Elevator Technology

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engineering. tomorrow. together.

meta100 English (09/2018) thyssenkrupp Elevator AG Asia Pacific Office
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Elevator Technology

meta100.

Brings extra to your building.

thyssenkrupp

thyssenkrupp moves people – the future of urban mobility.

In 40 short years, we've become one of the world's leading elevator companies with unique engineering capabilities, offering next-generation solutions like: MULTI, the ropeless elevator; ACCEL, an accelerated people mover; and MAX, a cloud-based predictive maintenance service. Whether building a new state-of-the-art system or optimizing and modernizing existing ones, our solutions deliver crucial energy and time efficiencies, helping to address the challenges of urbanization and transform cities into the best places to live.

Customers in **150** countries	Over 900 sales and service locations	Sales of **€ 7.7 billion**	**50,000+** employees

Figures for our Elevator Technology business

A trusted partner

We support our customers throughout their project lifecycle, from the design to the end-of-life phase. Every step of the way we strive to fully understand their needs and consistently deliver the safest, highest quality passenger transportation solutions, maintenance and modernization packages.

Through our International Technical Services, a global network of centers of excellence, thyssenkrupp trains its service technicians in a multibrand portfolio, enabling them to successfully service more than 1.3 million units under maintenance. This is a unique concept in the industry and an invaluable advantage for our customers.

thyssenkrupp – the diversified industrial group

engineering.tomorrow.together – three words that describe who we are, what we do, and how we do it. Driven by global megatrends such as urbanization and the need for efficient use of environmental resources, our global community of more than 158,000 colleagues works together with our customers to harness our engineering expertise and strive for technological and business solutions that satisfy the demand for "more" in a "better" way.

Find out more: **www.thyssenkrupp.com**

One World Trade Center

Shanghai World Financial Center

We provide smart and innovative products for a wide variety of applications:

- Passenger and freight elevators
- Escalators and moving walks
- Passenger boarding bridges, gound support equipment and intelligent gate systems.
- Stair and platform lifts
- Customized service and modernization solutions

thyssenkrupp Quartier

Mercedes Benz

meta100 brings extra to your building.

meta100 targets mid-rise buildings in the residential segment. meta100 is a value for money solution that reduces construction cost and is faster to install. meta100 gives peace of mind through reliable engineering and brightens up your building with interior designs. As a result, meta100 brings extra to your building.

Designed for

- Public and private residential mid-rise buildings

Specification

- Travels up to 110m or 32 stops
- Maximum load capacity of 1,150kg
- At a speed of 2.0m/s

Makes business sense

Reduced construction time means reduced construction costs. A smart, cost-efficient choice.

Gives peace of mind

Reliable thyssenkrupp engineering.

Brightens up your building

Eight stylish car interior design options.

Makes business sense.

meta100 is a highly efficient piece of mechanical engineering, delivering a smart, compact design with fast set up.

Finish your project in no time

Pre-assembled components plus a scaffold-free set up makes installation safer and quicker.

Reduce construction cost

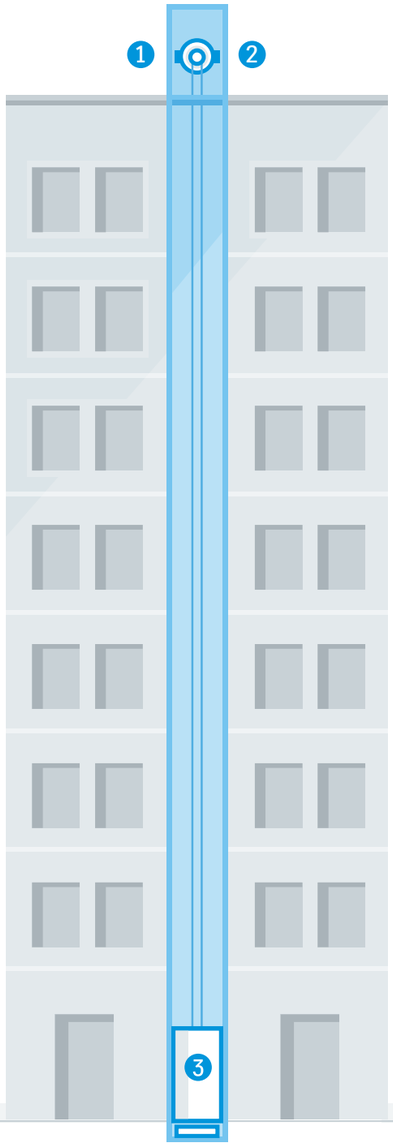
Our bottom suspension system reduces shaft overhead size and overall building height.

Maximise your revenue

Compact shaft dimensions give increased rentable floor space. A faster completion time hastens occupation and revenue from tenants.

Gives peace of mind.

Reliable and stringent German design and engineering.



1

Trusted brake technology

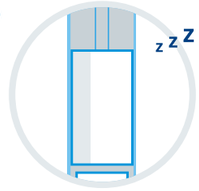
2 safety switches automatically stop and report when brake and brake air gap exceed specified value. Reduces the need for unscheduled service.

2

Longevity of the elements

Self lubricating, covered brake system enables prolonged life expectancy.

3



Optimal energy consumption

Standby mode helps to reduce energy wastage and create greater energy efficiency.

Brightens up your building.

Accurate engineering enables an even entrance and exit experience, whilst a choice of 8 stylish car interiors deliver a brighter in-car journey.

Fixtures

Every user interaction point is an opportunity to delight.

Full view of cabin design

Accessories

A chance to enhance the user experience through design detail.

Trends

Selected by our in-house design team for your personal composition.

Stylish.

A stylish interior design with a touch of luxury.

1 Ocean

Ceiling
RAL 7035

Side Wall
RAL 5020

Rear Wall
Metallic
RAL 1035

Front Wall
Metallic
RAL 1035

Door
Metallic
RAL 1035

Floor
CFL010

2 Copper

Ceiling
RAL 1015

Side Wall
Metallic RAL
8029

Rear Wall
RAL 1015

Front Wall
RAL 1015

Door
RAL 1015

Floor
H260

COP Black

Contemporary.

Inspired by contemporary Scandinavian interiors, fused with local flavours.

1 Sky

Ceiling
RAL 7035

Side Wall
RAL 5024

Rear Wall
Hairline
Stainless Steel

Front Wall
Hairline
Stainless Steel

Door
Hairline
Stainless Steel

Floor
H260

2 Mirror

Ceiling
RAL 7035

Side Wall
Hairline
Stainless Steel

Rear Wall
Hairline + Mirror
Stainless Steel

Front Wall
Hairline
Stainless Steel

Door
Hairline
Stainless Steel

Floor
H260

COP Black

Modern freshness.

A mix of vibrant colors with traditional patterns for that modern twist.

1 Lime

Ceiling
RAL 7035

Side Wall
RAL 9003

Rear Wall
RAL 9003

Front Wall
RAL 9003

Door
Hairline
Stainless Steel

Floor
TF8007

2 Tangerine

Ceiling
RAL 7035

Side Wall
RAL 1015

Rear Wall
RAL 9003

Front Wall
RAL 9003

Door
Hairline
Stainless Steel

Floor
TF8009

COP White

Natural home.

A cosy, warm and comfortable interior setting, created using natural textures.

1 Spring

Ceiling
RAL 7035

Side Wall
Mirabell
green

Rear Wall
Hairline
Stainless Steel

Front Wall
Hairline
Stainless Steel

Door
Hairline
Stainless Steel

Floor
CFL010

2 Autumn

Ceiling
RAL 7035

Side Wall
RAL 1013

Rear Wall
Laminate (8844NT
Aged Ash-s)

Front Wall
Hairline
Stainless Steel

Door
Hairline
Stainless Steel

Floor
H260

COP White

Heritage refined.

For our Heritage refined designs, we revived colours, crafts & materials from the past and combined them with today's technologies.

1 Light Wood

Ceiling
RAL 7035

Side Wall
RAL 9003 + Hairline Stainless Steel

Rear Wall
Hairline Stainless Steel

Front Wall
Hairline Stainless Steel

Door
Hairline Stainless Steel

Floor
TFW13

2 Dark Wood

Ceiling
RAL 7035

Side Wall
RAL 1015 + Hairline Stainless Steel

Rear Wall
Hairline Stainless Steel

Front Wall
Hairline Stainless Steel

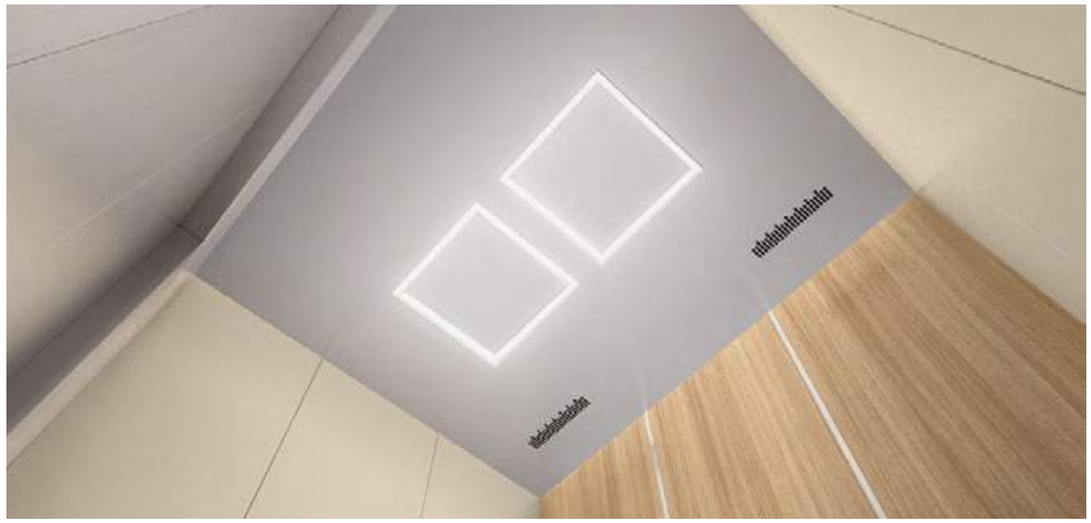
Door
Hairline Stainless Steel

Floor
TFW03

COP White

Accessories.

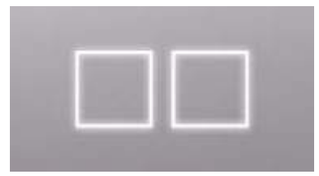
Designed with the same precision as our mechanical engineering to give quality satisfaction.



Ceiling

Curved

Round



Cubes

Handrail

Half-size mirror

Fixtures.

User-friendly design options for ease of use.

Classic

Panel	Stainless steel
Indicator	Red dot matrix
Button	Square button with red light

* All images shown here are for reference only.

Black

Panel	Stainless steel
Indicator	Red dot matrix
Button	Square button with red light

White

Panel	Stainless steel
Indicator	Blue white segment LCD
Button	Round button with blue light

Function list

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Category	No.	Function	MR	MRL
Enhanced Car Functions	1	Door reopen by following landing call at same landing	S	S
	2	Collective selective control	S	S
	3	Full-load non-stop	S	S
	4	Onward travel to the next stop in the case of a non-opening door	S	S
	5	Anti-nuisance "limit number of car call when empty load"	S	S
	6	Anti-nuisance "car call cancellation at terminal landing"	S	S
	7	Anti-nuisance "car call deletion opposite to travel direction"	S	S
	8	Adjustable waiting time for opening door at the main landing	S	S
	9	Adjustable speed and torque of door operator	S	S
	10	Re-levelling	S	S
	11	Energy saving operation for car light and fan	S	S
	12	Elevator start-up loading weighting compensation function	S	S
	13	In advance door open	O	O
	14	Changing fire landing	O	O
	15	Changing parking landing	O	O
	16	Changing main landing	O	O
	17	Main landing return	O	O
Safety and Emergency Functions	18	Landing to the nearest floor in case of problem (e.g. overtemperature of motor, car position missing)	S	S
	19	Fire emergency return (FER)	S	S
	20	Alarm & Intercom Function	S	S
	21	Emergency car lighting	S	S
	22	Overload protect	S	S
	23	Repeat door closing in the event of lock failure	S	S
	24	Door overload protect	S	S
	25	Safety curtain for door	S	S
	26	Parking (by key switch)	S	S
	27	Phase failure and phase reversal protection	S	S
	28	Lockable main switch integrated for controller cabinet	S	S
	29	Emergency electrical operation	S	S
	30	Inspection operation	S	S
	31	Traction machine over temperature supervision	S	S
	32	Traction machine skidding protection	S	S
	33	Prepared fire emergency return signal	S	S
	34	Unintended car movement protection	S	S
	35	Restrict the opening of the car door inside the car	S	S
	36	Brake torque detection functon	S	S
	37	Door lock safety device failure detection	S	S
	38	Emergency operation for electrical brake release	NA	S
	39	Main COP attendance	O	O
	40	Fireman service	O	O
	41	Door lock bypass function	S	S
	42	Automatic rescue operation	O	O
	43	Earthquake function (sensors by customer)	O	O

meta100 (GB code)

Function list

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Standard Function			GB	
Category	**No.**	**Function**	**MR**	**MRL**
Safety and Emergency Functions	44	Earthquake function (including sensors)	O	O
	45	Emergency power operation (generator by customer)	O	O
	46	Top of car emergency exit	O	O
	47	Residual current devices function (RCD function)	O	O
Trip Functions	48	Automatic doors	S	S
	49	Collective fault signal	S	S
	50	Operation counting (trip and hour)	S	S
	51	Car priority	O	O
Human Machine Interface	52	Door close button	S	S
	53	Door open button	S	S
	54	Car call cancellation (by double press)	S	S
	55	Landing indicator of dot-matrix (red)	S	S
	56	Car indicator of dot-matrix (red)	S	S
	57	Landing indicator of 4.3'' blue-white segment LCD	O	O
	58	Car indicator of 5.7" blue-white segment LCD	O	O
	59	Car arrival chime	O	O
	60	Speech synthesis service	O	O
	61	Second COP (excl. car attendant and intercom)	O	O
	62	COP for disabled persons (no indicator, braille push buttons as standard)	O	O
Monitoring and Tele-Service	63	Intercom system	S	S
	64	Traveling cable (incl. video transmission function)	O	O
	65	BAS interface function (dry contactor signal)	O	O
	66	Color video camera (in car)	O	O
	67	Remote monitor interfacing (excl. MH2 board)	O	O
	68	Remote monitor interfacing (incl. MH2 board, without modem)	O	O
	69	Supervision panel (cable by other, cable length<=150m)	O	O
	70	Build automation interfacing (RS232,MM board)	O	O
	71	Build automation interfacing (RS485,MMC board)	O	O
Group/Duplex Control	72	Group control	O	O
	73	Automatically allocate lower load elevator to response landing call in group	O	O
	74	Continued group/duplex operation in case of failure of the other elevator	O	O
	75	Taking units out of group (timer/switch)	O	O

* S - Standard; O - Option; NA - Not applicable

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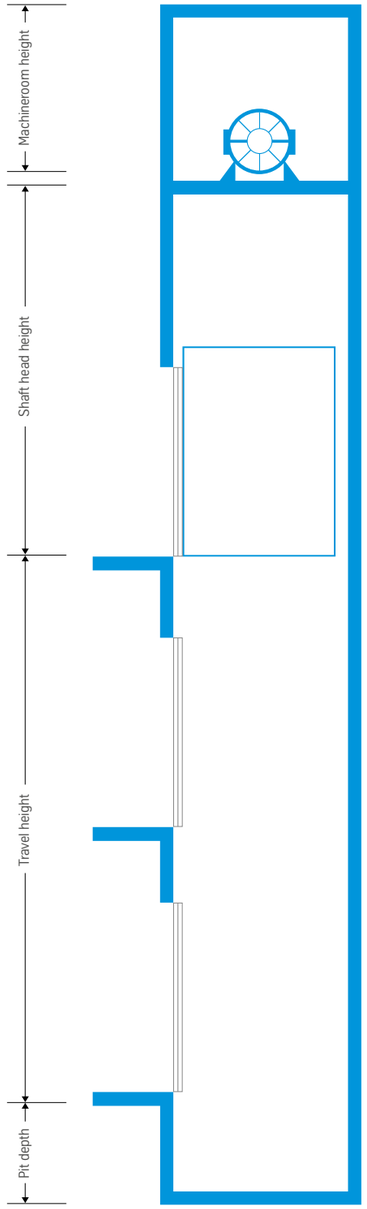
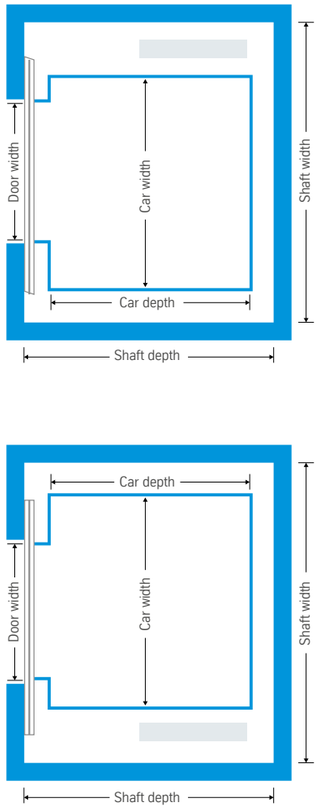
Layout (machineroom)

Shaft vertical section



Lift plan



Technical specifications (machineroom)

Basic parameters

Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors	Min. Overhead Height (mm)	Min. Pit Depth (mm)
630	1.0	50	18	CH+1350	1210
	1.6	75	26	CH+1500	1400
	1.75	90	31	CH+1550	1450
800	1.0	50	18	CH+1350	1210
	1.6	75	26	CH+1500	1400
	1.75	90	31	CH+1550	1450
	2	110	32	CH+1650	1550
	2.5	125	38	CH+1900	1850
1000	1	50	18	CH+1350	1210
	1.6	75	26	CH+1500	1400
	1.75	90	31	CH+1550	1450
	2	110	32	CH+1650	1550
	2.5	125	38	CH+1900	1850
1150	1	50	18	CH+1350	1210
	1.6	75	26	CH+1500	1400
	1.75	90	31	CH+1550	1450
	2	110	32	CH+1650	1550

* CH is car height. Standard car height is 2400mm and 2200/2300mm are optional.

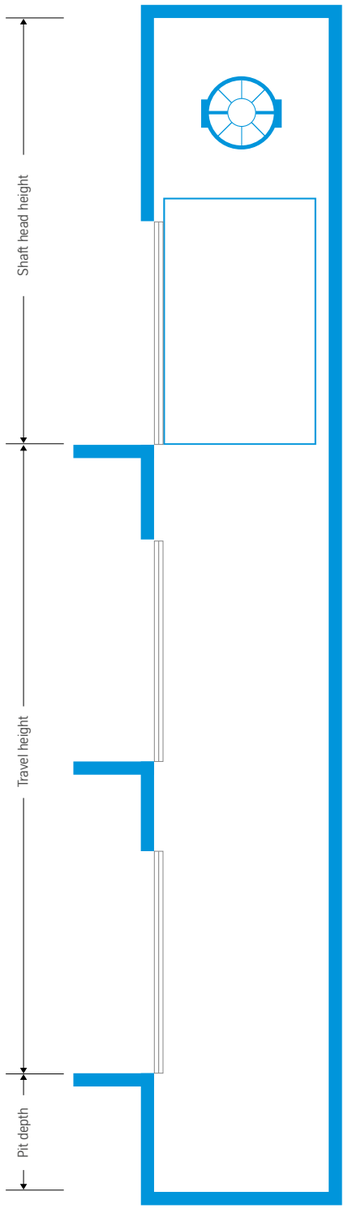
Car/Shaft dimensions

Rated Load (kg)	Car Size (CW x CD)(mm)	Door Opening	Door Size (DW x DH)(mm)	Min. Shaft Size (SW x SD)(mm)
630	1100x1400	Centre Opening	800x2100	1750x1800 (≤1.75m/s)
800	1350x1400	Centre Opening	800x2100	1950x1800 (≤2.0m/s)
				2000x1800 (2.5m/s)
	1100x1700	Centre Opening	800x2100	1750x2100 (≤2.5m/s)
			900x2100	1950x2100 (≤2.5m/s)
1000	1600x1400	Centre Opening	900x2100	2200x1800 (≤2.0m/s)
				2250x1800 (2.5m/s)
	1600x1500	Centre Opening	900x2100	2200x1900 (≤2.0m/s)
				2250x1900 (2.5m/s)
	1400x1600	Centre Opening	900x2100	2050x2000 (≤2.5m/s)
	1100x2100	Centre Opening	900x2100	1950x2500 (≤2.5m/s)
1150	1800x1400	Centre Opening	1100x2100	2400x1800 (≤2.0m/s)
	1800x1500	Centre Opening	1000x2100	2410x1890 (≤2.0m/s)
	1200x2100	Centre Opening	900x2100	1950x2500 (≤2.0m/s)

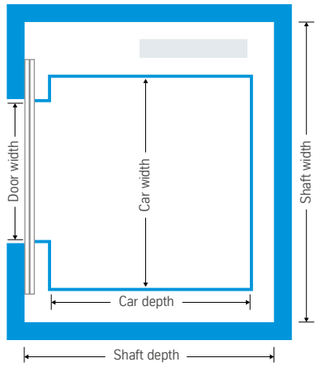
* For specification over the above scope, please contact the local thyssenkrupp elevator representative.

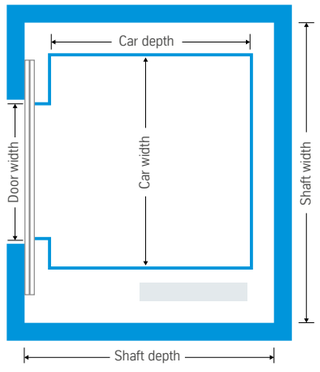
Layout (machineroom-less)

Shaft vertical section



Lift plan





Technical specifications (machineroom-less)

Basic parameters

Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors
630	1.0	50	18
	1.6	75	26
	1.75	90	31
800	1.0	50	18
	1.6	75	26
	1.75	90	31
	2	110	32
1000	1	50	18
	1.6	75	26
	1.75	90	31
	2	110	32
1150	1	50	18
	1.6	75	26
	1.75	90	31
	2	110	32

* Standard car height is 2400mm and 2200/2300mm are optional.

Minimum shaft head height and shaft pit depth

Car Height (mm)	Rated Speed (m/s)	Min. Overhead Height (mm)	Min. Pit Depth (mm)
2400	1	3750	1210
	1.6	3950	1400
	1.75	4000	1450
	2	4100	1550
2200/2300	1	3600/3650	1210
	1.6	3800/3850	1400
	1.75	3850/3900	1450
	2	4050/4050	1550

Car/Shaft dimensions

Rated Load (kg)	Car Size (CW x CD)(mm)	Door Opening	Door Size (DW x DH)(mm)	Min. Shaft Size (SW x SD)(mm)
630	1100x1400	Centre Opening	800x2100	1750x1800
800	1350x1400	Centre Opening	800x2100	1950x1800
	1100x1700		900x2100	1750x2100
1000	1600x1400	Centre Opening	900x2100	2200x1800
	1600x1500			2200x1900
	1100x2100			1950x2500
1150	1800x1400	Centre Opening	1100x2100	2400x1800
	1200x2100		1000x2100	2200x2500

* For specification over the above scope, please contact the local thyssenkrupp Elevator representative.

Function list

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Category	No.	Function	MR	MRL
Enhanced Car Functions	1	Door reopen by following landing call at same landing	S	S
	2	Collective selective control	S	S
	3	Full-load non-stop	S	S
	4	Onward travel to the next stop in the case of a non-opening door	S	S
	5	Anti-nuisance "limit number of car call when empty load"	S	S
	6	Anti-nuisance "car call cancellation at terminal landing"	S	S
	7	Anti-nuisance "car call deletion opposite to travel direction"	S	S
	8	Adjustable waiting time for opening door at the main landing	S	S
	9	Adjustable speed and torque of door operator	S	S
	10	Re-levelling	S	S
	11	Energy saving operation for car light and fan	S	S
	12	Elevator start-up loading weighting compensation function	S	S
	13	In advance door open	O	O
	14	Changing fire landing	O	O
	15	Changing parking landing	O	O
	16	Changing main landing	O	O
	17	Main landing return	O	O
	18	Door nudging	S	S
Safety and Emergency Functions	19	Landing to the nearest floor in case of problem (e.g. overtemperature of motor, car position missing)	S	S
	20	Fire emergency return (FER)	S	S
	21	Alarm & Intercom Function	S	S
	22	Emergency car lighting	S	S
	23	Overload protect	S	S
	24	Repeat door closing in the event of lock failure	S	S
	25	Door overload protect	S	S
	26	Safety curtain for door	S	S
	27	Parking (by key switch)	S	S
	28	Phase failure and phase reversal protection	S	S
	29	Lockable main switch integrated for controller cabinet	S	S
	30	Emergency electrical operation	S	S
	31	Inspection operation	S	S
	32	Traction machine over temperature supervision	S	S
	33	Traction machine skidding protection	S	S
	34	Prepared fire emergency return signal	S	S
	35	Unintended car movement protection	S	S
	36	Restrict the opening of the car door inside the car	S	S
	37	Brake torque detection functon	S	S
	38	Door lock safety device failure detection	S	S
	39	Emergency operation for electrical brake release	NA	S
	40	Main COP attendance	O	O
	41	Fireman service	O	O
	42	Door lock bypass function	S	S
	43	Automatic rescue operation	O	O
	44	Earthquake function (sensors by customer)	O	O

meta100 (EN81-20/50)

Function list

thyssenkrupp

Category	No.	Function	MR	MRL
Safety and Emergency Functions	45	Earthquake function (including sensos)	O	O
	46	Emergency power operation (generator by customer)	O	O
	47	Top of car emergency exit	O	S
	48	Residual current devices function (RCD function)	S	S
Trip Functions	49	Automatic doors	S	S
	50	Collective fault signal	S	S
	51	Operation counting (trip and hour)	S	S
	52	Car priority	O	O
Human Machine Interface	53	Door close button	S	S
	54	Door open button	S	S
	55	Car call cancellation (by double press)	S	S
	56	Landing indicator of dot-matrix (red)	S	S
	57	Car indicator of dot-matrix (red)	S	S
	58	Landing indicator of 4.3'' blue-white segment LCD	O	O
	59	Car indicator of 5.7" blue-white segment LCD	O	O
	60	Car arrival chime	O	O
	61	Speech synthesis service	O	O
	62	Second COP (excl. car attendant and intercom)	O	O
	63	COP for disabled persons (no indicator, braille push buttons as standard)	O	O
	64	Intercom system	S	S
Monitoring and Tele-Service	65	Traveling cable (incl. video transmission function)	O	O
	66	BAS interface function (dry contactor signal)	O	O
	67	Color video camera (in car)	O	O
	68	Remote monitor interfacing (excl. MH2 board)	O	O
	69	Remote monitor interfacing (incl. MH2 board, without modem)	O	O
	70	Supervision panel (cable by other, cable length<=150m)	O	O
	71	Build automation interfacing (RS232,MM board)	O	O
	72	Build automation interfacing (RS485,MMC board)	O	O
Group/Duplex Control	73	Group control	O	O
	74	Automatically allocate lower load elevator to response landing call in group	O	O
	75	Continued group/duplex operation in case of failure of the other elevator	O	O
	76	Peak service function (only for group control)	O	N/A
	77	Taking units out of group (timer/switch)	O	O

* S - Standard; O - Option; NA - Not applicable

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Layout (machineroom)

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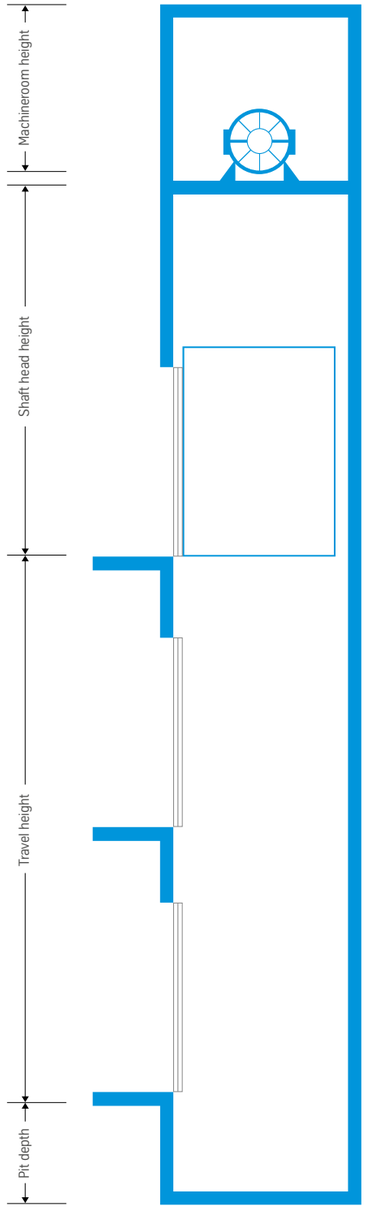
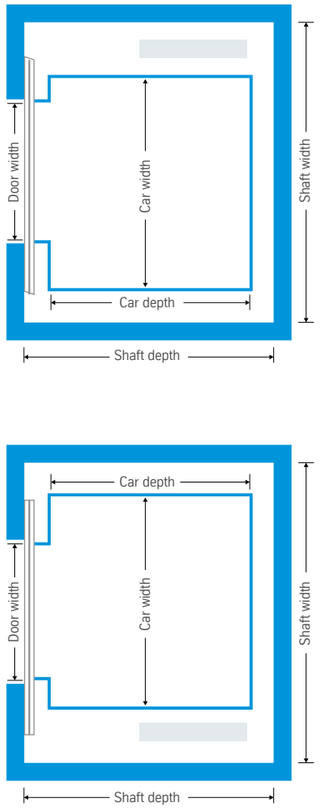
Shaft vertical section



Lift plan



Technical specifications (machineroom)

thyssenkrupp

Basic parameters

Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors	Min. Overhead Height (mm)	Min. Pit Depth (mm)
630	1.0	50	18	CH+1350	1800
	1.6	75	26	CH+1500	1900
	1.75	90	31	CH+1550	1950
800	1.0	50	18	CH+1350	1800
	1.6	75	26	CH+1500	1900
	1.75	90	31	CH+1550	1950
	2	110	32	CH+1650	2050
	2.5	125	38	CH+1900	2200
1000	1	50	18	CH+1350	1300
	1.6	75	26	CH+1500	1400
	1.75	90	31	CH+1550	1450
	2	110	32	CH+1650	1550
	2.5	125	38	CH+1900	1850
1150	1	50	18	CH+1350	1300
	1.6	75	26	CH+1500	1400
	1.75	90	31	CH+1550	1450
	2	110	32	CH+1650	1550

* CH is car height. Standard car height is 2400mm and 2200/2300mm are optional.

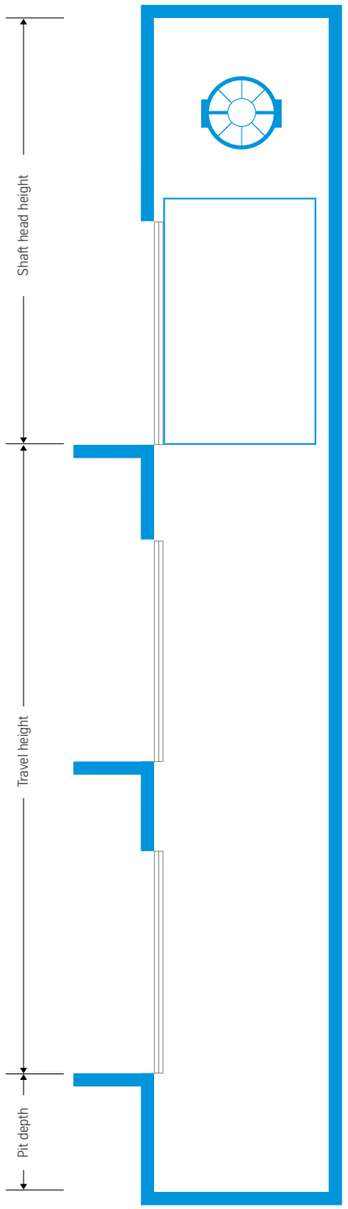
Car/Shaft dimensions

Rated Load (kg)	Car Size (CW x CD)(mm)	Door Opening	Door Size (DW x DH)(mm)	Min. Shaft Size (SW x SD)(mm)
630	1100x1400	Centre Opening	800x2100	1750x1800 (≤1.75m/s)
800	1350x1400	Centre Opening	800x2100	1950x1800 (≤2.0m/s)
				2000x1800 (2.5m/s)
	1100x1700	Centre Opening	800x2100	1750x2100 (≤2.5m/s)
			900x2100	1950x2100 (≤2.5m/s)
1000	1600x1400	Centre Opening	900x2100	2200x1800 (≤2.0m/s)
				2250x1800 (2.5m/s)
	1600x1500	Centre Opening	900x2100	2200x1900 (≤2.0m/s)
				2250x1900 (2.5m/s)
	1400x1600	Centre Opening	900x2100	2050x2000 (≤2.5m/s)
	1100x2100	Centre Opening	900x2100	1950x2500 (≤2.5m/s)
1150	1800x1400	Centre Opening	1100x2100	2400x1800 (≤2.0m/s)
	1800x1500	Centre Opening	1000x2100	2410x1890 (≤2.0m/s)
	1200x2100	Centre Opening	900x2100	1950x2500 (≤2.0m/s)

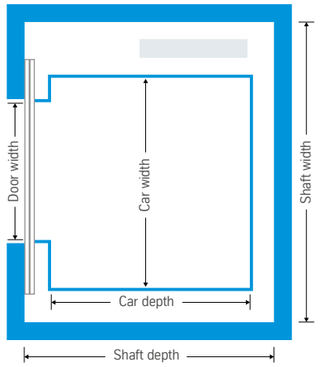
* For specification over the above scope, please contact the local thyssenkrupp elevator representative.

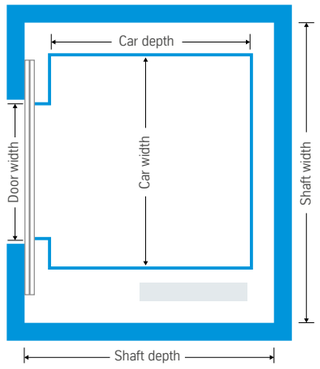
Layout (machineroom-less)

Shaft vertical section



Lift plan





Technical specifications (machineroom-less)

Basic parameters

Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors
630	1.0	50	18
	1.6	75	26
	1.75	90	31
800	1.0	50	18
	1.6	75	26
	1.75	90	31
	2	110	32
1000	1	50	18
	1.6	75	26
	1.75	90	31
	2	110	32
1150	1	50	18
	1.6	75	26
	1.75	90	31
	2	110	32

* Standard car height is 2400mm and 2200/2300mm are optional.

Minimum shaft head height and shaft pit depth

Rated Load (kg)	Car Height (mm)	Rated Speed (m/s)	Min. Overhead Height (mm)	Min. Pit Depth (mm)
630 - 800	2400	1	4150	1800
		1.6	4300	1900
		1.75	4350	1950
		2	4450	2050
	2200/2300	1	3950/4050	1800
		1.6	4100/4200	1900
		1.75	4150/4250	1950
		2	4250/4350	2050
1000 - 1150	2400	1	4150	1300
		1.6	4300	1450
		1.75	4350	1500
		2	4450	1550
	2200/2300	1	3950/4050	1300
		1.6	4100/4200	1450
		1.75	4150/4250	1500
		2	4250/4350	1550

Car/Shaft dimensions

Rated Load (kg)	Car Size (CW x CD)(mm)	Door Opening	Door Size (DW x DH)(mm)	Min. Shaft Size (SW x SD)(mm)
630	1100x1400	Centre Opening	800x2100	1750x1800
800	1350x1400	Centre Opening	800x2100	1950x1800
	1100x1700		900x2100	1750x2100
1000	1600x1400	Centre Opening	900x2100	2200x1800
	1600x1500			2200x1900
	1100x2100			1950x2500
1150	1800x1400	Centre Opening	1100x2100	2400x1800
	1200x2100		1000x2100	2200x2500

* For specification over the above scope, please contact the local thyssenkrupp Elevator representative.