GiantKONE

GPN65

Passenger Elevator (MRL)
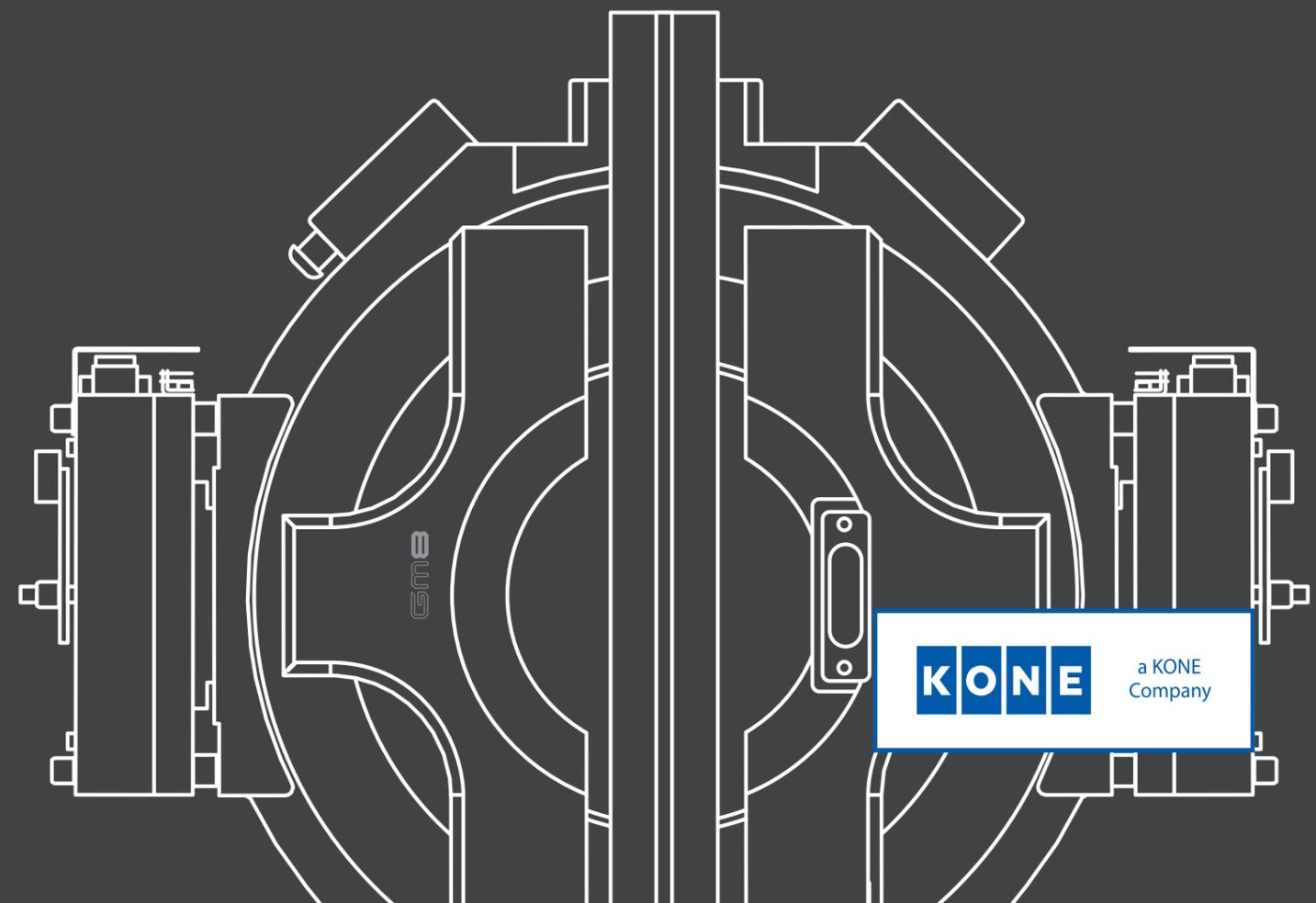
GiantKONE Elevator Co., Ltd.

KONE a KONE Company

CENTENNIAL KONE AND GLORY

Founded in 1910 in Helsinki, Finland, KONE Group pioneered the application of machine-room-less technology and has developed into a global leader in the elevator and escalator industry, operating in over 60 countries worldwide.

GiantKONE Elevator Co., Ltd. was established in China in 2005 as a subsidiary of KONE Group. Since its inception, it has been dedicated provide high-quality urban passenger transportation solutions. From a comprehensive product portfolio to advanced R&D, manufacturing, installation, and maintenance technologies, as well as diverse visual design options, GiantKONE delivers new experiences for its customers.

1910
KONE Group was Founded in 1910 in Helsinki, Finland.

2005
GiantKONE established in China in 2005 as a subsidiary of KONE Group.

3,000+
Staff.

50,000
Maximum annual production capacity.

GPN65(MRL) Specifications

Speed (m/s)	Load capacity (kg)	Maximum number of stops	Maximum travel distance (m)	Maximum number of group control units
1.0	400/630/800/1000/1050/1150/1250/1350/1600	18	55	4
1.6	630/800/1000/1050/1150/1250/1350/1600	28	80	4
1.75	630/800/1000/1050/1150/1250/1350/1600	28	80	4

Note: GPN65 is available for scenic elevator and bed elevator. For more information, please contact sales team.

In 1996, KONE invented the disc-type motor and introduced the world's first machine-room-less (MRL) elevator, pioneering the industry with this groundbreaking technology. GiantKONE has inherited KONE's expertise and developed the GPN65.

Equipped with a full range of disc-type motors codeveloped with KONE, the GPN65 features an ultra-thin structure that provides architects with greater design flexibility. Its modern appearance is distinctive and visually appealing , while the inherited professional scaffold-free installation technology from KONE ensures en-hanced safety, reliability, and time efficiency.

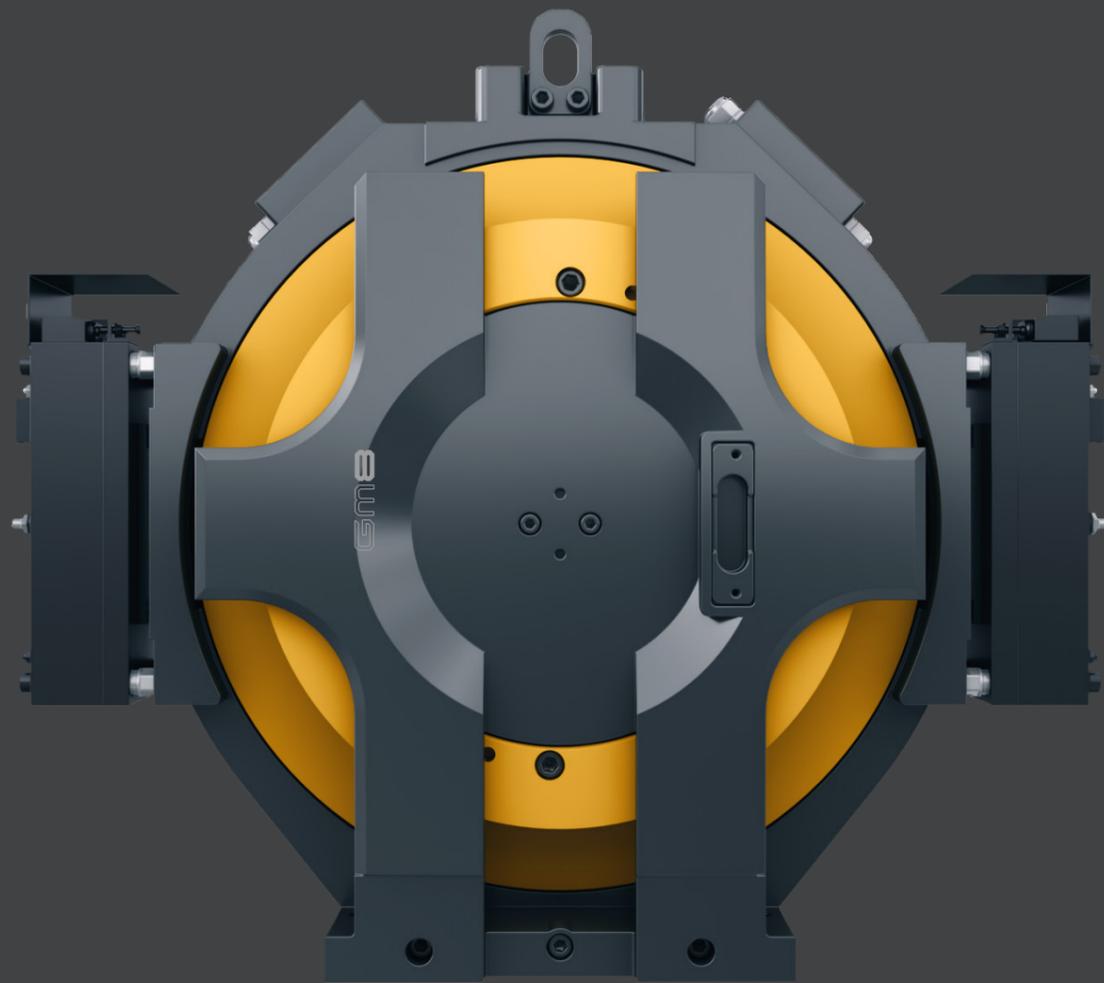## MAXIMIZED ARCHITECTURAL DISIGN FREEDOM

GM
DISC MOTOR

The New Authority In Energy Efficiency

reddot winner 2020

■ Adopting non-contact magnetic ring encoder, stable and reliable performance, easy maintenance.

■ Ultra-thin body design, flat structure facilitates heat dissipation while effectively improving the utilization rate of the shaft.

■ The newly designed embedded wire slot type can significantly reduce the internal resistance of the winding and improve the efficiency of the motor.

■ Brake mute design can effectively reduce the noise of braking system.

■ The floating and fixed motor method filters main engine vibration, ensuring smooth cabin running and passenger comfort.

■ The new outer rotor structure improves load bearing capacity.

* The images are for reference only. The actual product may vary based on model, batch, or customer requirements.

LIMITED SPACE CREATE ENDLESS POSSIBILITIES

Craftsmanship, materials, and structure are artfully presented through points, lines, and surfaces, allowing users to enjoy a quality life in elegance and refinement and experience the true essence of life in simplicity and authenticity.

The serene scenery flows seamlessly through a smooth and comfortable riding experience. GiantKONE elevators feature exquisite interior design. With a variety of personalized styles to meet diverse customer needs, they harmoniously unite reliable internal quality with refined visual aesthetics.

GiantKONE

Safety first

Safety is the top priority for GK products. We never slack in any stage of the process. Intelligent monitoring keeps an eye on the entire elevator process. Tested products make sure every elevator works well.

Comfortable ride

GPN65 is designed and manufactured in accordance with global standards of comfort. It has various patented technologies, including vector conversion technology, car displacement detection with millimeter-level accuracy, a unique double vibration damping function, and a fully digitalized door control system.

Environmental-friendly

GPN65 meets VDI4707-1 and ISO25745-2 Grade A energy efficiency standards, with LED lighting, intelligent fan, permanent magnet synchronization, and gearless trolling technology.

Gearless traction technology adjusts the motor current in real time, saving up to 40% energy compared to traditional geared elevators. It can also be equipped with an advanced energy feedback system to further reduce energy consumption by 20%.

A(mm)

General Damping Tools

A(mm)

GK Damping Tools

Conventional mainframe noise

Disc Motor noise

A
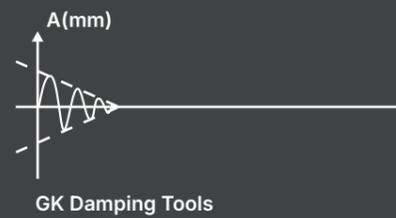
WITH THE ARCHITECTURAL STYLE OF YOUR BUILDING

GiantKONE offers a wide range of customized finishes options to meet the different needs of our customers.

CEILING	G1025055_ST (Stainless steel 304, LED light)
CAR WALL	Hairline stainless steel (304)
FLOOR	51950073 (PVC)
COP	218 (Std.) and 358PLUS (optional, Swing)

Car with COP 218

Car with COP 358 PLUS

| CEILING |

G1025055_ST

Stainless steel, LED light

G1025056_ST

Stainless steel, LED light

G1025036

Stainless steel, LED light

G1025050_ST

Stainless steel, LED light

Note: Option of painted steel sheet available.

| FLOOR |
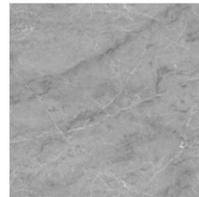
51950073
(PVC)

51950074
(PVC)

51782380
(PVC)

51782381
(PVC)

Note: Option of marble available.

| HANDRAIL |

G32104

G32105

| FIRE BOX |

218

| COP |

| 218 (Std.) |

Segment
(standard)

| COP Display type |

Dot Matrix

Segment

| LOP |

Simplex

Duplex

| LOP Display type |

Dot Matrix

Segment

| Button |

| 358PLUS (Optional, Swing) |

ELECTRICAL FUNCTION CONFIGURATION TABLE

● Standard
○ Optional

SECURITY FUNCTIONS

Rescue and fault monitoring

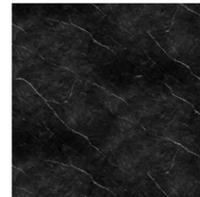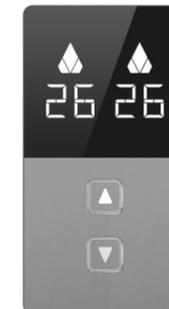| Code	Function	
ASC T	Uplink overspeed protection	●
BFS	Buffer detection	●
BMV R	Resistor braking	●
CCM A	Call in the machine room	●
CDC	Car door detection	●
CDL O	Car door limit	●
CLF M	To control the car lighting in the machine room	●
COD	Correction run	●
DCD	Door lock detection	●
DOP	No door allowed	●
DSC	Downstream overspeed protection	●
DTS	Run time detection	●
EEC C	Car exit detection	○
EEC S	Shaft exit inspection	○
EMH O	Pit emergency stop	●
EMR	Car roof emergency stop	●
IDJ	Communication evaluation	●
LAF	Stop at a different station	●
LCM A	Machine room outbound calls	●
MAF M	Machine room main switch	●
MOP T	Overheating protection	●
OLP	Trip protection	●
OSG CM	Speed limiter safety switch	●
PAS U	Give priority to release	●
PDD N/R	Phase detection	●
RDC O	Repeatedly opening and closing the door	●
RDF CN	Rescue run	●
SDB	Fault self-diagnosis	●
SGE	Safety gear safety switch	●
TEL	Failure classification	●
TWS C	Car speed limiter rope Tightening safety switch	●
UCMP	Car accidental movement protection	●

Code	Function	
ACU C	Voice comfort	●

Emergency operation

Code	Function	
FID AO	Firefighting standby	○
FID BO	Firefighting deactivated	○
FRD	Firefighting operation	○
FRI	Fire linkage	●
LPS VN	Run synchronously	●

Emergency backup power operation

Code	Function	
CEL S	Emergency lighting	●
EBS S	Emergency power supply	●
EPD MCF	urgent power supply	○
PEL	Emergency leveling	○

Emergency communications

Code	Function	
ABE C	Car roof alarm bell	○
ISE F	Five-way calling	●
ISE N	Multi-party call	○

CONTROL FUNCTION

Priority and special service function

Code	Function	
ATS C	Driver function	○
AUD I	Audio interface	○
CCR	IC card	○
CSM UN	Forced docking	○
CTV I	Video interface	○
DOE B	Door opening delay	○
EAQ	Earthquake detection	○
EFC	Energy feedback	○
FRE	Quick recall	○
LOC E,O	Incoming call lock	○
LOL E,O	Outbound call lock	○
OSS COI	Car exit	○
OSS LC	Floor exit	●
PRC	Priority service	○
PRC KI	Incoming call priority (continuous)	○
PRL LA / LO	Outbound call priority	○
SED WSR	Maintenance operation	●
PCF	Visitor linkage	○

Idle car allocation

Code	Function	
ADF	Drive away automatically	○
PAM C	Idle waiting for passengers	●
PAS C	idle waiting for passengers, sub-floor	○

Optimize the traffic flow function

Code	Function	
BLF	Direct drive with full load	●
DUP	Parallel operation	○
GC	Group control operation	○
IDP	Downstream peak service	○
ITP	Upstream and downstream peak services	○
IUP	Upstream peak service	○

INFORMATION FUNCTIONS

Information display outside the car

Code	Function	
BPI	Full load display	○
CPI LO	Car position, dot matrix	○
CPI LS	Car position, segment code	●
DIA L	Running direction display	●
LCL	Outbound call registration display	●

Information display in the car

Code	Function	
ACU F	Voice station announcement	●
CCL	Incoming call display	●
CPI CO	Car position, dot matrix	○
CPI CS	Car position, segment code	●
CRB C	Internal call buzzer	○
DIA C	Running direction display	●
OLF C	Overload reminder	●

Information display on the maintenance control screen

Code	Function	
CIL A	Control cabinet parts labels	●
CPI PS	Location indication	●
SCN N	Start count	●

Remote monitoring screen display

Code	Function	
HES	Community monitoring	○
LIL	BA interface	○

PASSENGER COMFORT FUNCTIONS

Entering and exiting the car

Code	Function	
ACL B	Precise re-leveling	●
ADO	Open early	●
BOF	Inspection and switch door	●
DCB I	Close the door inside the car	●
DOB OI	Open the door inside the car	●
NDC	Forced to close the door	○
QCC	Close quickly	○
RAA	Start outbound call response	●
REO S	Outbound calls reopen	●
SRC RNC	Light curtain detection	●
SSR	Self-rescue operation	●

Abuse, misuse protection

Code	Function	
CCB	Reverse internal call	●
CRC	Command elimination	●
FCC C	Internal calls to prevent trouble	●
LCC	Outbound call interlock	●
SPB BP	Button anti-adhesion	●

Ride comfort

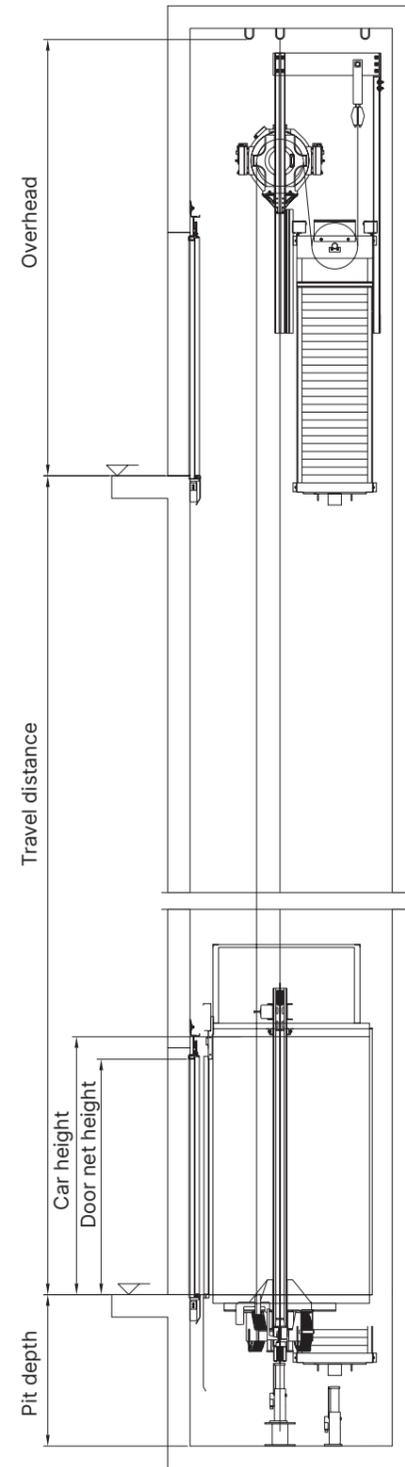| Code	Function	
AGC	Automatically generate curves	●
DIR S	Dock directly	●
OCL A	Car lighting energy saving	●
OCL AF	Car lighting control	○
OCV A	Car ventilation and energy saving	●
OCV AF	Car ventilation control	○
STP	start compensation	●

LAYOUT AND SPECIFICATION
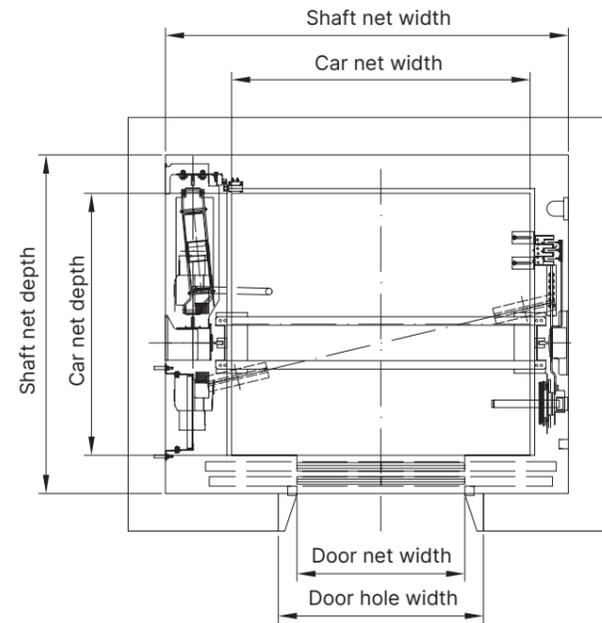
Sectional drawing of the shaft
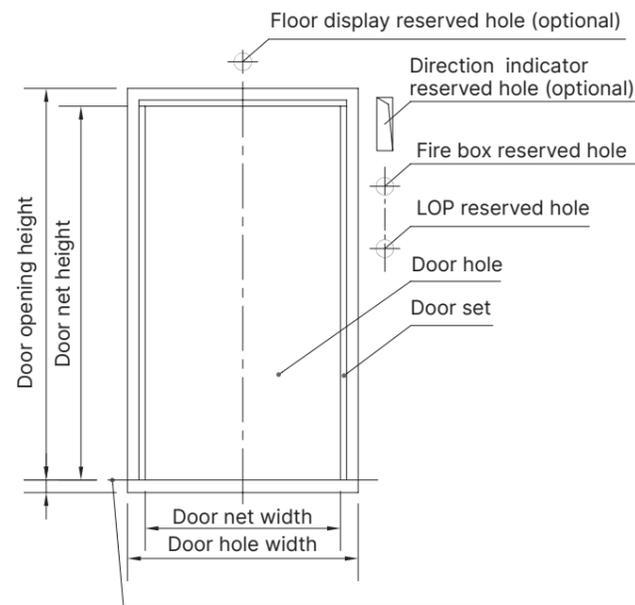
Door hall and LOP

Side view of the shaft

Persons/Load Capacity (kg)	Car dimensions (mm)	Car type	Car area (m²)	Door width (mm)	Door hole width (mm)	Minimum shaft dimensions (mm)	COP Position
5/400	1100×1000	SEC*	1.10	700	900	1700×1375	S(Side)
8/630	1100×1400	SEC	1.54	800	1000	1750×1690	S(Side)
		TTC*	1.54	800	1000	1750×1810	S(Side)
		SEC	1.54	900	1100	1950×1690	S(Side)
		TTC	1.54	900	1100	1950×1810	S(Side)
10/800	1350×1400	SEC	1.89	800	1000	1950×1690	F(Front)
		TTC	1.89	800	1000	1950×1810	F(Front)
		SEC	1.89	900	1100	1950×1690	S(Side)
		TTC	1.89	900	1100	1950×1810	S(Side)
13/1000	1600×1400	SEC	2.24	900	1100	2200×1800	F(Front)
	1400×1600	TTC	2.24	900	1100	2000×2010	S(Side)
14/1050	1600×1500	SEC	2.40	900	1100	2200×1850	F(Front)
	1600×1500	TTC	2.40	900	1100	2200×1910	F(Front)
15/1150	1800×1450	SEC	2.61	1000	1200	2350×1825	F(Front)
	1300×2000	TTC	2.73	900	1100	1950×2410	S(Side)
16/1250	1950×1400	SEC	2.73	1100	1300	2645×1875	F(Front)
	1300×2200	TTC	2.86	900	1100	1995×2610	S(Side)
18/1350	1950×1500	SEC	2.93	1100	1300	2680×2065	F(Front)
	1300×2300	TTC	2.99	900	1100	2030×2710	S(Side)
21/1600	1950×1750	SEC	3.41	1100	1300	2680×2190	F(Front)
	1400×2400	TTC	3.36	1000	1200	2150×2810	S(Side)

"SEC" stands for a single-door elevator car, and "TTC" stands for a through-door elevator car.

Persons/Load Capacity (kg)	Speed (m/s)	Door height (mm)	Car height (mm)	Minimum pit depth (mm)	Minimum overhead (mm)
5/400	1.0		2400	1220	3780 (3680)*
8/630	1.0		2400	1220	3780 (3680)
	1.6		2400	1350	3970 (3870)
	1.75		2400	1350	3990 (3890)
10/800	1.0		2400	1220	3780 (3680)
	1.6		2400	1350	3970 (3870)
	1.75		2400	1350	3990 (3890)
13/1000	1.0		2400	1220	3780 (3680)
	1.6		2400	1350	3970 (3870)
	1.75		2400	1350	3990 (3890)
14/1050	1.0		2400	1220	3780 (3680)
	1.6	2100	2400	1350	3970 (3870)
	1.75		2400	1350	3990 (3890)
15/1150	1.0		2400	1220	3780 (3680)
	1.6		2400	1350	3970 (3870)
	1.75		2400	1350	3990 (3890)
16/1250	1.0		2400	1380	3850 (3750)
	1.6		2400	1550	4000 (3900)
	1.75		2400	1600	4000 (3900)
18/1350	1.0		2400	1380	3850 (3750)
	1.6		2400	1550	4000 (3900)
	1.75		2400	1600	4000 (3900)
21/1600	1.0		2400	1380	3850 (3750)
	1.6		2400	1550	4000 (3900)
	1.75		2400	1600	4000 (3900)

* Minimum overhead (the data in parentheses calculated based on car height of 2300mm and door height of 2100mm).