

Detailed product information. synergy 100.

Version December 2018



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Product overview.

Application.

- synergy 100 is intended for transport of persons, which may take along goods with light to moderate weight, considering for the goods a maximum weight of 40% nominal load
- Buildings: Low-rise residential buildings
- Segment: New installation with functional requirements
- Pure and efficient solution
- Recommended number of trips: 200.000 starts / year
- Low traffic volume (ISO 25745, categories 1-2)
- Energy efficiency class A
- Design: Predesigned (F design line)
- Cabin dimensions: fixed standard dimensions (ISO 4190-1)
- Self-supporting cabin
- Single entrance / double entrance (180°)
- Machine room-less / machine room
- Modifications to the standard are not possible

Main performance data.

synergy 100

Features

Load, Q	kg	450 / 630 / 1000
Speed, v	m/s	1,0
Travel Height TH, max.	m	45
Number of stops, max.		12
Machine room-less / Machine room		• / ◦
Elevators group		Up to 2 elevators
Drive		Gearless, frequency controlled (VVVF)
Door model		CD10/ LD10
Door type		L2/ C2
Main regulations		EN 81-20/50, Safety rules for the construction and installation of lifts. Lifts for the transport of persons and goods. Examinations and tests EN 81-28, Emergency calls EN 81-58, Landing doors fire resistance test
Additional regulations (optional)		EN 81-70, Barrier free EN 81-77 Cat. 0-3, Seismic conditions EN 81-73, Fire evacuation

Elevator type.

Machine room-less

The motor is located at the head of the shaft on a bedplate fixed to a car guiderail and to the shaft wall. The speed governor is fixed to the other car guiderail.

The controller is installed in a control cabinet next to the landing door at the top floor. The VVVF frequency inverter is located in the shaft head.

synergy 100 is a 2:1 rope suspension, with diverting pulleys below the cabin. The ropes are fastened to guiderails at the head of the shaft.

With max. speed of 1 m/s, it includes a self-supporting cabin.

Machine room

The machine, the VVVF frequency inverter and the controller are located in the machine room on top of the shaft.



Cabin dimensions.

Specified loads in the shaft pit / overhead

Load Q	kg	450	630	1000	
Cabin width x Cabin depth CW x CD	mm	1000 x 1250	950 x 1300	1100 x 1400	1100 x 2100
Single entrance, SE		•	•	•	•
Double Entrance, DE (180°)		◦	◦	◦	◦
Passengers		6	6	8	13
Cabin Height, CH	mm	2200	2200	2200	2200
Door Opening, DO	mm	800 / 900	800 / 900	800 / 900	800 / 900
Door height, DH	mm	2000 / 2100	2000 / 2100	2000 / 2100	2000 / 2100

- Standard features
- Optional
- Not available

Planning data.

Shaft dimensions.

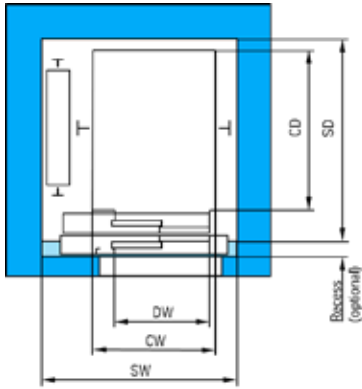
System				Cabin		Door				Shaft																														
Rated load [kg]	Number of passengers	Speed [m/s]	Travel height max. [m]	Car width x car depth [mm]	Car height [mm]	Type of entrance	Door type	Door width [mm]	Door height [mm]	Shaft width [mm]	Shaft width [mm] Full front	Shaft depth [mm] Door in recess & full front	Shaft depth [mm] Door partially in shaft	Shaft depth [mm] Door in shaft	Shaft pit [mm]	Shaft head [mm]																								
450	6	1,0	45	1000 x 1250	2200	S/D	L2/C2	800/900		2000/2100		1500	1500	1545	1610	1665	1000	3400																						
								S	L2	800	2000								1595	1595	1545	1610	1665	1000	3400															
								D	L2	800	2000								1500	1500	1680	1810	1920	1000	3400															
										900	2000								1595	1595	1680	1810	1920	1000	3400															
								S	C2	800	2000								1770	-	1510	1555	1595	1000	3400															
										900	2000								1970	-	1510	1555	1595	1000	3400															
								D	C2	800	2000								1770	-	1610	1700	1780	1000	3400															
										900	2000								1970	-	1610	1700	1780	1000	3400															
								450	6	1,0	45								950 x 1300	2200	S/D	L2/C2	800/900		2000/2100		1450	1480	1595	1660	1715	1000	3400							
																							S	L2	800	2000								1590	1590	1595	1660	1715	1000	3400
																							D	L2	800	2000								1450	1480	1730	1860	1970	1000	3400
																									900	2000								1590	1590	1730	1860	1970	1000	3400
S	C2	800	2000	1770	-	1560	1605					1645	1000	3400																										
		900	2000	1960	-	1560	1605					1645	1000	3400																										
D	C2	800	2000	1770	-	1660	1750					1830	1000	3400																										
		900	2000	1960	-	1660	1750					1830	1000	3400																										
630	8	1,0	45	1100 x 1400	2200	S/D	L2/C2					800/900		2000/2100		1600	1600	1695					1760	1815	1000	3400														
												S	L2	800	2000																			1600	1600	1695	1760	1815	1000	3400
												D	L2	800	2000																			1600	1600	1830	1960	2070	1000	3400
														900	2000																			1600	1600	1830	1960	2070	1000	3400
								S	C2	800	2000	1795	-	1660	1705				1745	1000	3400																			
										900	2000	1970	-	1660	1705				1745	1000	3400																			
								D	C2	800	2000	1795	-	1760	1850				1930	1000	3400																			
										900	2000	1970	-	1760	1850				1930	1000	3400																			
								1000	13	1,0	45	1100 x 2100	2200	S/D	L2/C2				800/900		2000/2100						1625	1625	2395	2460	2515	1000	3400							
																			S	L2	900	2000												1625	1625	2530	2660	2770	1000	3400
																			D	L2	900	2000												1625	1625	2530	2660	2770	1000	3400
																			S	C2	900	2000												1970	-	2360	2405	2445	1000	3400
		900	2000	1970	-	2460	2550	2630	1000	3400																														

Key:
 S: Single entrance
 D: Double entrance
 L2: Side-opening door with 2 panels
 C2: Central-opening door with 2 panels

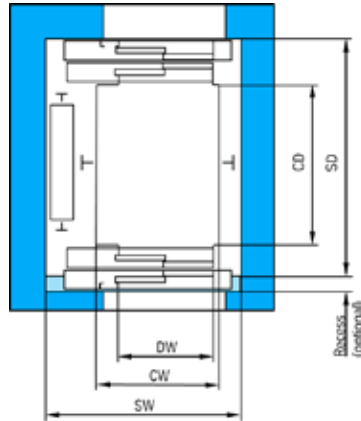
Note:
 The values shown correspond to a generic installation. During the planning phase, consider all applicable regulations stipulated by relevant notified body and all applicable national regulations. For specific project requirements, consult our thyssenkrupp Elevator sales representative.

Shaft layouts.

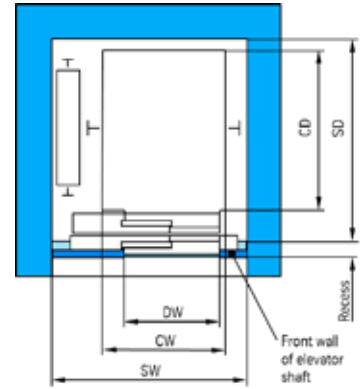
Shaft layout with side opening door L2



Single entrance

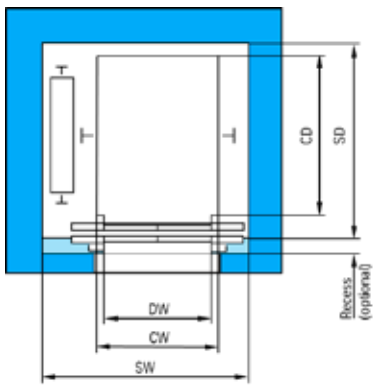


Double entrance

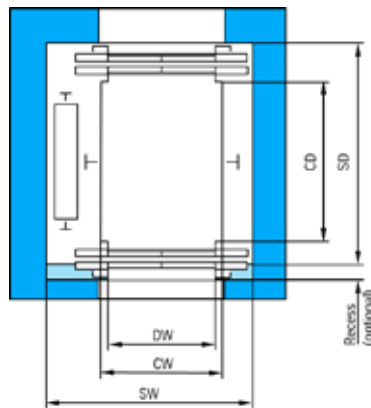


Single entrance, full-front door

Shaft layout with central opening door C2



Single entrance



Double entrance

Note:

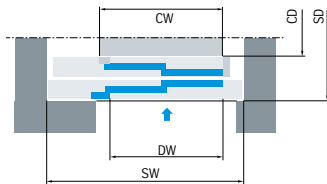
L2 - side opening door with 2 panels

C2 - central opening door with 2 panels

Installation options for the landing doors.

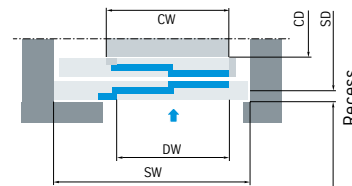
Installation in shaft

The landing doors are fastened to the shaft wall by means of brackets and drill fixings.



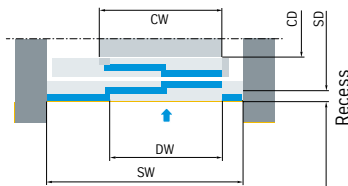
Installation in recess

In the interest of the economical utilization of space, the landing door can be installed in a recess (optional with full front for lateral opening doors).



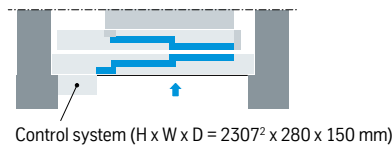
Installation with full front

Optionally, the landing door L2 can be mounted in the landing (recess) with a front wall of the elevator shaft.



Control system

The control system with the frequency inverter is located beside the frame of the landing door in the top landing and/or optionally in another freely defined place⁽¹⁾.



Door installation data

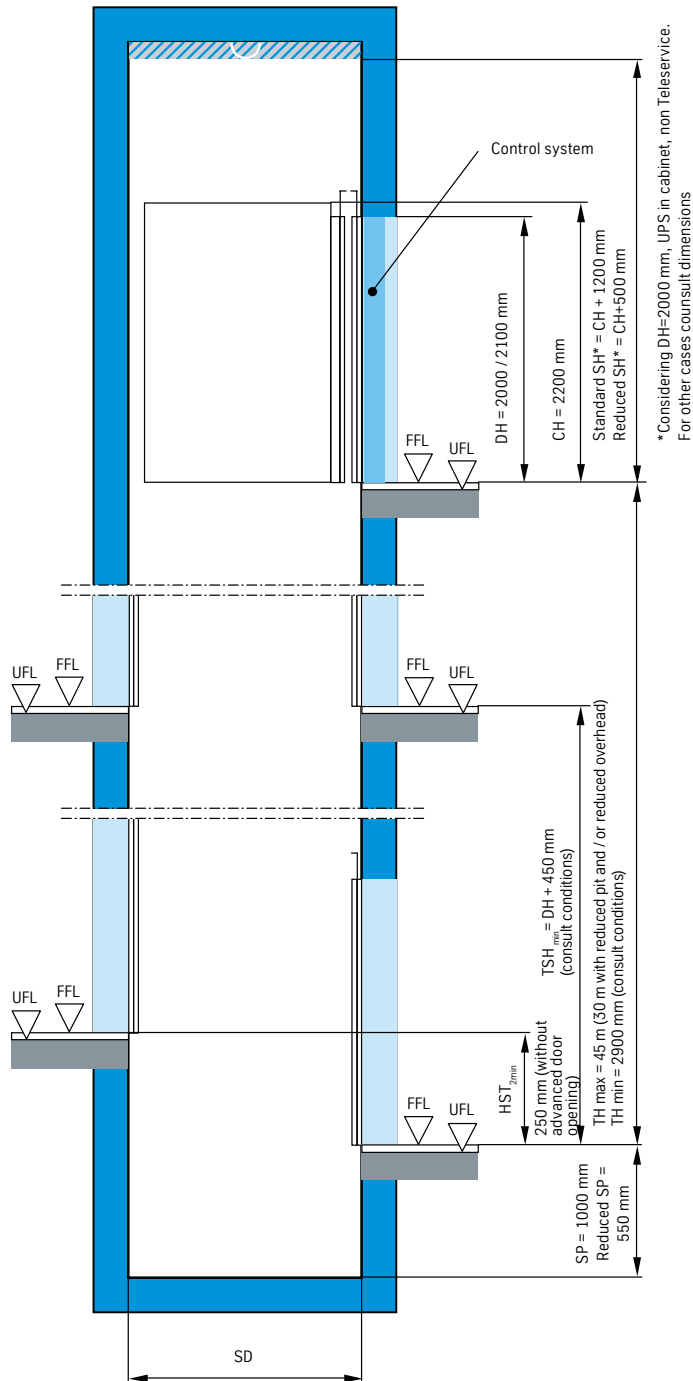
Door type		Recess values in landing	Recess values in recess	Recess values in shaft
L2	mm	50 (+/- 20)	50 (+/- 20)	170 (+/-20)
L2 full front	mm	50 (+/- 20)	-	-
C2	mm	50 (+/- 20)	50 (+/- 20)	134 (+/-20)

⁽¹⁾To ensure fire protection, the arrangement of the control box must comply with the local building codes, as well as the Model Conduit Systems Directive and the Model Highrise Building Directive.

⁽²⁾In case that control cabinet is positioned next to the shaft door, the height of the control cabinet is related to the door height DH + 305 mm. If the control cabinet is installed with offset position, the height is always 2307 mm. Standard finish for control cabinet is primed coating RAL 7042 / 7032 for further painting at jobsite.

Shaft vertical section.

Standard shaft head and shaft pit



Key:

CW: Car width
 CD: Car depth
 CH: Car height
 SW: Shaft width
 SD: Shaft depth
 SP: Shaft pit

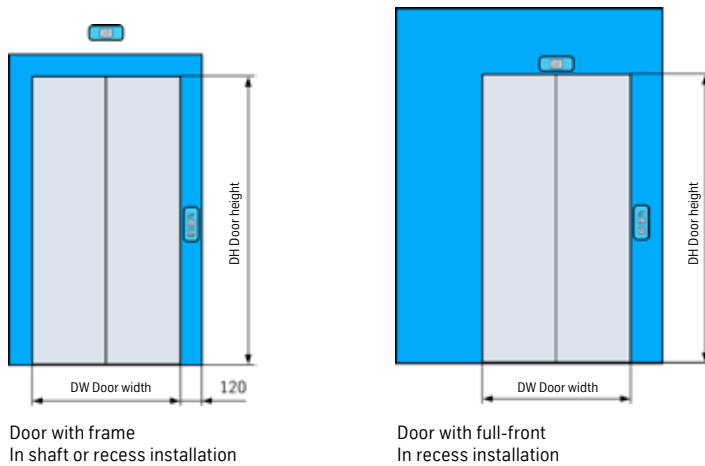
DW: Door width
 DH: Door height
 FFL: Finished floor level
 UFL: Unfinished floor level
 TH: Travel height
 HST: Min. height between floors

Doors range.

Door types and dimensions			
Door type	LD10 / CD10		
	L2		C2
	Door with frame	Full-front	Door with frame
Opening	side	side	central
N# Panels	2	2	2
Door width mm	800	•	•
	900	•	•
Door height mm	2000	•	•
	2100	•	•

- As standard
 - Not available
- c.e. Contract engineering

Door versions



Door with frame
In shaft or recess installation

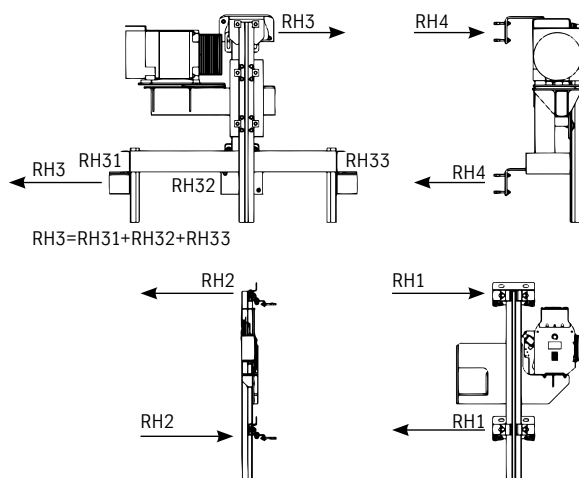
Door with full-front
In recess installation

Ocurring forces.

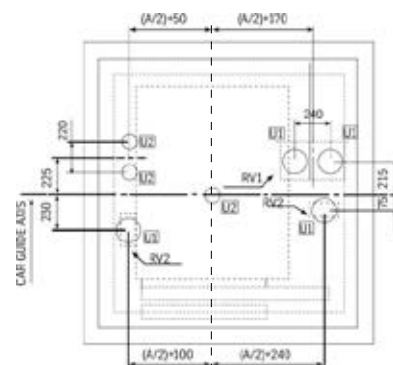
Specified loads in the shaft pit / overhead

			Machine room-less		Machine room	
			≤630 kg	>630 kg	≤630 kg	>630 kg
Self-supported cabin						
Load points / elevator car guide rails	R1	kN	31.40	49.00	31.40	49.00
	R2	kN	50.20	78.00	50.20	78.00
	R3	kN	56.60	82.00	36.50	53.40
	R4	kN	17.70	24.80	17.70	24.80
Load points / machine base frame and rope fixing points	RH1	kN	3.00	4.30	-	-
	RH2	kN	0.10	0.20	-	-
	RH3	kN	7.20	9.40	-	-
	RH4	kN	5.50	9.20	-	-
Load points in machine room bedplate	RV1	kN	-	-	32.00	48.00
	RV2	kN	-	-	21.40	29.30

Reactions in shaft head

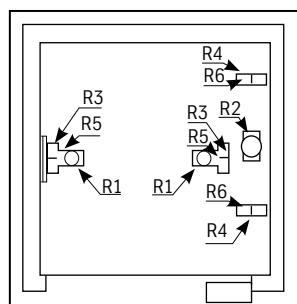


Machine room-less configuration

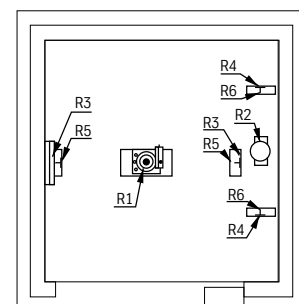


Machine room-less configuration

Reactions in pit



Self-supporting cabin



Car with sling

Electrical data.

Technical and electrical data				
Rated load		450 kg	630 kg	1000 kg
Machine type		Synchronous gearless		
		PMC125 S	PMC125 M	PMC125L
Weight of the drive (kg)	kg	127	132	193
Max. N° of travels per hour	s/h	120	120	180
Controller		CMC 4+ 20/50 frequency inverter		
Rated output of motor	kW	2.80	3.80	5.90
Operating input power ¹	kVA	3.9	5.3	
Nominal operating current ¹	A	7.90	10.20	14.90
System starting current ¹	A	22	25	34
Landing accuracy	mm	+/- 3 mm		
Rope suspension		2:1		
Diameter of traction pulley	mm	240		
Suspension ropes	mm	4 Ø 6	6 Ø 6	8 Ø 6
Guide rails counterweight	Category 0		T45/5	T65/8
	Category 1, 2 and 3		T70/9	T70/9
Guide rails car elevator		T89/16 - T70/9	T89/16 - T70/9	T89/16
Max. distance between fastening of rail brackets	Category 0	3000 - 1900	3000 - 1900	2400
	Category 1	2700 - 1900	2700 - 1900	2150
	Category 2	2100 - n.a.	2100 - n.a.	1550
	Category 3	1700 - n.a.	1700 - n.a.	1300

¹⁾ At 400 Volt / 50 Hz.

Design.

F design line.

Fresh

Timeless

F01

F02

F03

F10



F04

F05

F06

F11

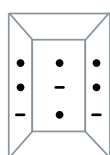


F design line.

F design line								
Predesigned cabins	Fresh						Timeless	
	F01	F02	F03	F04	F05	F06	F10	F11
Car ceiling								
White painted steel sheet	•	•	•	•	•	•	•	•
slim LED plate	•	•	•	•	•	•	•	•
Stainless steel Gr.220D (ferritic, type 441) upper band	•	•	•	•	•	•	•	•
Wall elements								
White Skinplate, close to RAL 9003	• / - / •	• / - / •	• / - / •	• / - / •	• / - / •	- / • / -	-	-
Yellow Skinplate, close to RAL 1016	- / • / -	-	-	-	-	-	-	-
Blue Skinplate, close to RAL 6034	-	- / • / -	-	-	-	-	-	-
Green Skinplate, close to RAL 6018	-	-	- / • / -	-	-	-	-	-
Beige Skinplate, close to RAL 1015	-	-	-	- / • / -	-	-	-	-
Grey Skinplate, close to RAL 7039	-	-	-	-	- / • / -	-	-	-
Steel look Skinplate	-	-	-	-	-	• / - / •	-	-
Stainless steel Gr.220D (ferritic, type 441)	-	-	-	-	-	-	• / • / •	-
Stainless steel Linen (austenitic, type 304)	-	-	-	-	-	-	-	• / • / •
Mirror								
In the rear wall, single entrance	•	•	•	•	•	•	•	•
Opposite to COP wall, double entrance	◦	◦	◦	◦	◦	◦	◦	◦
Car Operating Panel								
Silver Moon COP, Stainless steel Gr.220D (ferritic, type 441)	•	•	•	•	•	•	•	•
White Moon COP, White glass	◦	◦	◦	◦	◦	◦	◦	◦
Handrail								
Chrome-plated aluminum	•	•	•	•	•	•	•	•
Stainless steel brushed (ferritic, type 441)	◦	◦	◦	◦	◦	◦	◦	◦
Round tube (on opposite to COP wall)	•	•	•	•	•	•	•	•
Round tube (on three walls)	◦	◦	◦	◦	◦	◦	◦	◦
Without handrail	◦	◦	◦	◦	◦	◦	◦	◦
Car door and rear panel								
Stainless steel Gr.220D (ferritic, type 441)	•	•	•	•	•	•	•	•
Stainless steel Linen (austenitic, type 304)	◦	◦	◦	◦	◦	◦	◦	◦
Landing door								
Primed painted RAL 7042 / 7032	•	•	•	•	•	•	•	•
Stainless steel Gr.220D (ferritic, type 441)	◦	◦	◦	◦	◦	◦	◦	◦
Stainless steel Linen (austenitic, type 304)	◦	◦	◦	◦	◦	◦	◦	◦
Flooring material								
Nature Black Vinyl	•	•	•	•	•	•	•	•
Concrete Dark Grey Vinyl	◦	◦	◦	◦	◦	◦	◦	◦
Concrete Chalk Vinyl	◦	◦	◦	◦	◦	◦	◦	◦
Prepared for local flooring supply, 20 mm recess	◦	◦	◦	◦	◦	◦	◦	◦
Flooring and ceiling skirting								
Anodized aluminum	•	•	•	•	•	•	•	•

SD: shaft depth
DH: door height

LH: lintel height
All measures in mm



- / • / • Standard finish in all cabin panels
- / - / • Standard finish in COP wall and opposite COP wall
- / • / - Standard finish in rear cabin wall

For double entrance, rear wall panels finishes will be placed on the opposite COP wall

- As standard
- Optional
- Not available

Note: Options, colours and specifications, are subject to change. All cabin decor options illustrated in this brochure are representative only. The samples shown may vary from the original in colour and material. Patterned samples not to scale. Stainless steel Gr.220D = brushed stainless steel = hairline stainless steel (ferritic, type 441). Stainless steel Linen (austenitic, type 304). Consult your thyssenkrupp Elevator sales representative for cabin designer tool and samples.

F design line. Decoration panels.



Fresh



F01

RAL 9003	RAL 1016	RAL 9003
White	Yellow	White

F02

RAL 9003	RAL 6034	RAL 9003
White	Blue	White

F03

RAL 9003	RAL 6018	RAL 9003
White	Green	White

F04

RAL 9003	RAL 1015	RAL 9003
White	Beige	White

F05

RAL 9003	RAL 7039	RAL 9003
White	Grey	White

F06

Steel look	RAL 9003	Steel look
Steel look	White	Steel look



Timeless



F10

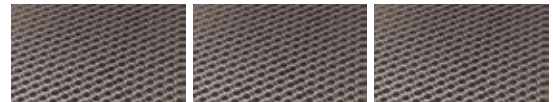


Stainless steel
Gr.220D

Stainless steel
Gr.220D

Stainless steel
Gr.220D

F11



Stainless steel
Linen

Stainless steel
Linen

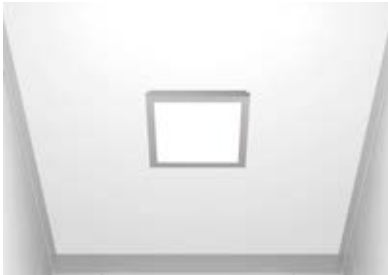
Stainless steel
Linen

Note: Options, colours and specifications, are subject to change. All cabin decor options illustrated in this brochure are representative only. The samples shown may vary from the original in colour and material. Patterned samples not to scale. All cabin visualizations are according a 1100 x 1400 mm cabin size. For other cabin sizes, differences in dimensions of panels, mirror and ceiling might exist. Consult your thyssenkrupp Elevator sales representative for cabin designer tool and samples. Stainless steel Gr.220D = brushed stainless steel = hairline stainless steel (ferritic, type 441). Stainless steel Linen (austenitic, type 304).

Cabin materials and finish.

F design line.

Ceiling



Slim LED plate

Skirting



Anodized aluminum

Handrail



Chrome-plated aluminum



Stainless steel satin

Floors



Nature Black Vinyl



Concrete Dark Grey Vinyl



Concrete Chalk Vinyl

Car ceiling and lighting system

- Standard car ceiling in 2 mm thickness steel sheet, powder coated white RAL 9010 (textured paint)
- LED plate lighting, 36W. Colour temperature 6000 °K.
- Dimensions X x Y = 300 x 300 mm (450 kg), 600 x 600 mm (630 kg) and 300 x 1200 mm (1000 kg)
- Emergency lighting for 3h
- Optional fan in car ceiling (automatic switch on-off, with push-button or with key switch in the COP)
- Cabin lighting according EN 81-20/50 (≥ 100 lux at 1 m height)

Panels and columns

- Wall panels / columns with PVC precoated finish (140 gr/m² coating thickness both sides), applied to a 1.5 / 2.0 mm steel sheet width
- Low flammable, fire protection class B-s1 d0, in compliance with EN 13501-1
- Optional walls panels / columns in 1.5 / 2.0 mm width in stainless steel Gr.220D (ferritic, type 441) and stainless steel Linen (austenitic, type 304) finish

Mirror

- Standard tempered 4 mm silver glass mirror, with rounded corners and polished edges
Weight = 10,1 kg/m²
- Dimensions (mm) SE and DE: X x Y = 480 / 630 x 900 mm for 450 / 630-1000 kg rated load
- Safety glass class 1(C)3, according to EN 12600 (glass in buildings)
- Placed over 300 mm from floor in accordance with EN 81-70
- Surface mounted with four small metal grips
- Standard location on the rear panel for single entrance and on the opposite COP wall for double entrance

Handrail

- Oval tube $\varnothing 45 \times 30$ mm in chrome-plated aluminum with straight and curved ending, according to handrail configuration and elevator layout
- Optional round satin stainless steel (ferritic, type 441) tubes $\varnothing 38$ mm with curved ending
- Standard on the COP opposite wall. Available 0, 1, 3 side walls
- Telescopic adjustment for easy installation
- Compliant to EN 81-70

Skirting

- Anodized aluminum profile, 16 x 90 mm width x height
- On side and rear walls, on top and bottom car

Flooring material

- Homogeneous acoustic vinyl, 2 - 3 mm width, with easy clean treatment and high resistance properties
- Reaction to fire Cfl-s1
- Slip resistance > 0.3 , EN 13893
- Optional, 20 mm (+/- 1 mm) recess for locally supplied flooring

Car operating panels.

Car Operating Panel (COP)

Silver Moon standard COP.

- Surface mounted vertical car operating panel, with front plate in stainless steel Gr.220D (ferritic, type 441)
- Optional front plate in white tempered safety glass 5 mm thickness, RAL 9003, with digital printing vitrified and round edges
- Black painted RAL 9004 steel rear case
- Dimensions: H x W x D = 1000 x 210 x 33 / 30 mm (glass / steel)
- Hinged opening for easy maintenance
- TFT 3.5" display with positioning and direction scroll indicator, white lettering on black background
- Display visible dimensions: H x W = 53 x 70 mm; letter size 30 mm + direction arrow
- Display resolution 320 x 240 (3.5")
- Overload indicator
- Optional voice synthesizer
- Standard Dot Button design line in stainless steel Gr.220D (ferritic, type 441) face plate
- Buttons for emergency call, door open and door close
- Max. number of buttons is 18
- Standard execution with emergency call audio. Optional intercom
- Prepared for third party communication devices (e.g. MSM15, 2N Lift1, Teleservice, Amphitec, etc.)
- Optional ECC-Encoded car calls, restricts car call with an access code, numeric keypad in COP



White Moon COP



Silver Moon COP

Push-buttons

- Standard Dot Button design line
- Compact round push-button, Ø44 mm touch area
- 15 mm tactile white characters / symbols and Braille lettering
- Silver stainless steel Gr.220D (ferritic, type 441) front plate with translucent polycarbonate mold
- Round white confirmation call LED light
- Text font: tk Type Regular
- Buttons range includes key switches, alarm, open / close doors, fan, etc.
- Compliant with standards EN 81-70



DB-01,
push-button

Landing fixtures.

F design line.

Landing Operating Panel (LOP)

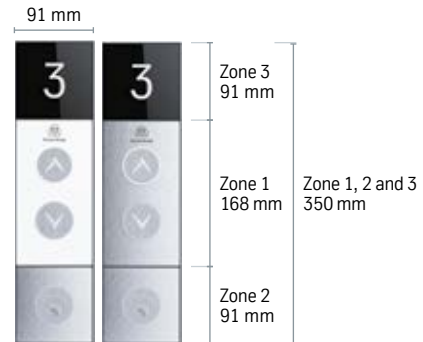
- Surface mounted landing operating panel
- Installation on the door frame or wall mounted
- Standard black aluminium rear case
- Standard Dot Button design line, with white call light confirmation
- Configurable concept allows a customize design:
 - Zone 1: Push-buttons / key switches zone
 - Standard front plate in stainless steel Gr.220D (ferritic, type 441). Optional in white safety glass 5 mm, RAL 9003
 - Standard push-button front finish in silver stainless steel Gr.220D (ferritic, type 441)
- Available in two configurations, for one or two push-buttons
- Optional key-operated switch with and without return (consult configuration options)
- Zone 2: Functional key switch zone (optional)
- Key switch for special functions (Access Control, Out of Service, etc.)
- Standard front plate in stainless steel Gr.220D (ferritic, type 441)
- Zone 3: Display zone (optional)
- TFT 3.5" display module with floor and functions information
- Text font: tk Type Regular

Landing Direction Indicator (LID)

- Surface mounted landing direction indicator
- Wall mounted installation. To be placed at 1.80 m to fulfill EN 81-70
- TFT 3.5" display with arrow indicator (40 mm height)
- Dimensions: H x W x D = 101 x 91 x 21 mm
- White arrow centered on a black background display
- Front plate in white safety glass 5 mm, RAL 9003
- Standard black aluminium rear case
- Audible gong optional, LID 51

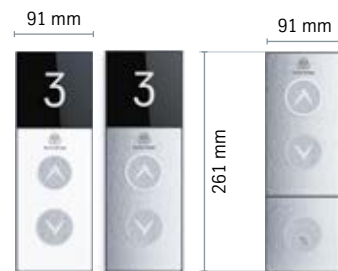
Landing Position Indicator (LIP)

- Surface mounted landing position and car direction indicator
- Horizontal installation on the wall
- Composed of two arrow displays and a floor display in between
- TFT 3.5" displays with floor information and arrow direction indication
- Total dimensions H x W x D= 91 x 261 x 21 mm
- White lettering (35 mm) and arrows (40 mm) on a black background
- Text font: tk Type Regular
- Front plate in black safety glass 5 mm, RAL 9005
- Standard black aluminium rear case
- Lettering compliant to EN 81-70



LOP 50

TFT 3.5" display
2 Push-buttons, silver steel plate
White glass / Stainless steel LOP plate
1 Key switch, Stainless steel plate

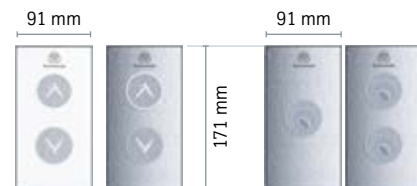


LOP 53

TFT 3.5" display
2 Push-buttons, silver steel plate
White glass / Stainless steel LOP plate

LOP 52

2 Push-buttons, silver steel plate
White glass / Stainless steel LOP plate
1 Key switch, Stainless steel plate



LOP 51

2 Push-buttons, silver steel plate
White glass / Stainless steel LOP plate

LOP 51

1/2 Key switch
Stainless steel LOP plate

LID 50-51



LIP 50



Options.

Technical data

synergy 100

System

Machine room-less / Machine room	• / ◦
Load 450 / 630 / 1000 kg	•
Single entrance / Double entrance (180°)	• / ◦
Speed 1,0 m/s	•
Travel height max. 45	•
Number of stops max. 12	•
Single lift / 2 group	• / ◦
Overhead min., CH + 1200 mm	•
Reduced overhead, CH + 500 mm	◦
Pit min. 1000 mm	•
Reduced pit 550 mm	◦

Cabin

Self-supporting cabin 1 m/s	•
Fixed cabin dimensions	•
Car width range 1100 - 1200 mm	◦
Car depth range 1400 - 2100 mm	◦
Car height 2200 mm	•

- As standard
- Optional

Technical data

Landing door

Door types	
Two-panel sliding door LD10, side opening	•
Two-panel sliding door LD10, side opening with full front	◦
Two-panel sliding door LD10, central opening	◦
Door width DW = 800 / 900 mm	• / ◦
Door height DH = 2000 / 2100 mm	• / ◦
Installation in shaft	•
Installation in recess	◦
Installation in the landing with full front door (only for door type L2)	◦
Fire resistance* classes: E-120	•
Fire resistance* classes: EI-60, E-30 Russia	◦
Finish for doors panels and door frame and / or front wall	
Primed coating RAL 7032, for painting at jobsite	•
Stainless steel Gr.220D (ferritic, type 441)	◦
Stainless steel Linen (austenitic, type 304)	◦
Aluminium door sill	•
Aluminium profile between the door architraves	◦

Cabin door

Door types	
Two-panel sliding door CD10, side opening	•
Two-panel sliding door CD10, central opening	◦
Door width DW = 800 / 900 mm	• / ◦
Door height DH = 2000 / 2100 mm	• / ◦
Door protection	
Light curtain (mandatory EN 81-20/50)	•
Finish for the doors panels	
Stainless steel Gr.220D (ferritic, type 441)	•
Stainless steel Linen (austenitic, type 304)	◦
Aluminium door sill	•
Mechanical car door lock (mandatory EN 81-20/50)	•
Correct operation of door circuits up to 2.000 m height above sea level	•

Car Operating Panel (COP)

White Moon COP: vertical white glass front plate	◦
Silver Moon COP: vertical stainless steel Gr.220D (ferritic, type 441) front plate	•
Dot Button design Line, with white acknowledgment and Braille lettering	•
3.5" TFT display with position and direction indicator, white lettering on black background, overload indicator	•
Button for emergency call	•
Buttons for door open and door close (deselectable)	•
Main floor green round frame EN 81-70	•
Key switches in the control panel (Access / Functions)	◦
Speaker + Micro / Speaker + Micro + Emergency call system CC15	• / ◦
ECC Function - Encoded Car Calls	◦
Verbal announcement (voice synthesizer)	◦
Inductive loop (Micome)	c.e.
Inductive loop for 2N Lift1 emergency call system	◦

- Standard features
- Optional
- Not available
- c.e. Contract engineer

*When control cabinet is placed next to landing door, please ensure that it's assembled on wall or on full-front door to grant the door fire resistance class. Please consult your thyssenkrupp Elevator sales representative for the available options.

Landing fixtures	
LOP 50, Landing Operating Panel	
Mounted on the landing door frame ⁽¹⁾ / on the wall	● / ○
Zone 1: Upwards / downwards call buttons / key switch special accesses	●
Zone 2: Functions key switches module	○
Zone 3: 3.5" TFT display module. Available for position indication or for position and functions indication	○ / ○
Front finish (Zone 1): Stainless steel Gr.220D (ferritic, type 441) or White tempered glass	● / ○
Front finish (Zone 2): Stainless steel Gr.220D (ferritic, type 441)	●
Front finish (Zone 3): Black tempered glass with lettering on black background	●
LIP 50, Landing Position Indicator	
TFT display module 3 x 3.5" with direction and position indication	○
Mounted on the wall / on the door lintel ⁽¹⁾	● / ○
Front finish: Black tempered glass with lettering on black background	●
Audible "gong"	○
Placement in none floor / main floor / all floors	○ / ○ / ○
LID 50-51, Landing Direction Indicator	
3.5" TFT display module with arrow indication	●
Mounted on the wall / on the door jamb ⁽¹⁾	● / ○
LID 50, without gong / LID 51, with gong	● / ○
Front finish: White tempered glass with white arrow on black background	●
Placement in all floors (except main floor if LIP_50 included) / none floor	○ / ○

Control functions

Control box of the control system (H x W x D = 2305* x 280 x 150 mm)	
Primed coating RAL 7042 / 7032, for painting at jobsite	●
Stainless steel Gr.220D (ferritic, type 441)	○
In top landing / in other freely definable landing ⁽¹⁾	● / ○
Offset position (cable length up to 40 m)	○
Controller operation	
Down collective	●
Full collective control, upwards / downwards	○
Duplex control system (group with 2 elevators)	○
Dual entrance on the same level / offset dual entrance	○
Uneven in duplex (group with different number of stops)	○
Parking level in main landing (fixed)	○
Dual button collective control (direction-sensitive)	○
Fire emergency control	
1 fire landing (stat.), voltage-free contact for customer-fitted fire detectors	○
Fire evacuation (signal by others)	○
EN 81-73 Controller (up to 4 evacuations floors) (fire detectors by customer)	○
Firemen service operation (not in accordance with EN 81-72) ⁽²⁾ (requires independent LOP)	○
French firemen	○
Emergency evacuation	
Automatic in next landing in the case of power failure (load-dependent)	●
In any landing with UPS (uninterrupted power supply)	○
By means of customer-fitted emergency power supply	○
Emergency lighting in the elevator cabin (3h)	●
Emergency call system	
EAR: CC15 GSM / CC15 RTC Analogic	● / ●
Autodialer 2N Lift1 RTC / GSM	○ / ○
Teleservice Gen. 7 including modem (preassigned) ⁽³⁾ / Teleservice Gen. 7 including modem and elevator attendant function	○ / ○
Others: SafeLine, Easy Alarm, Amphitec, etc.	○
Two-way intercom (elevator car - control cabinet)	○
Three-way intercom (elevator car - control cabinet - third point eg. lobby)	○

- As standard
- Optional

Special access control	
Dual function in the landing for access control (Disabling and enabling external calls)	c.e.
Cancellation of car calls by means of double-click in the control panel	o
Key switch in the COP for special functions (VIP, Preference Service, Out of Service, Firemen, Maintenance, Fan, Car calls inhibition, etc.)	o
Encoded car calls-ECC, numeric keypad in the COP	o
Preference / Independent Service - COP	o
Out of service - LOP	o
Penthouse control	o
Prepared for card reader	o
Efficiency	
Automatic switch off of cabin light to reduce energy consumption	•
Sleep mode (automatic shutdown of control system, frequency inverter, indicator elements)	o
Others	
Fan in car ceiling: automatic activation and deactivation and run-on / activation with button in the elevator car / activation with key switch in the elevator car	o / o / o
Overload indicator in the elevator car	•
Collective fault signal	•
Voltage-free contact for collective fault signal ⁽⁴⁾	
Preparation for BMS, Building Management System (Move, Stop, Breakdown)	o
Extended BMS (Move, Stop, Breakdown, Going up, Going down, Inspection, Out of Order and Fire Service)	o
Supply main switch RCD (Residual Current Device) Type B	•
Safety gear in counterweight	o
Water pit sensor	o
Halogen-free shaft wiring ⁽⁵⁾	o
CCTV and category 6 wiring	o
Regulations and miscellaneous	
Barrier-free version in accordance with EN 81-70	
Verbal announcement in elevator car, direction indicator elements at all landings, button to close and reopen the door, acoustic signal, emergency call system	o
EN 81-77 (Seismic conditions)	
Category 0: Design acceleration (m/s ²): $ad < 1$. EN 81-20 requirements are adequate and therefore no further actions are required	•
Category 1: Design acceleration (m/s ²): $1 \leq ad < 2.5$. Minimum corrective actions are required	o
Category 2: Design acceleration (m/s ²): $2.5 \leq ad < 4$. Medium corrective actions are required	o
Category 3: Design acceleration (m/s ²): $ad \geq 4$. Substantial corrective actions are required	o
Compliance EN 81-20/50	•

- As standard
 - o Optional
 - Not available
- c.e. Contract engineering

Note: In case that control cabinet is positioned next to the shaft door, the height of the control cabinet is related to the door height $DH + 305$ mm. If the control cabinet is installed with offset position, the height is always 2307 mm.

⁽¹⁾In case of installation on landing, the control cabinet will be always integrated in the front wall of the elevator shaft.

⁽²⁾After activation via key switch, all internal and external calls are deleted. Elevator car moves to fire landing (change the travelling direction might be necessary). Only commands from elevator car are accepted.

⁽³⁾Preassigned for Germany and included in the standard.

⁽⁴⁾This option is realized via the option "Voltage free contact for Building Management System BMS".

⁽⁵⁾All cables / wirings with exception of motor cable as well as the travelling cable are halogen-free.

Please consult your thyssenkrupp Elevator sales representative for the available options.

Elevator Technology

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