this certificate are supplied to applicant in the French language ; any translation should be enclosed with the original certificate which is the only authentic text. No duplicate shall be issued.

Translation realised for ThyssenKrupp Elevator Manufacturing France
Certified as conforming with the original issued by APAVE


G. RICHARD
Product manager



DESCRIPTION OF LIFT MODEL

DAM 6 - 06 / 06

" ISIS " - Version 2/A lift without machine room
(Trademark " ISIS " or " SYMPHONY ")

Gearless LS – Steel ropes

450 kg ≤ CU ≤ 1050 kg _ V ≤ 1.00 m/s or 1.00 < V ≤ 1.60 m/s

Lift model =

Basic lift with possible extensions
(without modification to safety components)

Basic lift:

Type of lift: Electric traction lift
Rated load: 1000 kg
Number of passengers: 13
Speed: 1,00 m/s (frequency variation)
Lift travel: 12 metres
Number of served levels: 2 (same side)
Clear opening: 800 x 2100 mm (Door M2T)
Car mass: 1200 kg
Counterweight mass: 1700 kg
Machine room: None

Limits of use:

- Not to be used in an atmosphere presenting risk of explosion.
- Do not expose to weather (IP 20 protection rating).
- The service box is located on the landing on the top terminal level (N) or the one before (N - 1) – Keep in a dry, sheltered place.
(Free access and 500 x 700 mm working area per § 6.3.2.a of EN 81)
- Shaft top ventilation in conformity with § 5.2.3 of EN 81.
- Working temperature: 5 to 40°C (§ 0.3.15 of EN 81)
- Manual repair on emergency current
- Installation in buildings open to the public
(in accordance with the regulations in force in the countries concerned)
- Possibility of safety gear on counterweight
- Possibility of emergency return to floor system

Possible extensions to limits :

Live load:	450 to 1050 kg	450 to 1050 kg
Max. speed:	V ≤ 1,00 m/s	1.00 < V ≤ 1,60 m/s
Travel:	0 to 40 metres (max. 24 levels)	0 to 60 metres (max. 24 levels)
Max. car dimensions :	Width 1000 to 1600 mm - Depth 1250 to 2100 mm Height 2100 mini (2000 mm in existing buildings – in accordance with the regulations in force in the countries concerned)	
Max. suspended weight :	2200 kg (car side) - 1700 kg (counterweight side)	
Max. clear opening :	Width 700 to 1500 mm Height 2000 to 2500 mm (1900 mm mini in existing buildings - in accordance with the regulations in force in the countries concerned)	
Max. clear opening :	Automatic telescopic or centre-opening sliding doors (conforming to § 7 of EN 81)	
Nature of doors:	Painted sheet or stainless steel covered door frame Painted sheet, stainless steel covered or glazed panels (per table J2 of EN 81)	
Position of doors:	In shaft, recessed or on landing	
Access:	Single or through	
Fireman arrangement:	Possible in option with additional equipments (in accordance with the regulations in force in the countries concerned)	
<u>Fixings:</u>	Concrete (C 20/25 mini) or other materials, Halfen steel or rails. (Resistant to the forces shown on GAD)	
<u>List of regulations and basic standards :</u>	Lift directive 95 / 16 / EC JUNE 95 Standard EN 81-1 NOVEMBER 98 EN 81-1 / A2 MAI 05	

The building must be designed to bear the indicated loads and meet acoustic and fire constraints in conformity with regulations currently in force in the countries in question.



ENGINEERING CHARACTERISTICS AND SAFETY COMPONENTS

CTCS 5 - 06 / 06

Page 01

"ISIS" - Version 2/A lift without machine room

(Trademark "ISIS" or "SYMPHONY")

Gearless LS - Steel ropes

450 kg <= CU <= 1050 kg - V <= 1,00 m/s or 1,00 < V <= 1,60 m/s

Rated load (kg)	450 to 1050	
Max. mass car side (kg)	2200	
Max. mass counterweight side (kg)	1700	
Hanging	2/1	
Diameter of suspension ropes (mm)	6,5	
Number of suspension ropes	6 to 9	
Minimum breaking load (Rt min en kN)	31,5	
Diameter of speed governor cable (mm)	6,3 or 6,5	
Minimum breaking load (Rt min en kN)	>= 26,5	
Max. travel (m)	40	60
Rated speed (m/s)	<=1	<=1,6
Traction sheave diameter (mm)	240	
Grooves	45° V grooves	
Reeling angle (°)	180	
Type of guide rails	Car	T 70x65x9 or T 89x62x16 or T 125x65x16 - oiled
	Counterweight	T 50x50x5 or T 70x65x9 drawn
Max. interval between fixings (mm)	Car	2300 to 3500
	Counterweight	2950 to 3500
Controller	MCI (Integral collective)	

SAFETY GEAR AND BRAKING CLAMPS (car) - V = 1,00 m/s			
Types	Certificate	Total suspended mass (kg)	Type of guide rails
DYNATECH PR-2500-UD	ATI/LD - VA/M065A-2/00	613 to 1955 Kg (+/- 7,5 %)	Oiled
		Braking force (N)	
		2889 to 9761 N	
Types	Certificate	Total suspended mass (kg)	Type of guide rails
DYNATECH PQ-4000-UD	ATI/LD - VA/M120/01	881 to 4023 Kg (+/- 7,5 %)	Oiled
		Braking force (N)	
		6629 to 28659 N	
Types	Certificate	Total suspended mass (kg)	Type of guide rails
DYNATECH ASG-100 UD	ATI/LD-VA / M154 / 06	515 to 2139 kg (+/- 7,5 %)	Oiled
		Braking force (N)	
		5408 to 16035 N	

N.B. PR 2500 clamps (CE approval ATI/LD-VA/M062/99) controlled by speed governor (CE approval AGB 209, ATI / LD - VA / M155 / 06 or AGB 055/2) fitted as a fall arrester system on the counterweight are not used as a protective device against excessive up speed.

They are not therefore a safety component in the terms of appendix 4 § 2 of the elevator directive 95/16/EC

NON-LINEAR ENERGY ACCUMULATION-TYPE BUFFERS (V <= 1,00 m/s)			
Types	Certificate	Impact speed	Load on one pad
ACLA A300402 ACLA C300422	08/208/AP 001/300402 08/208/AP 002/300422	maxi 1,15 m/s maxi 1,15 m/s	Maxi : 12500 N Mini 3250 N
ACLA A300403 ACLA C300423	08/208/AP 001/300403 08/208/AP 002/300423	maxi 1,15 m/s maxi 1,15 m/s	Maxi : 25340 N Mini 5680 N

ENERGY DISSIPATION BUFFERS (1,00 < V <= 1,60 m/s)			
Types	Certificate	Impact speed	Load on one buffer
THYSSEN 01 A / 01 B / 01 C	APV 001 / 002 / 003	maxi 1,84 m/s	Mini 6200 / 9700 N Maxi 20000 / 30200 N



SPEED GOVERNOR - $V \leq 1,00$ m/s			
Types	Certificate	Rated engagement speed	Observations
PFB LK 200 T	AGB 209/1	$V_n \leq 1,00$ m/s / $V_d \text{ max.} \leq 1,50$ m/s	Remote engagement 2-directional engagement
Types	Certificate	Rated engagement speed	Observations
DYNATECH VEGA	ATI / LD - VA / M155 / 06	$V_n \leq 1,00$ m/s / $V_d \text{ max.} \leq 1,50$ m/s	Remote engagement 2-directional engagement

SPEED GOVERNOR - $1,00 < V \leq 1,60$ m/s			
Types	Certificate	Rated engagement speed	Observations
THYSSEN 6023	AGB 055/2	$V_n \leq 1,60$ m/s / $V_d \text{ max.} \leq 2,15$ m/s	Remote engagement 2-directional engagement

ELECTRONIC COMPONENTS		
Types	Certificate	Operation
Module SR 1 Module BSR 1	09 208 92610/5 ATI / LD - VA / M158 / 06 ATI / LD - VA / M129 / 03	Levelling and self-levelling door-open safety circuit Levelling and self-levelling door-open safety circuit

LANDING DOOR LOCKING DEVICES		
Types	Certificate	Operation
THYSSEN M2TS6 THYSSEN M2ZS6 M2T/M2Z S6 version étanche THYSSEN M2T / M2Z S11 SELCOM " HYDRA 01 " SELCOM " HYDRA 11 " SELCOM " HYDRA 31 " SELCOM " HYDRA 43 " SLYCA "ECOSYL" SLYCA "POLYGAM" SLYCA "3BS" MEILLER " TTS 18 " MEILLER " TTS 28 " MEILLER "TTS 31"	ATV 545/0 ATV 546/0 ATV 611 N° 0071/0406/12 ATV 438/1 ATV 439/1 ATV 440/1 ATV 442 N° 0071/0199/09 N° 0071/0199/05 N° 0071/0199/08 ATV 368/4 ATV 588 ATV 590	2 x side-opening panels (L and R) 2 x side-opening panels (Z) 2 x side-opening panels 2 x side-opening panels 2 x side-opening panels (Z) 2 x side-opening panels (L and R) 3 x side-opening panels (L and R) 4 x side-opening panels (Z) 2 or 4 x side-opening panels (Z) or 2 x side-opening panels (L and R) 2 or 4 x side-opening panels (Z) or 2 x side-opening panels (L and R) 3 x side-opening panels (L and R) 4 x side-opening panels (Z) 4 x side-opening panels (Z) 3 x side-opening panels (L and R)



DEFINITION OF CAR AND DRIVE

DCE 5 - 06 / 06

" ISIS " - Version 2/A lift without machine room
(Trademark "ISIS" or "SYMPHONY")

Gearless LS – Steel ropes

450 kg ≤ CU ≤ 1050 kg – V ≤ 1.00 m/s or 1.00 < V ≤ 1.60 m/s

Car and car door

Dimensions : Width : min.1000 mm to max. 1600 mm - Depth : min. 1250 mm to max. 2100 mm
Surface area conforming to § 8.2.1 of EN 81

Position and type of controls in conformity with standard ISO 4190 or EN 81-70.

Ventilation surfaces in conformity with § 8.16.2 of EN 81.
(Mechanical ventilation optional)

Car trapdoor dimensions in conformity with § 8.12 of EN 81.

Lighting ensuring a minimum 50 Lux at floor level as per § 8.17.1 of EN 81.

Car walls, floor and ceiling in conformity with § 8.3 of EN 81.

Structural panels in painted sheet, EZ sheet, plastic-coated sheet or stainless steel sheet;
mechanical strength in conformity with § 8.3.2.1 of EN 81.

Painted or EZ sheet panels can be covered with plastic-coated or stainless steel sheet, melamine panels, laminate mounted on wood, PVC sandwich panels, marble, solid wood, (etc.), supplied with a fire resistance report, in conformity with the legislation in force in each country concerned.

Glass side and back walls possible per § 8.3.2.2 and in conformity with the strength tests described in appendix J (table J1) of EN 81.

Car top in sheet metal or laminated glass, designed to comply with the requirements of § 8.13 of EN 81.

Car top guard rail in conformity with § 8.13.3 of EN 81.
(Retractable guard rail possible if compensatory measures provided)

The car door is a two-panel type with side opening or a two-panel type with central opening, sliding horizontally.
(conforming to § 8.6 of EN 81).

Car door panels in painted or stainless steel sheet or glazed (EN 81 - Appendix J - table J2)
(clearance between car door and wall conforming to § 11.2 of EN 81)

The maximum loaded suspended weight on car side is 2200 kg (including cladding).
(i.e.: maximum empty suspended weight 1150 kg for a live load of 1050 kg)

Drive and Controller

machine Gearless MLS XA 2 (oil free)
Power : 4.6 kW to 11 kW (Depending on the load)
Speed : 159 rpm (V = 1.00 m/s) or 255 rpm (V = 1.60 m/s)
THREE-PHASE power supply: 400 V + N – 50/60 Hz

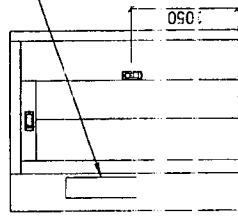
Traction drive
Sheave dia. 240 mm – V-Grooves to 45°
6 to 9 steel ropes - 6.5 mm dia. (Depending on the load)

MCI integral collective controller with frequency converter (possibility of GROUP function).

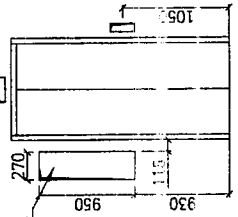
Work area 700 mm deep in front of the controller per § 6.3.2.1 of EN 81
(Light in this area at least 200 lux at a height of 1 m from floor).

Elevation of landing opening top terminal level

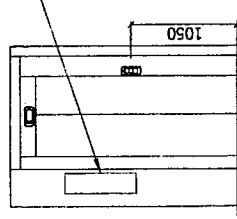
Centre-opening door on landing



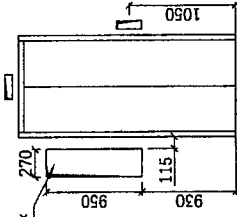
Centre-opening door in shaft



Side-opening door on landing



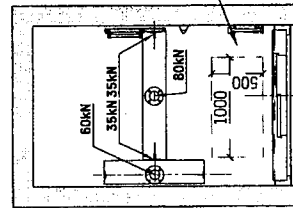
Side-opening door in shaft



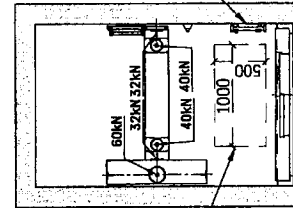
In cases where the lifts share a shaft, make provision for a mesh dividing screen per article 5.6.2 of EN 82

Plan of pit

$1.00 < V \leq 1.60$ m/s



$V \leq 1.00$ m/s

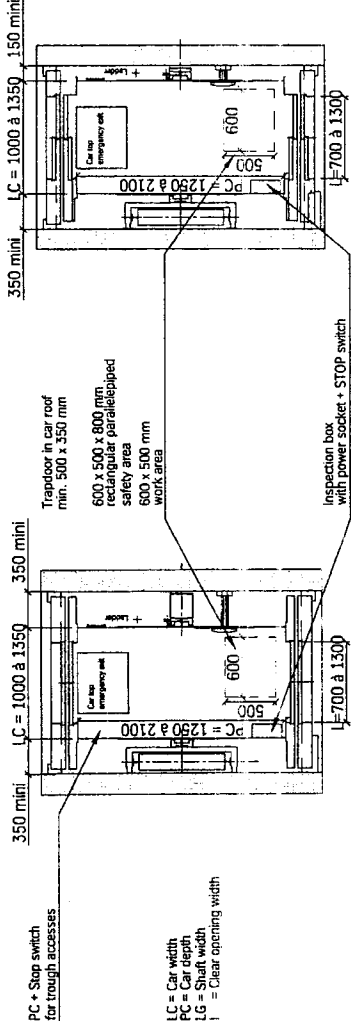


Type of concrete as per P1B305 B25
Mean resistance 25 MPa
Concrete grade EN 206 C20/25

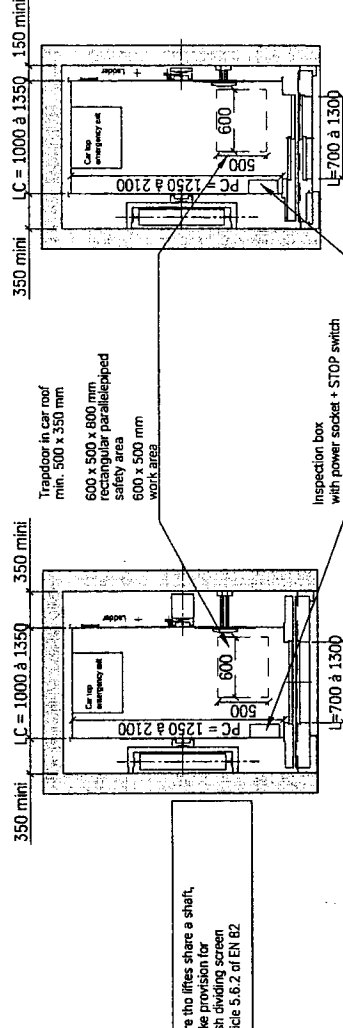
1000 X 500 X 600 mm rectangular parallelepiped safety area

Elevation of shaft (Symmetrical installation possible)

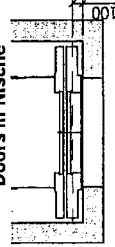
2 panel central opening door on landing with trough access2-panel side opening door on landing with trough accesses



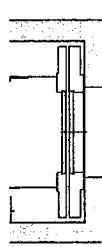
2 panel central opening door on landing with single access2-panel side opening door on landing with single access



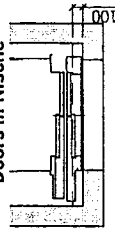
Doors in Nische



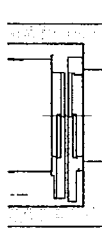
Doors in shaft



Doors in Nische



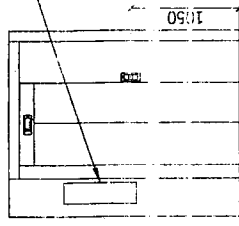
Doors in shaft



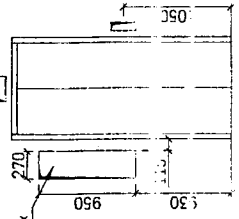
						CERTIFICATION DRAWING Shaft plans		2 panel door		Narrow car = 1000 à 1350 - V=1.00/1.50 m/s		Page			
						DRAWN: 15/09/2005		NAME: VERGÈS S				PI 14		1/1	
												ThyssenKrupp Elevator Manufacturing France		ISIS or SYMPHONY LIFT 450 kg ≤ CU ≤ 1050 kg (Gearless)	
												A3			
												REVISION PLAN		TEDOC013-11/94	
												A		02/0000	

ation of landing opening top terminal level

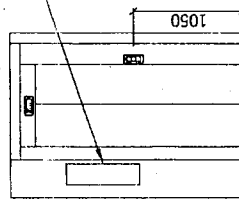
Centre-opening door on landing



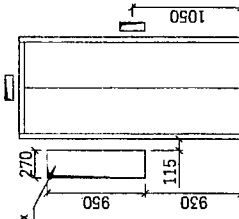
Centre-opening door in shaft



Side-opening door on landing

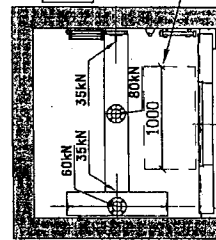


Side-opening door in shaft

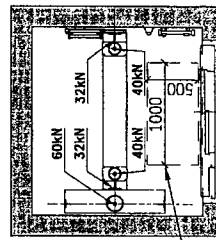


Plan of pit

$1.00 < V \leq 1.60$ m/s

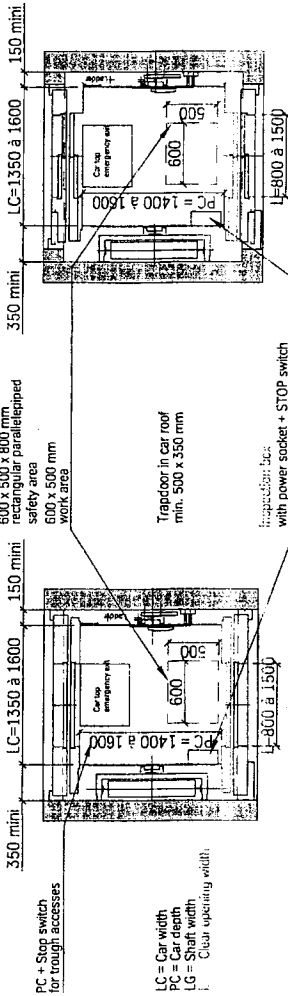


$V \leq 1.00$ m/s

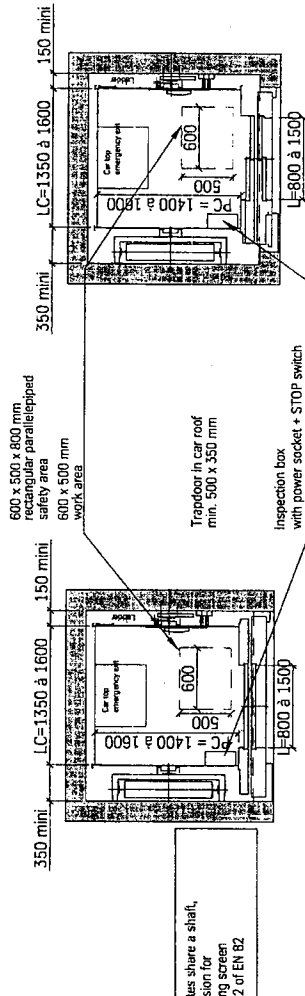


Elevation of shaft (Symmetrical installation possible)

2 panel central opening door on landing with trough accesses 2 panel side opening door on landing with trough accesses

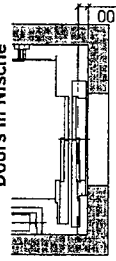


2 panel central opening door on landing with single access 2 panel side opening door on landing with single access

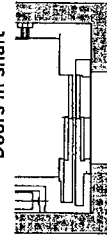


In cases where the lifts share a shaft, make provision for a mesh dividing screen per article 5.6.2 of EN 82

Doors in Nische



Doors in shaft



CERTIFICATION DRAWING

Shaft plans

2 panel door

Wide car = 1350 à 1600 - V=1.00/1.60 m/s

Page 1/1
PI 15
ISIS or SYMPHONY LIFT
800 kg < CU < 1050 kg
(Gearless)

DRAWN: 18/09/2005 NAME: VERONIQUE S



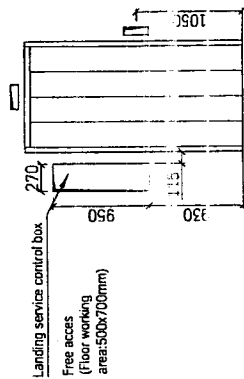
ThyssenKrupp Elevator
Manufacturing France

A3

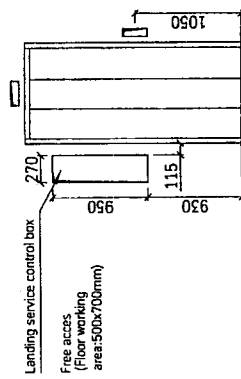
REVISION PLAN
TEDOC013-11/94

Elevation of landing opening top terminal level

4 panel central opening door in shaft



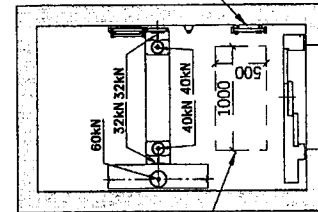
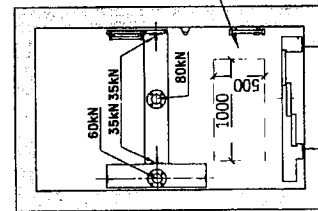
3 panel side opening door in shaft



Plan of pit

1.00 < V ≤ 1.60 m/s

V ≤ 1.00 m/s



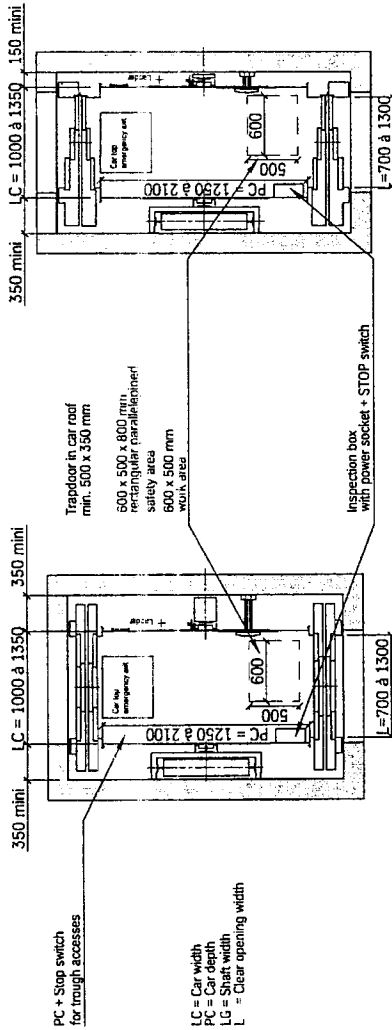
Type of concrete as per P18305 B25
Mean resistance 25 MPa
Concrete grade EN 206 C20/25

1000 X 500 X 600 mm
rectangular parallelepiped
safety area

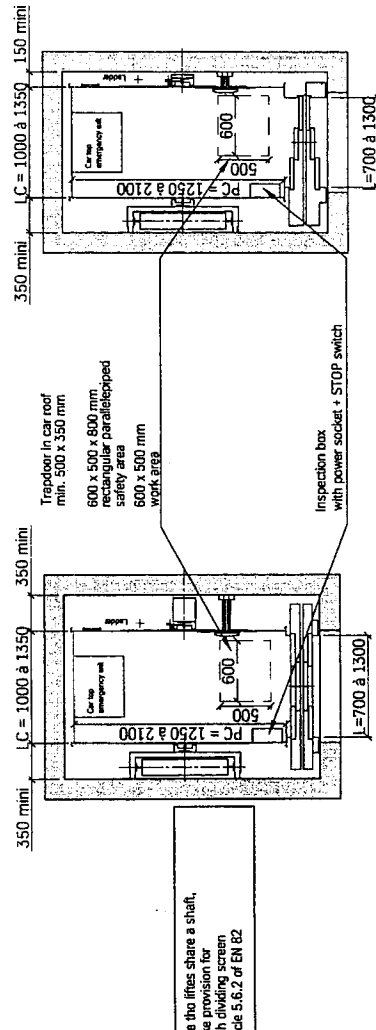
Pit ladder

Elevation of shaft (Symetrical installation possible)

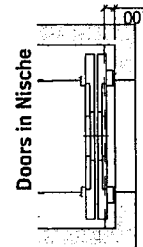
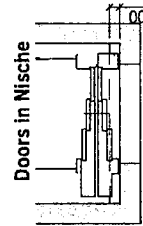
4 panel central opening door in shaft with trough accesses 3 panel side opening door in shaft with trough accesses



4 panel central opening door in shaft with single access 3 panel side opening door in shaft with single access



In cases where the lifts share a shaft,
make provision for
a mesh dividing screen
per article 5.6.2 of EN 82



CERTIFICATION DRAWING

Shaft plans

two panel and three panel doors
Narrow car = 1000 ± 1350 - V=1.00/1.60 m/s
450 kg < CU < 1050 kg
(gearless)



ThyssenKrupp Elevator
Manufacturing France

DRAWN: L006/2006 NAME: VERGÈS

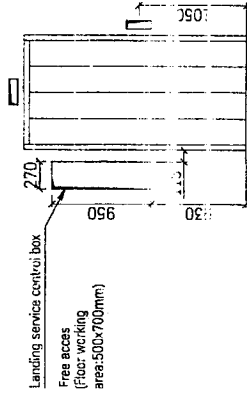
A3

REVISION PLAN
TEDOC013-11/94

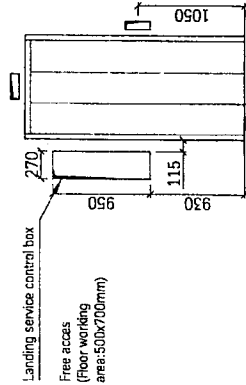
Page
PI 16 1/1

ation of landing opening top terminal level

4 panel central opening door in shaft



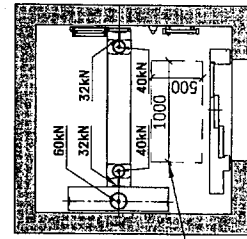
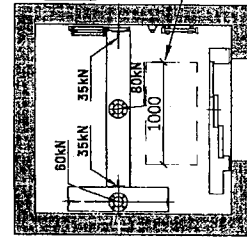
3 panel side opening door in shaft



Plan of pit

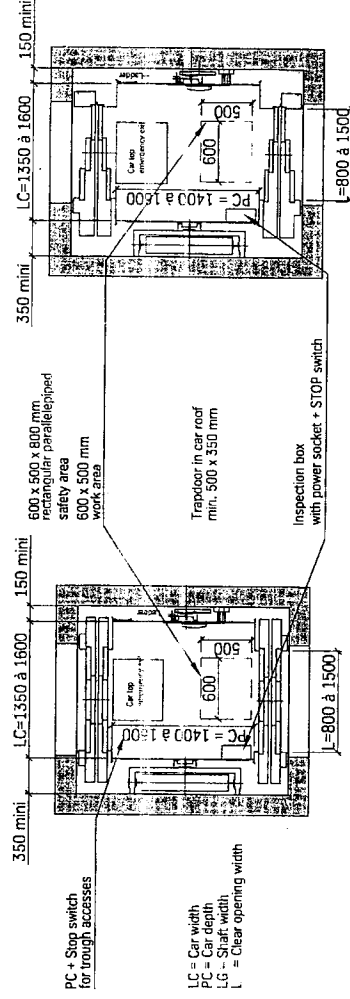
1.00 < V ≤ 1.60 m/s

V < 1.00 m/s

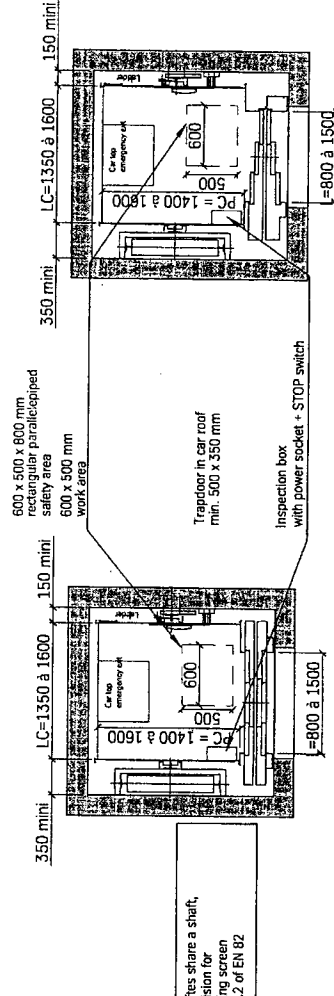


Elevation of shaft (Symmetrical installation possible)

4 panel central opening door in shaft with trough accesses 3 panel side opening door in shaft with trough accesses



4 panel central opening door in shaft with single access 3 panel side opening door in shaft with single access



In cases where the lifts share a shaft,
make provision for
a mesh dividing screen
per article 5.6.2 of EN 82

Doors in Nische

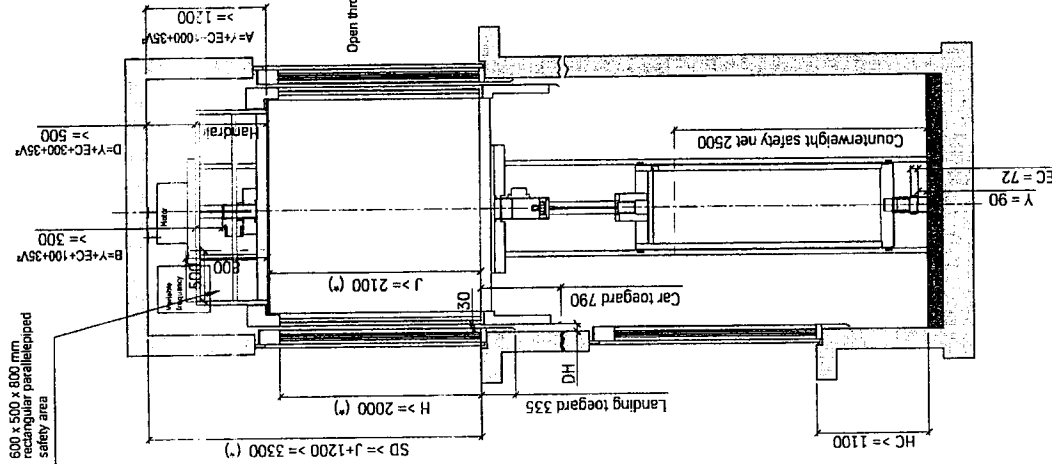
Doors in Nische

REVISION PLAN	A3
TEDOC013-1/94	

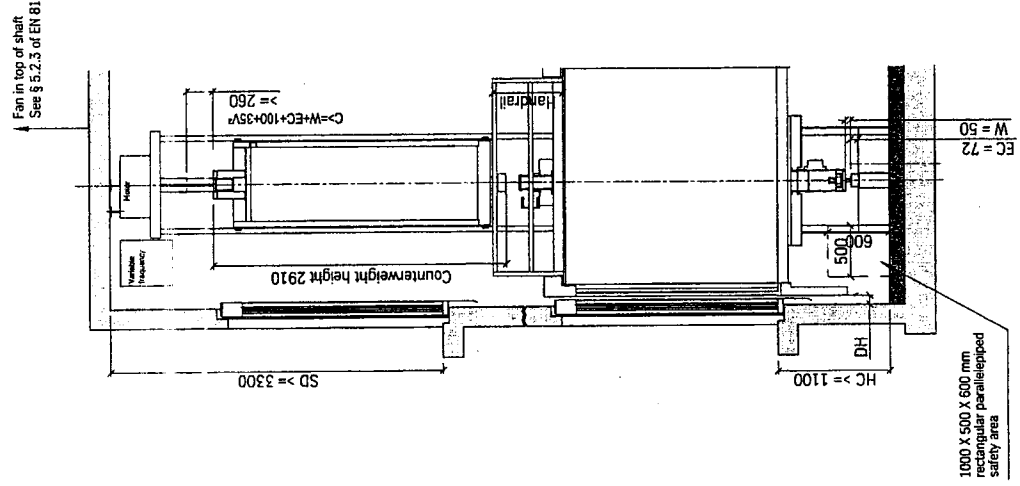
DRAWN: 15/09/2005	NAME: VECHE S
ThyssenKrupp Elevator Manufacturing France	

CERTIFICATION DRAWING Shaft plans	Page 1/1
two panel and three panel doors	PI 17
Wide car = 1350 à 1600 - V=1.00/1.60 m/s	PI 17
ISIS or SYMPHONY LIFT	1/1
800 kg < CU < 1050 kg	
(Gearless)	

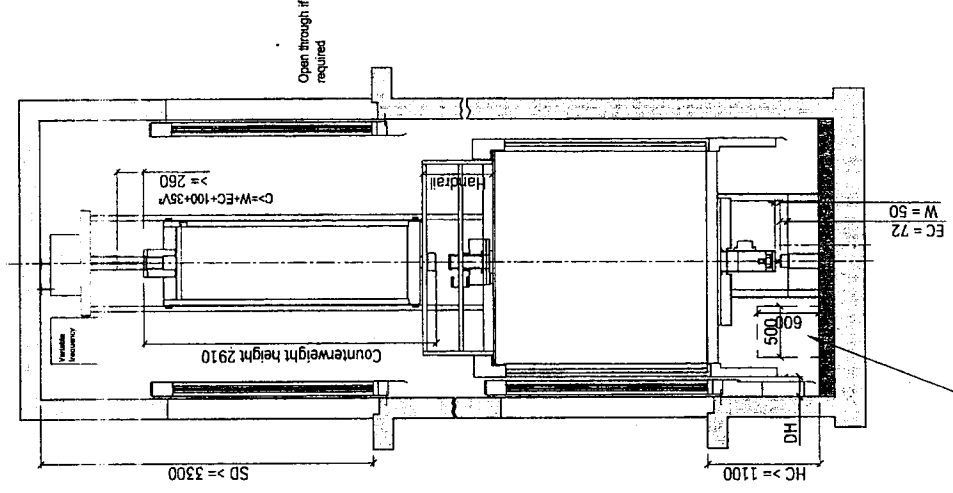
Doors on landing



Doors in Nische



Doors in shaft



- HC = Pit height
- Y = Clearance under counterweight buffer
- EC = Buffer compression
- SD = Headroom
- J = Car headroom
- A = Clearance on car roof
- B = Clearance at topmost part of installation
- W = Clearance between car and buffer
- C = Clearance above counterweight
- D = Clearance above handrail
- H = Clear opening height
- DH = Clearance between car sill and shaft wall

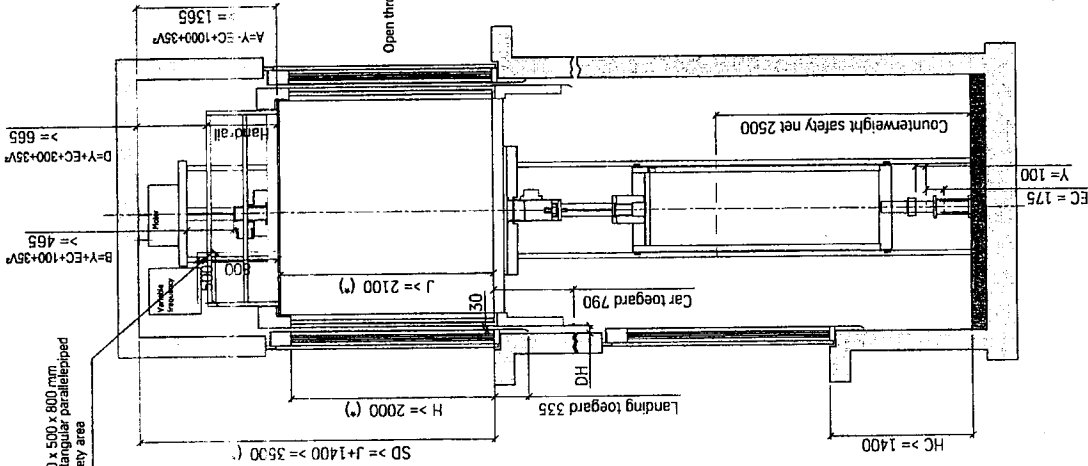
See § 10.2.1 of EN 81

(*) Height possible in existing buildings

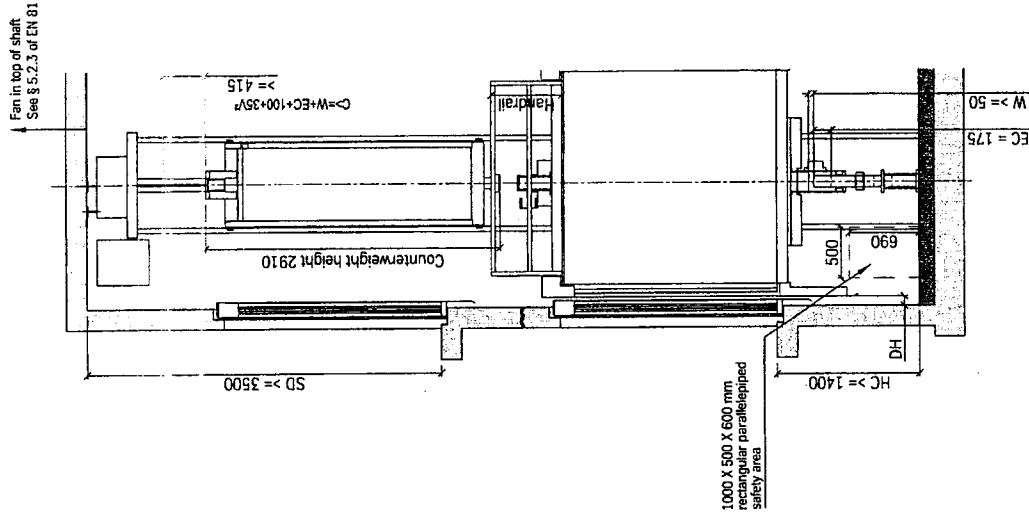
H = 1900 mm - J = 2000 mm - SD = 3200 mm
in accordance with the regulation in force in the countries concerned.

CERTIFICATION DRAWING		Page
Shaft plans		1/1
Verticals sections of shaft V ≤ 1.00		PI 18
ISIS or SYMPHONY LIFT		1/1
DRAWN: 15/09/2005 NAME: VERGNE S		
ThyssenKrupp Elevator		
Manufacturing France		
A3		
EDITION PLAN		
TEDOC013-11/94		

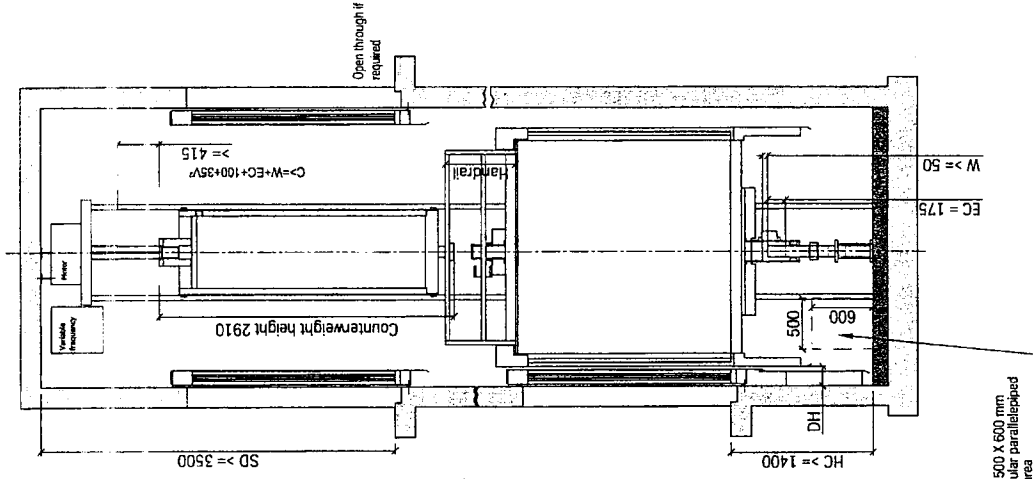
Doors on landing



Doors in Nische



Doors in shaft



- HC = Pit height
- Y = Clearance under counterweight buffer
- EC = Buffer compression
- SD = Headroom
- J = Car headroom
- A = Clearance on car roof
- B = Clearance at topmost part of installation
- W = Clearance between car and buffer
- C = Clearance above counterweight
- D = Clearance above handrail
- H = Clear opening height
- DH = Clearance between car sill and shaft wall

See § 10.2.1 of EN 81

(*) Height possible in existing buildings
H = 1900 mm - J = 2000 mm - SD = 3400 mm
In accordance with the regulation in force in the countries concerned.

CERTIFICATION DRAWING		Shaft plans	
Verticals sections of shaft V <= 1.60		Page	
ISIS or SYMPHONY LIFT		PI 19	
1/1		1/1	
DRAWN: 15/08/2008		NAME: VERGÈS S	
ThyssenKrupp Elevator		Manufacturing France	
A3		REVISION PLAN	
TEDOC013-11/94		A 05/05/03	



Service Technique Equipements Mécaniques

Correspondant : D. FERRIER-CANA

Ligne directe : 01.40.54.59.21

N° Chrono : 200710220100474

N/réf. : DFC/TM

V/réf. : 070.955.01.27

V/lettre du

**THYSSENKRUPP ELEVATOR
MANUFACTURING FRANCE**
A l'attention de Monsieur André FAYOL
Rue de Champfleür
ZI Saint Barthélemy
49001 ANGERS CEDEX 01

Paris, le 16 août 2007

Objet : **Examen CE de type « Ascenseur "ISIS - Version 2A" »**

N° 0077-V-B-069-08-2006

Limiteur de vitesse Dynatec modèle VEGA

Certificat : AT/LD-VA/M 155A-1/06

Messieurs,

Comme suite à nos entretiens téléphoniques et à votre Email du 16 août 2007, nous avons l'honneur de vous confirmer les points suivants :

⇒ Nous prenons note de la nouvelle référence du limiteur de vitesse :

- AT/LD-VA/M 155 A-1/06

en remplacement de la référence :

- AT/LD-VA/M 155/06 qui figure dans les documents annexés à notre attestation d'examen CE de type : 0077-V-B-069-08-2006.

En attente de la finalisation de la mise à jour en cours du dossier technique en notre possession et de l'actualisation de l'annexe CTCS - 06/06 page 02/02 - Mise à jour le 04/07, nous vous confirmons la validité de notre attestation d'examen CE de type n° 0077-V-B-069-08-2006, les exigences essentielles de sécurité de la Directive 95/16/CE restant satisfaites.

Restant à votre disposition pour tout renseignement complémentaire,

Nous vous prions d'agréer, Messieurs, l'expression de notre considération distinguée.

Pour, l'Ingénieur, Chef du Service Technique
Equipements Mécaniques
D. FERRIER-CANA

Paris, August the 16th 2007

Further to our conversations and your e-mail from 16th of August 2007, we are pleased to confirm the following points:

We take into account the new reference number of governor:

- ATI/LD-VA/M155 A 1/06

instead of the reference:

- ATI/LD-VA/M 155/06 which appears on the documents annexed to our EC Type examination Certificate number: 0077-V-B-069-08-2006

We are finalizing the up-dating of technical files and the CTCS annex - 06/06 page 02/02 - up-dated 04/05 and in the meantime we confirm the validity of our EC Type examination Certificate number: 0077-V-B-069-08-2006, as the main security requirements of 95/16/CE Directive are fulfilled.

We stay at your disposal for any information you may need.

Sincerely yours

Technical Department Manager
Mechanical Equipment
D. FERRIER-CANA

