

## SYNERGY 200: STYLISH AND FLEXIBLE



# STYLISH AND FLEXIBLE FOR RESIDENTIAL BUILDINGS

synergy 200 is the ideal solution for low- and mid-traffic residential buildings with demanding design and exceptional flexibility requirements.

With its timeless elegance and outstanding efficiency, synergy 200 meets the highest demands in terms of comfort, flexibility and design for residential buildings. Featuring the latest technology, high-quality materials and an impressive design, synergy 200 offers enhanced comfort for passengers and adds value to residential buildings.

Choose synergy 200 and trust in TK Elevator's expertise. Our excellent service ensures maximum availability and optimum functionality for longer, resulting in increased user satisfaction. Thanks to its flexible cabin sizes, this elevator is the perfect choice for modernisation projects that require full replacement.

 →→
 made in europe

 ★
 At our elevator manufacturing

 ★
 Centers in Germany and Spain.

OVERVIEW SYNERGY 200						
Elevator type	Machine room-less, optional machine room					
Passengers	4 to 13 passengers					
Load	320 / 450 / 630 / 825 / 1,000 kg					
Speed	1.0 / 1.6 / 1.75 m/s					
Travel height	Up to 75 m					
Number of stops	Up to 20 stops					
Cabin	41 predesigned cabins / custom-fit solutions					
Door types	Side-opening with 2 or 3 panels, central-opening with 2 or 4 panels					
Door opening width	From 700 mm to 1,100 mm					
Door height	Up to 2,300 mm					

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# The synergy family at a glance

### synergy 100: Pure and efficient

The ideal solution for low-traffic functional residential buildings.

## synergy 200: Stylish and flexible

Ideal elevator for low- to midtraffic residential buildings with demanding design and flexibility requirements. Also perfect for modernising existing buildings.

## synergy 300: Versatile and smart

Designed for low-duty and low- to mid-traffic commercial and office buildings.

## Space flexibility, efficiency and stylish design in one elevator

If you are planning a new residential building in the comfort or premium segment, your customers will be expecting a reliable elevator solution with exceptional flexibility and quality. With its adjustable dimensions and a wide range of options, synergy 200 adjusts to your needs and fits seamlessly into your building.

## → the space efficiency and flexibility

Whether you choose standard dimensions for overhead and pit or a version with reduced dimensions – synergy 200 is best-in-class. In addition to the available standard cabin dimensions, you can match the cabin size to the shaft in 10 mm-steps.

<sup>م</sup> رابه

## Sophisticated design

Select one of 41 predesigned cabin interiors that are available in the D and E design lines or tailor the cabin design to your needs with our customfit solutions. High-quality laminates or glass walls add a personal touch to your cabin.

## Energy efficiency

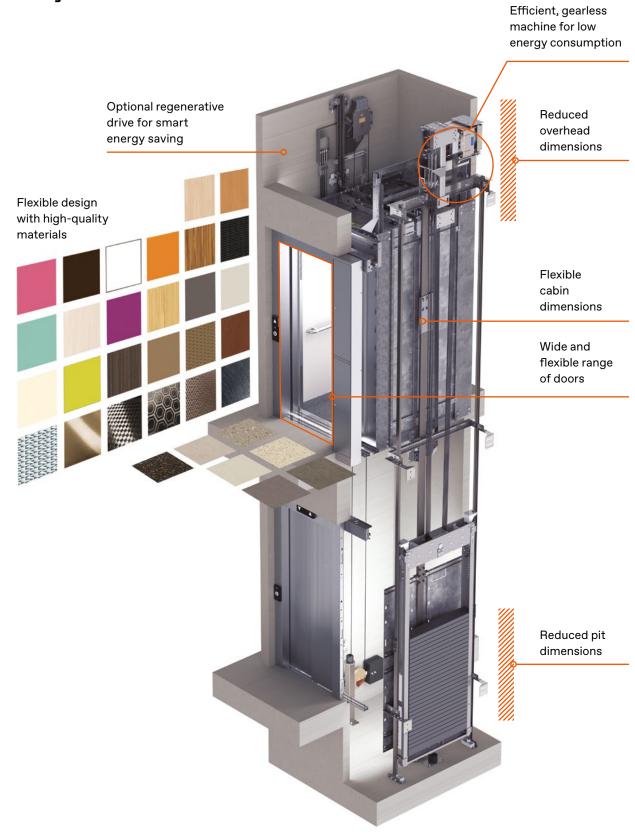
synergy 200 offers several standard features that keep energy costs in the green range, such as LED lighting, automatic stand-by operation and its efficient, gearless machine. synergy has been given a Class A rating for energy efficiency.

## ا <u>گ</u>

# Best-in-class installation and service

Efficient installation thanks to optimised manufacturing processes, a modular product concept and experienced installation teams. Professional, friendly and rapid service with regional service branches and personal contacts.

## One elevator. Many benefits.



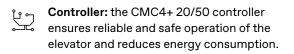
# PERFORMANCE EFFICIENCY COMFORT SAFETY & REGULATIONS DESIGN



Proven performance complements and enhances your building.



**Gearless machine designed in Germany:** high performance and quality ensure smooth operation and a long and reliable working life.





**Variable door sizes:** synergy 200 offers a wide range of door and opening sizes, adapted to the building configuration and performance requirements.



**High performance based on TKE experience:** synergy 200 is engineered and tested by TK Elevator. Proven components guarantee reliable performance and longevity of your elevator.

# Energy efficiency

#### Efficient, throughout the entire product life cycle.

Sustainability is part of our corporate strategy. It involves the holistic improvement of our products and processes to help you reduce the environmental footprint of your buildings and qualify for LEED<sup>®</sup> and BREEAM<sup>®</sup> certification by incorporating green features in our elevators.

#### synergy



Based on a 630 kg elevator at 1 m/s with 12 m travel height and usage category 1

Measurements taken on a standard synergy configuration with sleep mode achieve the highest energy-efficiency rating Class A according to ISO 25745-2. The low energy consumption reduces the  $CO_2$  footprint of the elevator during operation and consequently its share of the overall energy consumption of a building. This has also been proven by synergy's life cycle assessment.



 Materials production (%)
 Operation (%)
 Others (%)

**Product life cycle assessment** (LCA): carried out via continuous improvements focused on the materials used, manufacturing and production processes, and operation. In this way, we minimise the environmental impact of our products.

Based on the carbon footprint of an ISO 14044 compliant LCA of a 630 kg elevator at 1 m/s with 5 stops, 25 years lifetime and sleep mode option with usage category 2 according to ISO 25745-2.



(<sub>\p</sub>)

Low energy consumption thanks to the highly efficient gearless machine with no contaminant lubricants.

#### Standby mode:

cabin lighting comes with automatic switch-off as standard.

#### Sleep mode (optional):

The electronic components are turned off when the elevator is in sleep mode and are instantly activated when the elevator is called.



LED lighting is standard for all lighting devices in shaft, cabin (ceilings, push- buttons, etc.) and landings. LED lighting can last 10 times longer and is up to 80% more energy efficient than halogen lighting.

**Regenerative drive:** the optional regenerative drive is a smart system that generates electricity when the cabin has a full load going down and is empty going up. The power generated in both situations is then captured and fed into the grid.

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# Comfort

When an elevator ride becomes an experience.



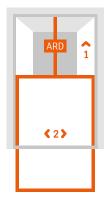
- High-quality materials and extraordinary design: synergy 200 is a pleasure for all the senses.
- Silent and low-vibration: thanks to high-quality materials and sound insulation, synergy 200 operates silently and very smoothly.
- Landing accuracy: the controller guarantees accurate levelling. Landing accuracy of +/- 3 mm ensures safe and comfortable access for passengers.
- Accessibility: synergy 200's standard features cover most of the accessibility requirements of the new EN 81-70:2018 European standard. These include cabin and door dimensions, a large safety mirror, luminance contrast in fixtures, large pushbuttons with Braille lettering, as well as voice announcements and adjustable sound level.

# Safety & regulations

Safety that meets the highest standards.

- EN BI-20150 Elevators are the safest means of transport: all safety elements are manufactured to meet all relevant industry standards and regulations, including our company's own strict internal Safety, Health and Environment standards, as well as meeting ISO 9001 and 14001.
  - Highest standards: we design and test to the highest standards and manufacture our own safety components.
- Stay connected 24/7: whenever you need it, the communication system is there for you, keeping you connected with our 24hr call center.

**Emergency evacuation (standard):** in the event of power failure, the Automatic Rescue Device (ARD) will safely take you to the next floor (load dependent) <1> and open the doors to allow passengers to exit the cabin <2>.





Endless possibilities.



# Design lines for synergy 200

The collection of predesigned cabins of the E and D design lines have been created by expert designers to achieve a wide spectrum of atmospheres. synergy 200 combines genuine style with quality materials, such as stainless steel, laminate or glass. This adds to the premium feel while ensuring long-lasting good looks.

### Design line E

Characterised by fresh and natural colour combinations, the E design line offers a great choice of predesigned cabins in stainless steel or high-quality laminates and melamines.



E32

## Design line D

Geared to high-end residential buildings, the D design line's range of predesigned cabins offers great versatility. They represent a qualitative step up in materials and interior finishes, using either patterned stainless steel, exclusive laminates or decorative glass.



D32

Discover more variants of the E design line in the cabin designer tool.

Discover more variants of the D design line in the cabin designer tool.



d-design-synergy.tkelevator.com

# Highest flexibility: Custom-fit solutions

If you are looking for something truly distinctive, exclusive or unique, you can tailor the elevator design to your precise requirements.



#### **Custom selection**

You can individually select all materials within your chosen design line for the rear wall, COP wall or opposite COP wall. In addition, you can choose a ceiling, floor and skirting, handrails and COP.



### **Custom cabin**

With this option, you get a cabin equipped only with a ceiling and a COP from your chosen design line. You are then free to choose your own floor, if you wish, and can also equip the cabin with your own wall finish and skirting.



### **Custom printed glass**

Customise the walls of your elevator with glass walls in the colour of your choice or with an image that is digitally printed onto the glass wall.

If you have any questions regarding the cabin design, original samples or individual design, please contact your TKE sales representative.

To discover the full design collection, please see the dedicated Design Book on our website.



# Panels, buttons, handrails, and more for synergy 200

Alto full height

#### Car Operating Panels (COP)



synergy 200 offers elegant vertical car operating panels with robust stainless steel or tempered glass surface and 7" TFT display. Optionally, a second vertical or horizontal COP and vandal-resistant versions of Edge and Edge high are also available.

#### Landing Direction Indicator Panels (LDIP) & Landing Indicator Panels (LIP)





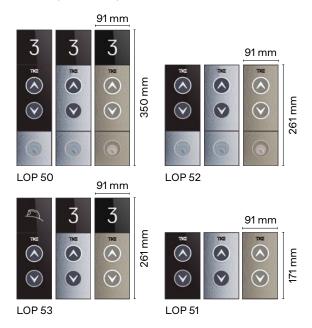
LDIP 50: 91 × 101 × 21 mm

LIP 50: 261 × 91 × 21 mm

Achieve a modern and neutral look with a black glass face place.

Note: For synergy 200, various vandal-resistant fixtures are available. Please see our dedicated Design Book for more options.

Landing Operating Panels (LOP)



The modular concept of the landing operator panels allows a customised configuration. They feature stainless steel buttons, and optionally a TFT 3.5" display as well as a key switch zone. Front plate available in stainless steel or black glass.

#### **Push-buttons**

DB

steel

push-button Stainless

Satin Silver



DB

steel

push-button Stainless

Satin Black





steel

Satin

Champagne

- DB push-button Stainless
- VB

push-button . Stainless steel Satin Black

Standard DB button series with stainless steel faceplate and Braille lettering and round white confirmation lighting. Vandal-resistant VB button series with black stainless steel faceplate. Both series conform with the new EN 81-70 regulation.



#### Panels

Choose among melamines, laminates and stainless steel in the E design line and decorative glass, laminate or steel in the D design line in our predesigned cabins.

#### Ceilings

Select from a wide range of lighting styles and different colours with direct or indirect lighting to create the desired atmosphere in your cabin. In addition, vandalresistant ceilings are available in both design lines.



LED lighting plate (standard)



Tiffany

Handrails



Lightbox



Steel Grille, vandal-resistant

#### Floors



Concrete Light Grey Vinyl Concrete Dark Grey Vinyl

Choose from a wide range of hard-wearing vinyls or

a custom flooring (e.g. marble) for a more exclusive

design. You have the option to supply your own



Stainless steel Satin Silver, straight fixing



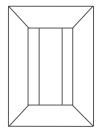
Stainless steel Satin Black, sloped fixing

Robust stainless steel handrails to place on rear or side walls. Straight fitting for E design line and sloped fitting for D design line.

#### Mirrors

Choose the partial-width and partial-height silver safety mirror for the E design line or the fullwidth and full-height silver or smoked safety mirror for the D design line. The cabin is also available with full-width and midheight safety mirror or without a mirror in both E and D design lines.

flooring (recess  $\leq 25$  mm).

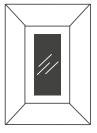


Without mirror





Full-width, full-height



Partial-width and partial-height

Colours, options and specifications are subject to change. All cabin decor options illustrated in this brochure are for illustrative purposes only. The samples shown may vary from the original in colour and material. Patterned samples not to scale. Consult your TK Elevator sales representative about our cabin designer tool and samples.

#### SELECTED FEATURES AND OPTIONS

#### Comfort

Accessibility						
Door open/close and alarm push-button						
Big push-buttons with Braille lettering	•					
Round green frame in main floor push-button	•					
Adjustable sound level (35-65 dBA)	•					
Luminance contrast in fixtures	•					
Induction loop for hearing-impaired passengers						
XL horizontal COP with XL push-buttons						
Access control						
Cancellation calls by double click in COP						
Key and Eurokey switch in COP/LOP for access/ functions						
Encoded car calls (ECC)						
Preference / Independent service of COP						
Out of service LOP	o					
Penthouse control						
VIP function						
Prepared for card reader LOP/COP						
Others						
Car ventilation fan						
CCTV multimedia travelling cable						
Performance						

Performance						
Parking level in main landing floor	•					
Group control system (up to 4 elevators)						
Building management system (BMS)						
Extended Building Management System (BMS)						
Pre-opening of doors						
Layout						
Flexible car dimension in 10 mm-steps						
Flexible door dimension in 50 mm-steps						
Reduced overhead						
Reduced and extra-reduced pit						
Machine room						
Efficiency						
Energy-saving cabin and shaft LED lighting						
Cabin lighting stand-by						
Sleep mode						

# Safety & regulationsLight curtain protectionEmergency lighting in cabin 3 hAutomatic evacuation to next landingAutomatic evacuation to any landing

Two-/three-way intercom	
Safety gear on counterweight	
Water pit sensor	
Escape hatch	
Halogen-free shaft wiring (except for the motor and travelling cable)	•
Doors fire rating E120	•
Doors fire rating EI60 / EI120 / EW60 (EN81-58)	
EN 81-20/50, Lifts construction and components testing	•
EN 81-28, Emergency call system	
EN 81-70, Accessibility to lifts	
EN 81-71, Vandal-resistant (components), partially Category 1	
EN 81-73, Fire evacuation	
EN 81-77, Seismic, Category 0 / 1, 2, 3	■/□

#### Design

Design	
Predesigned cabins	•
Glass walls finish	
Custom-fit cabin designs: wall finish selection / glass printing / raw cabin	
Vandal-resistant false ceiling	
Preparation for customer-supplied flooring $\leq 25$ m	
Stainless steel COP/LOP	•
Glass faceplate for COP/LOP	
Vandal-resistant COP / LOP	
Double vertical / horizontal COP	
Vandal-resistant push-buttons	
TFT 7" display in COP	•
Courtesy LED backlighting in COP / ceiling	
TFT 3.5" display in LOP, functions / direction	
LOP, LIP and LDIP surface-mounted on door frame or wall	
Selectable controller cabinet position	
Landing doors in primed coating RAL 7032, for painting at jobsite	
Landing doors in ferritic stainless steel Gr.220D (AISI 441)	
Landing doors in stainless steel Linen, Champagne	
Cabin doors in ferritic stainless steel Gr.220D (AISI 441)	•
Cabin doors in stainless steel Linen, Champagne	
Framed glass doors	

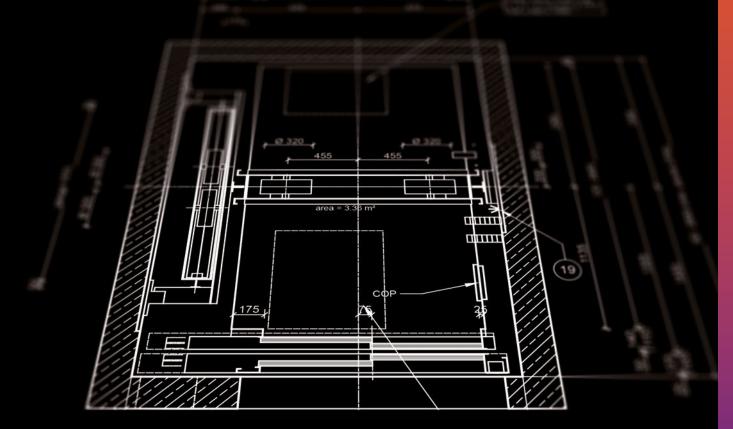
Optional product feature
 Standard product feature

To discover the other options available for synergy 200, please contact your local TK Elevator sales representative. The details quoted in this sheet can only be viewed as binding when confirmed expressly in writing.

Regenerative drive

# SUCCESS BEGINS WITH A GREAT PLAN

- We support you from the first idea through to completed installation.
- Our highly experienced commercial team will advise you on the best mobility solutions to meet your requirements.
- Easy delivery and skilled installation.



#### synergy 200 in-planner tool

Make the most of your building space and find the optimal dimensions for your new synergy 200 cabin. All you need is either the shaft or cabin measurements. For new installations, you can simply find the smallest possible shaft dimensions for a specific cabin size. For modernisation projects, you can easily optimise the cabin size to fit a particular shaft.



plan-synergy200. tkelevator.com

# Technical product scope

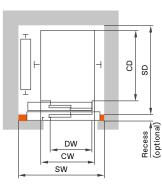
### **Door options**

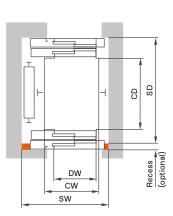
## Shaft planning layout

#### Shaft layout with side-opening door L2

Single entrance

Double entrance

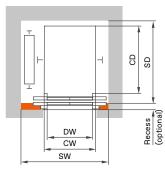


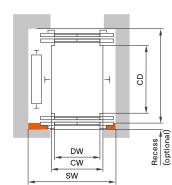


#### Shaft layout with central-opening door C2

Single entrance

Double entrance

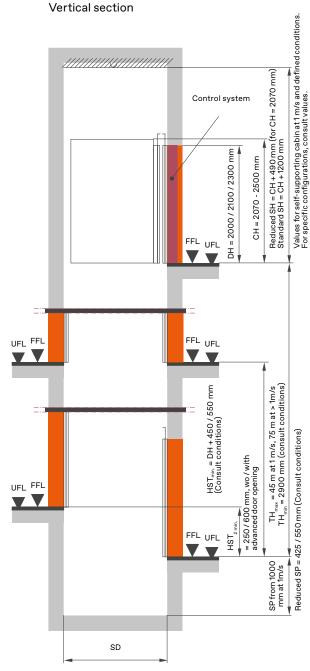




Key:

CW: car width	DW: door
CD: car depth	DH: door
CH: car height	FFL: finish
SW: shaft width	UFL: unfini
SD: shaft depth	TH: travel
SH: shaft head	HST: min. h
SP: shaft pit	

- V: door width I: door height L: finished floor level L: unfinished floor level I: travel height
- HST: min. height between floors





The values shown correspond to a generic installation. Please contact your TK Elevator sales representative for guaranteed shaft dimensions for specific projects, especially for reduced shaft head and/or pit. During the planning phase, all applicable regulations stipulated by relevant notified bodies and all applicable national regulations should also be considered.

SYS	ΓEΝ	Л		CABIN	J	DO	OR			SHAF	т						
Rated load (kg)	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	Shaft depth (mm) - Full front	Shaft depth (mm) - Door partially in shaft	Shaft depth (mm) - Door in shaft	Shaft pit (mm)	Shaft head (mm)
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320 4 -	4	1.0	45	850 x 1000	2070- 2500 2200	S D	L2 L2	700-800 700 700	2000	1350 1350	-	1300 1430	-	1370 1580	1425 1680	1100 1100	3485 3485
	1.0	45	900 x 1000	2070- 2500 2200 2070-	S D	L2 L2	700-800 800 800 700-	2000- 2300 2000 2000 2000-	1445 1445	-	1300 1430	-	1370 1580	1425 1680	1100 1100	3485 3485	
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		1.6 1.75	75 75			S S	L2 L2	1000 1000	2000 2000	2100 2100	-	1700 1700	-	1770 1770	1825 1825	1350 1460	3615 3745

Key: S: Single entrance, D: Double entrance, L2: Side-opening door with 2 panels, C2: Central-opening door with 2 panels Note: Optional reduced SP = 425/550 mm and reduced SH = CH+490 mm, for CH=2070 mm and self supporting cabin at 1 m/s. Consult shaft dimensions for 1.6 and 1.75 m/s speed. Shaft dimensions considering a general shaft tolerance of +/- 25 mm on each side.



## Your service partner: always there

Your elevator is in good hands. With one of the leading providers of urban mobility.

On par with our innovative elevators and escalators engineered and manufactured in Europe, the provision of high-quality maintenance and repairs is a core priority at TK Elevator. Our service concept is built on the basis of ensuring maximum passenger comfort, convenience and safety at all times while protecting the long-term value of your investment – and it extends beyond our own products.

Regardless of make and model, we can cover all your maintenance and service requirements, which is an invaluable advantage for TKE customers.

## Key features of our service offering

- Rapid 24/7 service through our 1,000+ regional branches
- Service packages for all major products or models on the market
- Expert service technicians backed by a global network of service centers, providing them with real-time support on third-party products and models
- Customised, state-of-the-art diagnostic tools to interface with other manufacturers' control systems
- Compliance with all applicable laws and regulations
- Large stock of spare parts for all major lift brands on demand, and efficient logistics capable of swift delivery

# MAX – the game changer that keeps people moving

Introducing MAX: the elevator industry's first real-time, cloud-based predictive maintenance solution. Our smart, machine learning Internet of Things (IoT) solution dramatically increases elevator availability by reducing out-of-service situations through real-time diagnostics.



Precise

diagnostics

Data gathering

Predictive

MAX is only available in selected markets. Consult your TK Elevator sales representative for further information.

# YOUR INNOVATION PARTNER



countries of customers

1,200,000 100+

employees



service available for customers

locations

24/7 1,000+

service technicians

24,000+



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