



ISO 9001  
Certificate



ISO 14001  
Certificate

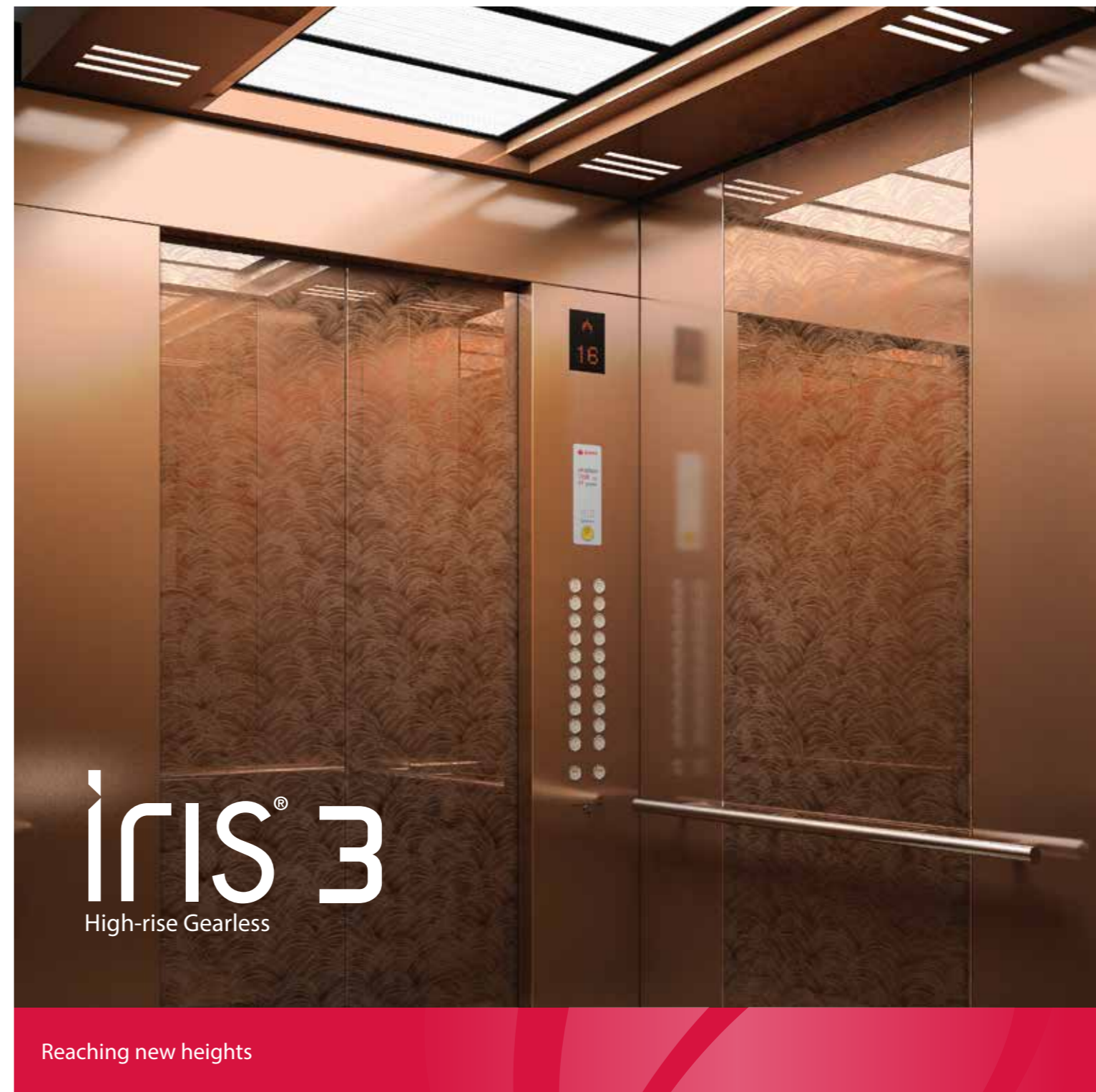


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Sigma constantly endeavors to improve products. Please note that the information in this catalog is subject to change without prior notice.  
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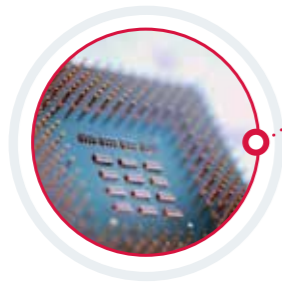


Reaching new heights

[www.sigmaelevator.com](http://www.sigmaelevator.com)



**SIGMA** Reaching new heights



**Engineered to be Safe & Reliable**

Sigma products are engineered by highly qualified engineers thereby ensuring customers receive excellent products with reliable quality.



**Aesthetics Design Excellence**

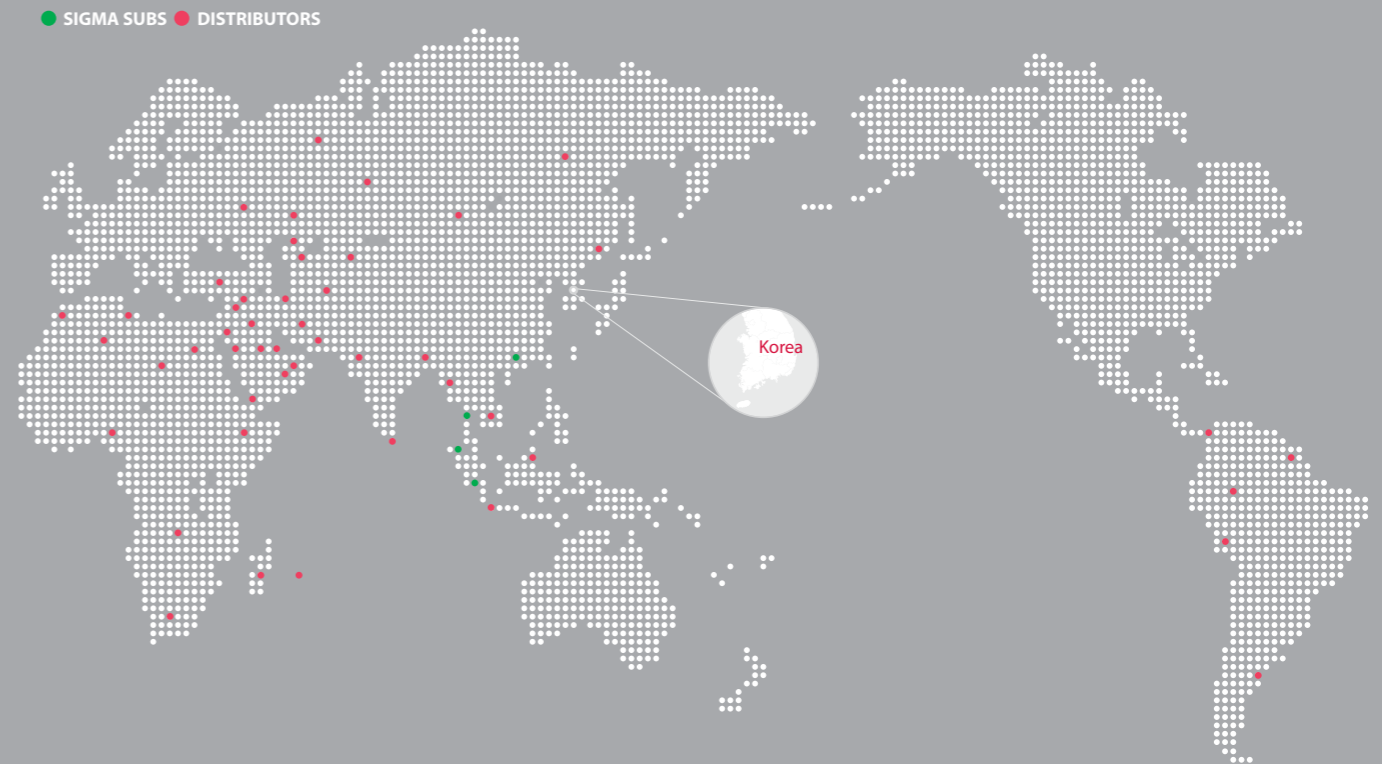
Sigma's international design centers are staffed with professionals who continue to pursue ideal aesthetic designs to satisfy customers needs.



**Global Network**

Sigma has served customers in more than 60 countries over the last 40 years.

Sigma has installed over 160,000 elevators worldwide since 1978





# Reaching new heights **SIGMA**

Our dedication and passion to reach customer satisfaction always have been a driving force of our creative and innovative ideas. Upgrading our ideas in providing comfortable elevators to you and devoting ourselves in creating customized solutions to meet the unique needs of your project are our ultimate goal.

# Green Technology



## Permanent Magnet (PM) Gearless Machine

PM gearless machine reduces about 40% in area and 50% in cubic volume leading to smaller machine room with flexible equipment layout. Machine itself realizes 35% less energy loss than induction machine and delivers improved power factor.



## Re-used Energy

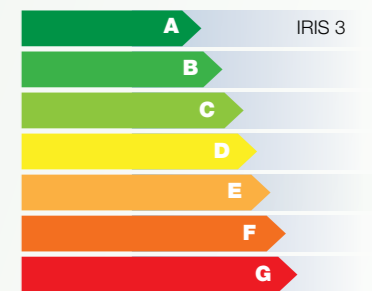
When the elevator travels up with light load or descends with heavy load, the machine generates energy. SIGMA's regenerative drive system captures wasted energy as a heat and feeds back to the building grid which will be re-used for other utilities.



<Regeneration>

## Total Solution for Energy

IRIS 3 is designed to consume minimum energy at the initial stage with adopting energy efficient components in door, lighting and traction units. Through total system control shown in the validated VDI A ratings, we realize up to 50% energy savings and promise sustainable growth.



## Noise and Vibration Control

Especially in high rise building, noise and vibration are created from movement of the people, flowing wind and operating machine which may cause discomfort. But, streamlined car structure, sealed car enclosure, reinforced multiple connections and wrapped on moving parts prevents noise and vibration leading to peaceful environment.



## Precise and Optimal Control

The digital closed-loop variable frequency (VF) drive, with vector control, further increases efficiency and accuracy, and a digital speed encoder ensures correct car speed and positioning. Also, smoothed "Jerk-in and Jerk-out" velocity profiling enhances ride quality.



# Perfect Control and Comfort



# Safety and Reliability



## Robust Elevator System

Sigma understands that only robust system design can guarantee customers' requirements and keep their precious daily life style. The intelligent controller which realized our core value has safety chain following the international code requirements to avoid unexpected error. In addition, IRIS 3 applies more than 10 kinds of safety devices.

## Strict Test Standard

Our product development process requires stricter standards than the industry level and new products are born with much research, simulations and field tests. We execute more than 30 kinds of reliability tests and these intense quality assurance programs make fool-proof products right from the design stage.

## SIGMA NeT : Computerized Monitoring

Through SIGMA NeT which monitors elevator, escalator and movingwalks by internet-based software, our elevator not only provides a comprehensive and easy-to-use interface but also brings perfect quality to reality. This results in harmony with building usage and customers' confidence.

## All Way Through Management

For more than 40 years of experience in the industry has given us a distinct expertise and challenging mind to take on any elevator difficulties.

## Design Process

Sigma's project management team works with developer/architect to understand exactly which type of elevator they require, to select the technology they need, and to achieve optional performance considering all aspects like shaft sizes, the number of people moving in and out of the premises, peak-hour traffic, elevator speed and number, and so on. This is very important role for preventing problems that may arise during operation.

## Installation and Service Process

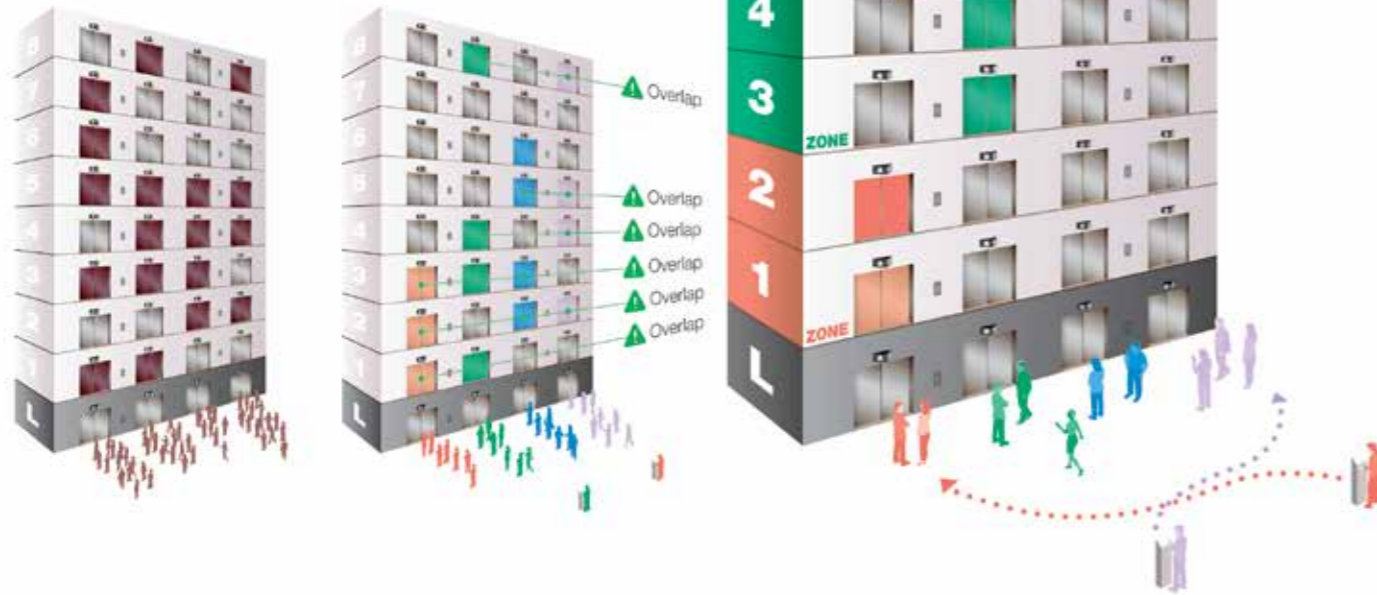
Installation can make designing criteria maximize and upgrade building's value. Our skilled engineers handle specification changes like add-ons to elevator and construction demands happening in the field. After completion and handover, elevator in operation can be maintained with the help of accumulated service knowledge.

# Professional Project Management



# Innovative technology

e\*Route moves people more efficiently by taking grouping to the next level.



## Conventional up/down button systems

let passengers choose their own elevators. This results in disorganized travel paths. One elevator may stop at widely separated floors or multiple elevators might stop at the same floor.

## Conventional destination management systems

assign passengers going to the same destination to the same elevator. Elevators stop at fewer floors, but two elevators may still have overlapping stops.

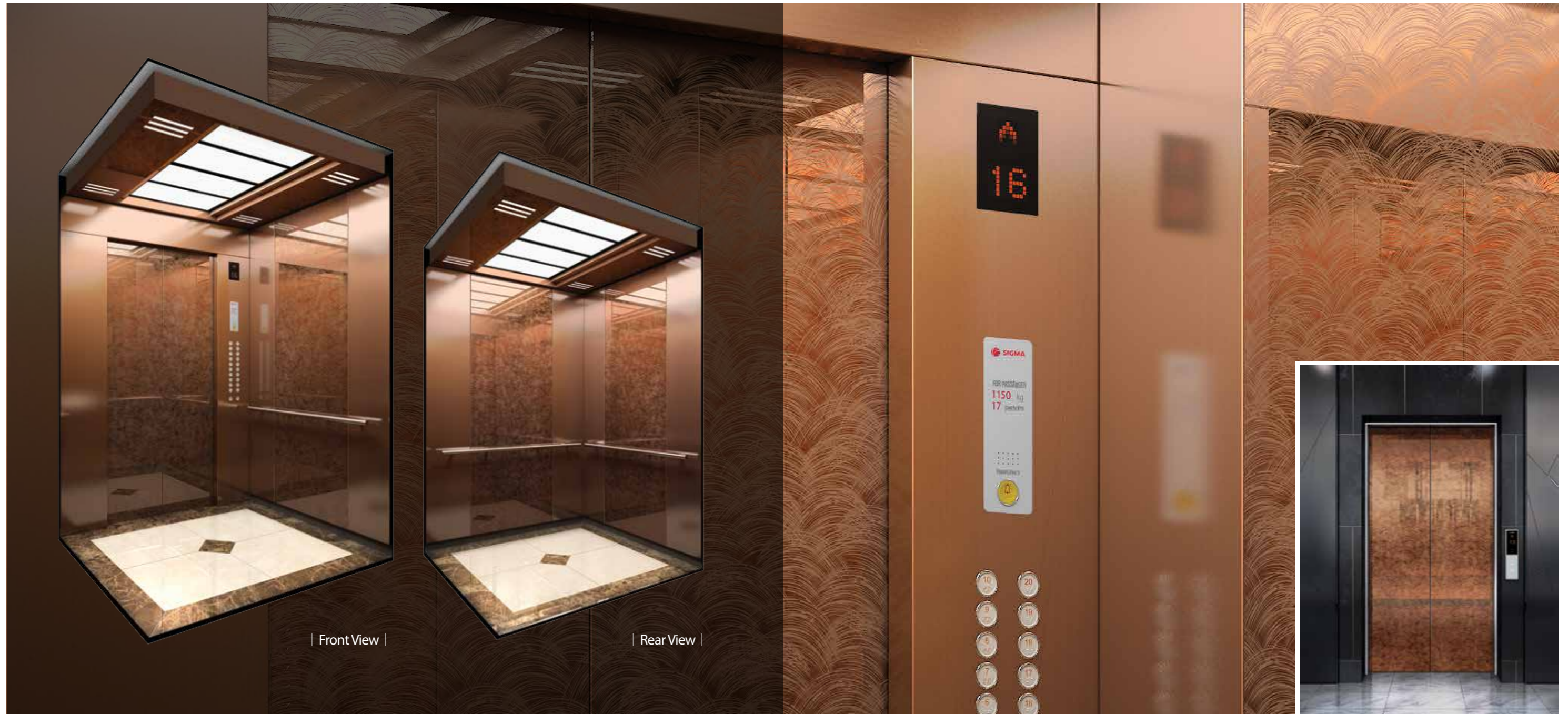
## SmartGrouping

Sigma patented SmartGrouping technology organizes travel by grouping both passengers and stops. Passengers going to the same destination are assigned to the same elevator. But SmartGrouping also assigns elevators to serve a group of floors, or a zone. The result is faster, better-organized service.



### Configurations

	Operating panel	In-car annunciators	Up/down buttons & Hall lanterns	Static signage	Dynamic signage	Touch-capable keypad	Touchpad	Touchscreen
Lobby-only	Lobby (one lobby only)			•	•	•	•	•
	Non-lobby floors		•					
	Cars	Exposed	•					
Full-building	Lobby (up to 4 consecutive lobbies)			•	•	•	•	•
	Non-lobby floors			•	•	•	•	•
	Cars	Concealed	•					



# Royal Gold

## Specification

Ceiling	C-NS1 (Color Bronze)
COP	CBX-64C
Wall / Car Door	Bead Blast Tin Gold Rose + Mirror Tin Gold Rose Etching (YS-1325)
Handrail	HR04 (POL)
Floor	Marble (Local)

## Entrance

Door	Mirror Tin Gold Rose Etching (YS-1325)
Button & IND	VIX-MA52S
Jamb	J-101 (STSHL)



# Shine Bead

## Specification

Ceiling	C-NS1
COP	CBX-64C
Wall / Car Door	Bead Blast+ Mirror Trim
Handrail	HR04 (POL)
Floor	Marble (Local)

## Entrance

Door	Bead Blast
Button & IND	VIX-M652
Jamb	J-101 (STSHL)





# Art Classic

## Specification

Ceiling	C-4081
COP	COP2 (BR34C(B) (Button) + UI15 (CPI)
Wall / Car Door	Bead Blast + Mirror Art Hairline Tin Gold Rose Etching (YS-1327)
Handrail	HR04 (POL)
Floor	Marble (Local)

## Entrance

Door	Mirror Art Hairline Tin Gold Rose Etching (YS-1327)
Button & IND Jamb	HBP11_BND J-101 (STSHL)

# Fixtures

## Ceiling



4180L



4081L

## Handrail



4900\_A



4900\_B



4900F

## COP



CBT-501



CBX-64C

## Button



BR27A



BR27A(B)



BR27B(K)



BR34C(B)

## Hall Button



HBP\_11B

## VID



HBP11\_BND



HBP11\_TFT

## Hall Lantern



HL13

## CPI



U15



U18

## HPI



U115

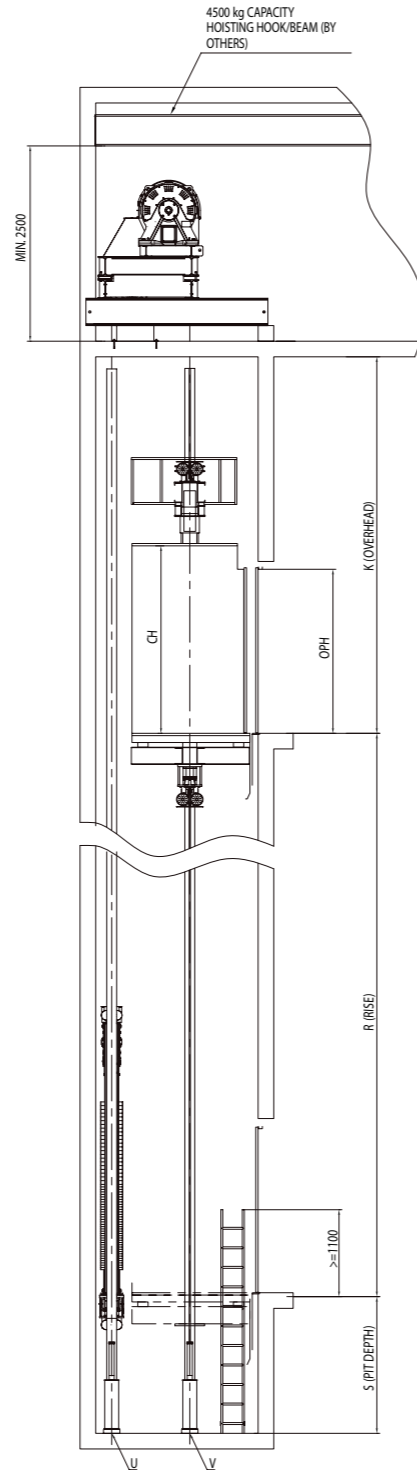
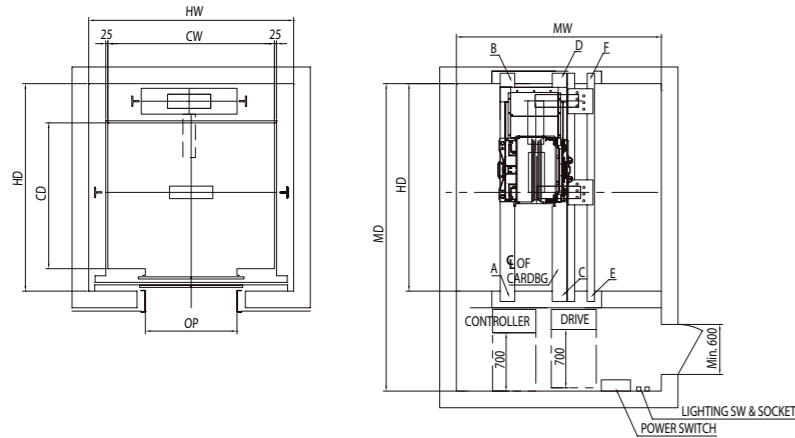


U118

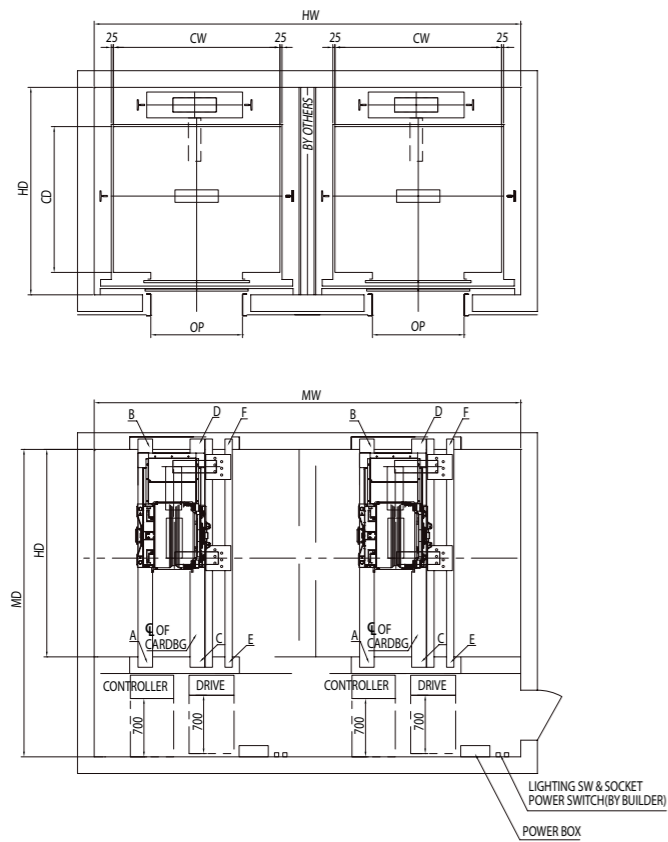
# Technical Data

Layout Dimensions | Speed : 3.0m/s ~ 3.5m/s

## Simplex



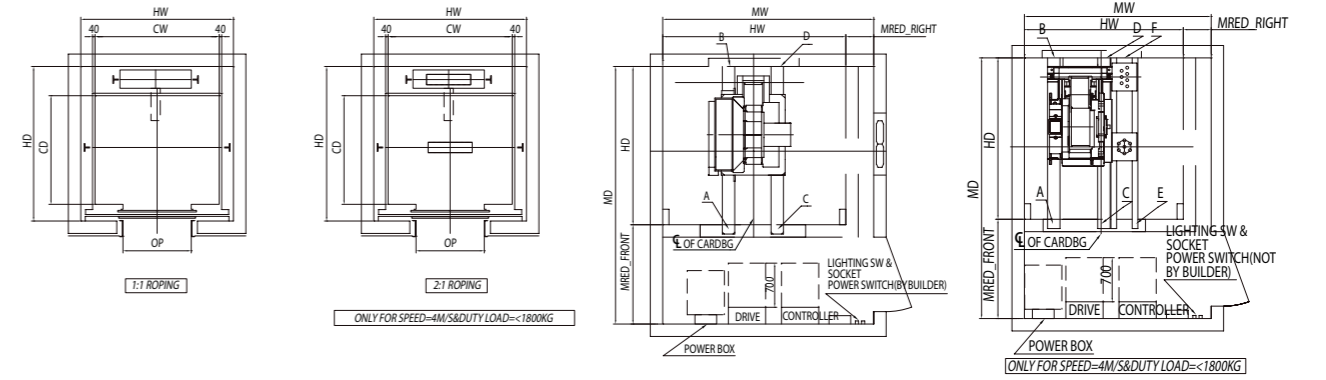
## Duplex



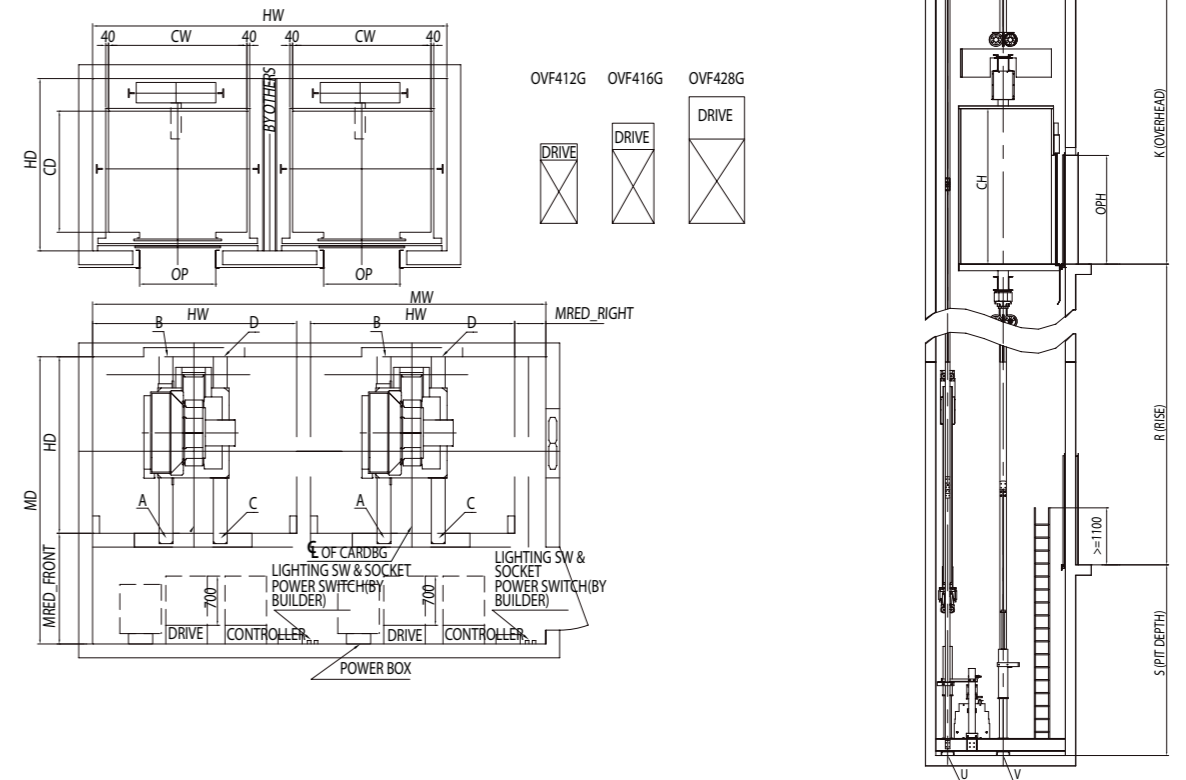
# Technical Data

Layout Dimensions | Speed : 4.0m/s ~ 7.0m/s

## Simplex



## Duplex



# Technical Data

## | Layout Dimensions | Speed : 3.0m/s ~ 4.0m/s

### Speed 3.0~3.5m/s

Based on Rear CWT

Speed (m/s)	Capacity		Entrance Opening (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load (N)							
	Person	Load(kg)		CW	CD	Simplex		Duplex		Simplex		Duplex		Machine Room							
			HW			HD	HW	HD	MW	MD	MW	MD	A	B	C	D	E	F	U	V	
3.0 ~ 3.5	12	900	900	1600	1350	2060	1980	4320	1980	2060	3180	4320	3180	2294	3733	2294	3733	3690	6994	13216	14168
	13	1000	900	1600	1400	2060	2030	4320	2030	2060	3230	4320	3230	2370	3859	2370	3859	3843	7260	13920	15076
				1600	1500	2060	2130	4320	2130	2060	3330	4320	3330	2352	3913	2352	3913	3819	7286	14064	15216
	15	1150	1000	2000	1350	2460	1980	5120	1980	2460	3180	5120	3180	2495	4055	2495	4055	4092	7697	15056	16512
			1100	2000	1350	2460	1980	5120	1980	2460	3180	5120	3180	2495	4055	2495	4055	4092	7697	15056	16512
			1000	1800	1500	2260	2130	4720	2130	2260	3330	4720	3330	2469	4105	2469	4105	4054	7702	15152	16608
	18	1350	1100	2000	1500	2460	2130	5120	2130	2460	3330	5120	3330	2616	4344	2616	4344	4348	8219	16500	18352
			1000	1800	1700	2260	2330	4720	2330	2260	3530	4720	3530	2332	4329	2332	4329	3842	7667	15300	17156
			1000	1900	1600	2360	2230	4920	2230	2360	3430	4920	3430	2616	4344	2616	4344	4348	8219	16500	18352
	21	1600	1100	2000	1750	2460	2380	5120	2380	2460	3580	5120	3580	2470	4675	2470	4675	4127	8287	17756	20112
			1100	2100	1600	2560	2230	5320	2230	2560	3430	5320	3430	2743	4817	2743	4817	4634	8935	16984	19340
			1100	2100	1700	2560	2330	5320	2330	2560	3530	5320	3530	2743	4817	2743	4817	4634	8935	17756	20112

### Speed 4.0m/s

Based on Rear CWT

Speed (m/s)	Capacity		Entrance Opening (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load (N)							
	Person	Load(kg)		CW	CD	Simplex		Duplex		Simplex		Duplex		Machine Room							
			HW			HD	HW	HD	MW	MD	MW	MD	A	B	C	D	E	F	U	V	
4.0	12	900	900	1600	1350	2160	2100	4520	2100	2510	3700	4870	3700	2294	3733	2294	3733	3690	6994	13216	14168
	13	1000	900	1600	1400	2160	2150	4520	2150	2510	3750	4870	3750	2370	3859	2370	3859	3843	7260	13920	15076
				1600	1500	2160	2250	4520	2250	2510	3850	4870	3850	2352	3913	2352	3913	3819	7286	14064	15216
	15	1150	1000	1800	1500	2360	2250	4920	2250	2710	3850	5270	3850	2469	4105	2469	4105	4054	7702	15152	16608
			1100	2000	1350	2560	2100	5320	2100	2910	3700	5670	3700	2495	4055	2495	4055	4092	7697	15056	16512
	17	1275	1100	2000	1400	2560	2150	5320	2150	2910	3750	5670	3750	2591	4213	2591	4213	4285	8033	15944	17652
			1000	1800	1700	2360	2450	4920	2450	2710	4050	5270	4050	2332	4329	2332	4329	3842	7667	15300	17156
	18	1350	1100	2000	1500	2560	2250	5320	2250	2910	3850	5670	3850	2616	4344	2616	4344	4348	8219	16500	18352
			1350	1100	2000	1550	2560	2300	5320	2300	2910	3900	5670	3900	2616	4344	2616	4344	4348	8219	16500
	21	1600	1100	2000	1750	2560	2500	5320	2500	2910	4100	5670	4100	2470	4675	2470	4675	4127	8287	17756	20112
			1200	2100	1600	2660	2350	5520	2350	3010	3950	5870	3950	2743	4817	2743	4817	4634	8935	16984	19340
	24	1800	1100	2000	1800	2560	2550	5320	2550	2910	4150	5670	4150	2649	5021	2649	5021	4483	8990	18000	20752
1300			2350	1600	2910	2350	6020	2350	3260	3950	6370	3950	2890	5071	2890	5071	4928	9469	19160	21916	
27	2000	1300	2350	1700	2950	2450	6100	2450	3300	4050	6450	4050	5346	9992	5346	9992	-	-	18564	21716	
30	2250	1300	2400	1800	2000	2550	4200	2550	2350	4150	4550	4150	5522	10544	5522	10544	-	-	19768	23424	

## | Layout Dimensions | Speed : 5.0m/s ~ 7.0m/s

### Speed 5.0~6.0m/s

Based on Rear CWT

Speed (m/s)	Capacity		Entrance Opening (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load (N)							
	Person	Load(kg)		CW	CD	Simplex		Duplex		Simplex		Duplex		Machine Room							
			HW			HD	HW	HD	MW	MD	MW	MD	A	B	C	D	E	F	U	V	
5.0 ~ 6.0	12	900	900	1600	1350	2160	2100	4520	2100	2510	3700	4870	3700	5491	9300	5491	9300	14396	14592	13216	14168
	13	1000	900	1600	1400	2160	2150	4520	2150	2510	3750	4870	3750	5521	9486	5521	9486	14728	15124	13920	15076
				1600	1500	2160	2250	4520	2250	2510	3850	4870	3850	5391	9541	5391	9541	14576	14972	14064	15216
	15	1150	1000	1800	1500	2360	2250	4920	2250	2710	3850	5270	3850	5617	9919	5617	9919	15636	16332	15152	16608
			1100	2000	1350	2560	2100	5320	2100	2910	3700	5670	3700	5855	9875	5855	9875	16024	16720	15056	16512
	17	1275	1100	2000	1400	2560	2150	5320	2150	2910	3750	5670	3750	6051	10203	6051	10203	16944	17892	15944	17652
			1000	1800	1700	2360	2450	4920	2450	2710	4050	5270	4050	5382	10347	5382	10347	15820	16920	15300	17156
	18	1350	1100	2000	1500	2560	2250	5320	2250	2910	3850	5670	3850	6113	10516	6113	10516	17620	18720	16500	18352
			1350	1100	2000	1550	2560	2300	5320	2300	2910	3900	5670	3900	5914	10471	5914	10471	17132	18232	16500
	21	1600	1100	2000	1750	2560	2500	5320	2500	2910	4100	5670	4100	5631	11011	5631	11011	17396	18992	17756	20112
			1200	2100	1600	2660	2350	5520	2350	3010	3950	5870	3950	6046	10974	6046	10974	18152	19748	16984	19340
	24	1800	1100	2000	1800	2600	2550	5400	2550	2950	4150	5750	4150	5839	11431	5839	11431	18452	20448	18000	20752
1300			2350	1600	2950	2350	6100	2350	3300	3950	6450	3950	6341	11485	6341	11485	19564	21564	19160	21916	
27	2000	1300	2350	1700	2950	2450	6100	2450	3300	4050	6450	4050	6253	11933	6253	11933	20084	22484	18564	21716	
30	2250	1300	2400	1800	2000	2550	4200	2550	2350	4150	4550	4150	6428	12531	6428	12531	21380	24280	19768	23424	

### Speed 7.0m/s

Based on Rear CWT

Speed (m/s)	Capacity		Entrance Opening (mm)	Car Size		Hoistway Size				Machine Room Size				Reaction Load (N)							
	Person	Load(kg)		CW	CD	Simplex		Duplex		Simplex		Duplex		Machine Room							
			HW			HD	HW	HD	MW	MD	MW	MD	A	B	C	D	E	F	U	V	
7.0	12	900	900	1600	1350	2160	2100	4520	2100	2510	3700	4870	3700	5605	9653	5605	9653	15328	15524	13216	14168
	13	1000	900	1600	1400	2160	2150	4520	2150	2510	3750	4870	3750	5640	9853	5640	9853	15700	16096	13920	15076
				1600	1500	2160	2250	4520	2250	2510	3850	4870	3850	5677	10073	5677	10073	16212	16612	14064	15216
	15	1150	1000	1800	1500	2360	2250	4920	2250	2710	3850	5270	3850	5884	10415	5884	10415	17160	17860	15152	16608
			1100	2000	1350	2560	2100	5320	2100	2910	3700	5670	3700	6015	10322	6015	10322	17236	17932	15056	16512
	17	1275	1100	2000	1400	2560	2150	5320	2150	2910	3750	5670	3750	6087	10594	6087	10594	17800	18748	15944	17652
			1000	1800	1700	2360	2450	4920	2450	2710	4050	5270	4050	56							

# Technical Data

## Power Supply Plan | Speed : 3.0~7.0 m/s

(380V)

Speed (m/s)	Capacity		Motor Capacity (kW)	Current (A)		Heat Dissipation (J/H)
	Person	Load(kg)		Rated Current	Startup Current	
3.0	12	900	21	31	57	1716.0
	13	1000	22	34	59	1869.0
	15	1150	25	38	63	2099.0
	18	1350	31	46	76	3083.0
	21	1600	35	53	83	3547.0
3.5	12	900	26	40	75	2644
	13	1000	28	43	79	2860
	15	1150	31.0	48	85	3184
	18	1350	35.0	54	91	3617
4.0	21	1600	40	61	96	4158
	12	900	33	50	131	3075
	13	1000	35	54	136	3297
	15	1150	39	59	146	3630
	17	1275	42	63	152	3909
	18	1350	43	66	156	4075
	21	1600	49	74	170	4632
	24	1800	53	81	179	5077
5.0	27	2000	56	85	163	4679
	30	2250	61	93	174	5159
	12	900	43	64	171	3303
	13	1000	45	68	177	3532
	15	1150	49	74	189	3903
	17	1275	52	79	196	4203
	18	1350	54	83	201	4383
	21	1600	61	93	214	4984
	24	1800	67	101	222	5464
	27	2000	72	110	213	5945
6.0	30	2250	77	117	220	6546
	12	900	51	77	206	4088
	13	1000	54	82	213	4376
	15	1150	59	90	227	4809
	17	1275	63	96	236	5170
	18	1350	66	100	242	5385
	21	1600	74	113	258	6106
	24	1800	81	123	267	6683
	27	2000	87	133	256	7260
7.0	30	2250	-	-	-	-
	12	900	61	92	241	4922
	13	1000	64	98	250	5258
	15	1150	70	107	266	5763
	17	1275	75	114	277	6182
	18	1350	78	118	283	6435
	21	1600	76	115	286	6239
24	1800	83	127	297	6912	

## Overhead, Pit & Machine Room Height

Based on EH=2100, CH=2400, Rear CWT

Speed(m/s)	Rise (m)	Load(kg)	Overhead(mm)	Pit Depth(mm)	Machine Room Height(mm)
3	-	900~1150	5170	3030	2500
		1275~1600	5170	3080	
3.5	-	900~1150	5460	3210	
		1275~1600	5460	3260	
4	~200	~1350	5880	4210	2580
		~1800	5930	4210	
		~2250	5940	4210	
5	~200	~1350	6810	5310	2570
		~1800	6810	5310	
		~2250	6800	5320	
	200<Rise<=300	~1350	6980	5310	
		~1800	6980	5310	
		~2250	6970	5320	
6	~200	~1350	7580	7270	
		~1800	7580	7270	
		~2250	7570	7280	
	200<Rise<=300	~1350	7780	7270	
		~1800	7780	7270	
		~2250	7770	7280	
7 (Reduced2)	~200	~1350	6860	5310	
		~1800	6860	5310	
	200<Rise<=300	~1350	6860	5310	
		~1800	6860	5310	

# Technical Data

## Technical Features

### Operation Functions

● Standard ○ Option

Function	Description	
[ADO]	Advance Door Opening	●
[ALM]	Alarm for Mechanics	●
[ARD]	Automatic Car Return - Automatic car return parks the car at a defined landing with the doors in a defined state, when the car has no demand.	●
[BFS]	Oil Buffer Switch	●
EMC/EMI	EMC/EMI (Controller and drive)	●
[LW]	Load weighing Device	●
[NDG]	Nudging Door - If the doors are prevented from closing for a fixed period time, the door reversal devices are rendered inoperative.	●
[OLD]	Overload Operation - When the load of the car exceeds 100% capacity, overload operation is triggered. This operation opens the door, sounds the buzzer, and illuminates the overload lamp. The overload condition is removed when the weight of the car falls below the overload weight.	●
[RLEV]	Re-leveling Operation	●
[TCIB1]	Top of Car Inspection/Machine Room Inspection	●
[THB]	Motor Thermic Device	●
[UCM]	Protection Against Uncontrolled Car Movement - A traction drive lift shall be provided with a means to prevent uncontrolled movement of the lift car away from the landing with (both) the landing door and the car door not in the locked position.	●
[FAD]	Failure Auto Diagnose	●
[ACCB]	Audible Car Call Button (Sound Car Buttons) - Answer back sound.	○
[ANS]	Anti-Nuisance Operation - Upon activation, all registered car calls are canceled. This is used to prevent the car from answering car calls when no one is in the car.	○
[ATT]	Attendant Operation - Attendant operation is activated by a switch located in the car operating panel. The car operated automatically except that judgment as to car loading, door closing, and hall call bypass are made by the attendant. - Door operation and the starting of the car are performed by applying constant pressure to the door close button. Constant pressure applied to the non-stop button bypasses hall calls as the car travels through the hoist way to serve registered car calls. Nudging, door protection devices and load weighing bypass are inhibited.	○
[BMS]	BA interface - Standard BA interface protocol is RS485. If customers need other protocol BA board, please make deviation. - If customers need more information, please check Oits Document D7001_BA board user manual.	○

### Operation Functions

● Standard ○ Option

Function	Description	
[CCC]	Car Call Cancellation	○
[CARSIGN]	Car Arrival Chime	○
[CARLOCK]	Car Door Lock	○
[DHB]	Door Hold Button Operation - Door hold button operation acts like a door open button, but the operation keeps the doors open for a defined period of time. This time can be canceled by pressing a door close button or car call button. This operation is not affected by other door monitoring systems. Note that hall calls are re-assigned to other available cars.	○
[EEC]	Top of Car Emergency Exit	○
[EFO]	Emergency Fireman Operation - All cars not on fireman's service shall be commanded to make an express priority run to the designated return landing as soon as a fireman's car is switched to Emergency Fireman's Service. For "EFO" the cars are parked until the end of Emergency Fireman's Service. - The initiation signal may be triggered by a smoke sensor and /or a keyswitch "EFK" wired in parallel. - Upon recognition of fireman's service, a car shall return non-stop to the designated return landing and park with the doors fully open. Optionally the doors shall be closed again after 15 seconds with the door open button operational. - Door open buttons, door protection devices, car calls, lanterns, and direction lamps shall be extinguished and / or rendered inoperative during Phase I. The Sky II OCSG GECB will provide the interface for smoke sensor, voltage is 30VDC. The sensor and wiring should be provided by customer.	○
[EFS]	Emergency Fireman Service (Automatic) - Emergency Fireman's Service Phase II, Type I shall automatically place the car on independent service when the elevator is at the designated return landing from Phase I with the doors fully open.	○
[EPO]	Emergency Power Operation - This feature can only be used if the building is equipped with an emergency power generator. In case of regular power supply shut down, this feature provides the following operations: All cars except cars in inspection mode or in side emergency exit operation ("SEE") are successively sent to a selected landing where they open their doors at that landing and then stay idle with open doors. The return to full normal operation is done automatically when regular power supply is reestablished. - Note: If "EFS" (Firemen's Service) is provided, it is obvious that all cars selected for "EFS" will be served with "EPO-C/D".	○
[EQO]	Earthquake Operation - Earthquake operation is actuated by a trigger which is connected with a controller. The trigger produces a signal when an earthquake happens. Upon receipt of the signal, a car in motion will make a controlled emergency stop, and then move at slow speed in a direction away from the counterweight. When the car reaches the next door zone, the car will stop and open its doors and remove itself from service. The car will remain out of service until manually inspected and reset.	○
[HCM]	Hall Chime - One gong when the up direction and double gong when the down direction.	○
[ISC]	Independent Service Operation - Independent service operation removes the car from the group, permitting it to respond to registered car calls while prohibiting the doors from closing unless constant pressure is applied to a start button. While on this operation, the car ignores all hall calls and the hall lanterns do not illuminate.	○
[SSM]	Speech Synthesis Module - The speech synthesis option converts car position and direction information into an audible announcement as the elevator arrives at a landing. - Chinese and English are available.	○