



ISO 9001
Certificate



ISO 14001
Certificate



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SOLON[®] Premium

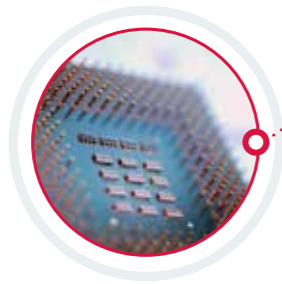
Roped Machine Roomless Elevator

Reaching new heights



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

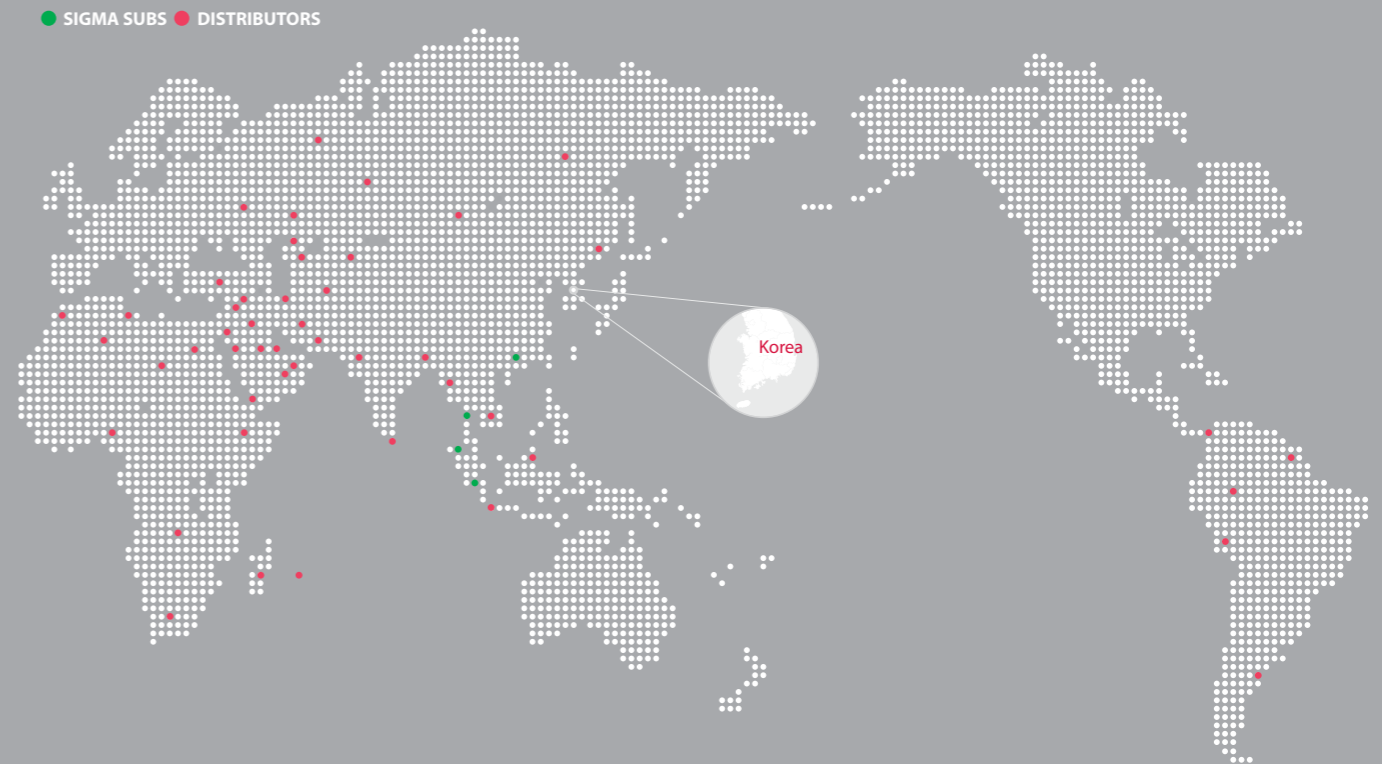
Sigma's international design centers are staffed with professionals who continue to pursue ideal aesthetic designs to satisfy customers needs.



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



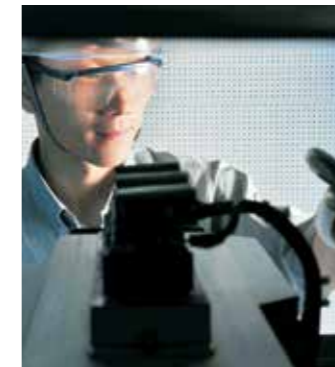
SOLON[®] Premium

Innovative mid-rise elevator with a highly efficient and compact PMSM gearless traction machine



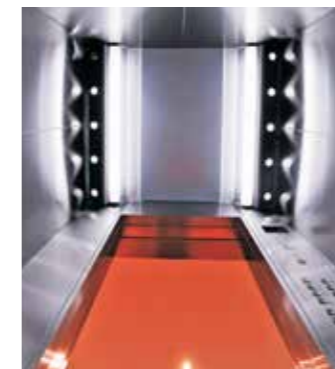
Space Saving

Scientific hoistway layout provides smaller hoistway size and class leading buffer height, pit depth and top storey space effectively utilizing the building space.



Intelligent Design Easy maintenance

The main components of the Solon Premium are installed in the hoistway where the traction machine is installed on a hoistway rail. The integrated controller is installed outside the landing door at the top floor for easy maintenance and inspection.



Reliable Quality Upgraded Safety High Performance

In addition to energy and power savings, Sigma also applies multiple advanced technologies to upgrade safety of the Solon Premium. From the start of the product development, Solon Premium has followed a strict design philosophy. All safety components have passed E3 certification.



Environmental Sensitivity

As global building design increasingly emphasizes environmental sensitivity, Sigma is focused on manufacturing products that better meet customer needs.

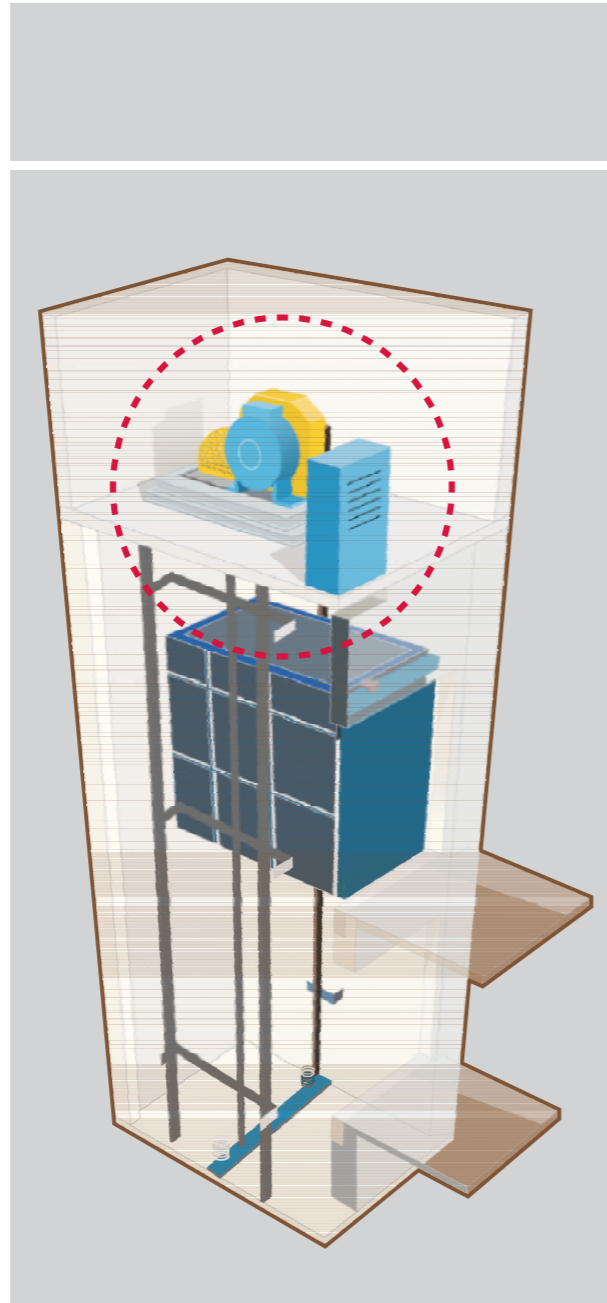
Space Saving

Solon Premium creates possibilities in limited building space, saving space and construction costs. Compared with other MRL elevators, Solon Premium offer better quality and performance in terms of safety, reliability, energy savings and ride comfort.

Coverage	1.0 ~ 1.75m/s	450 ~ 1000kg	up to 30 stops
	Speed	Duty	Stops



Solon Premium



Traditional Elevator

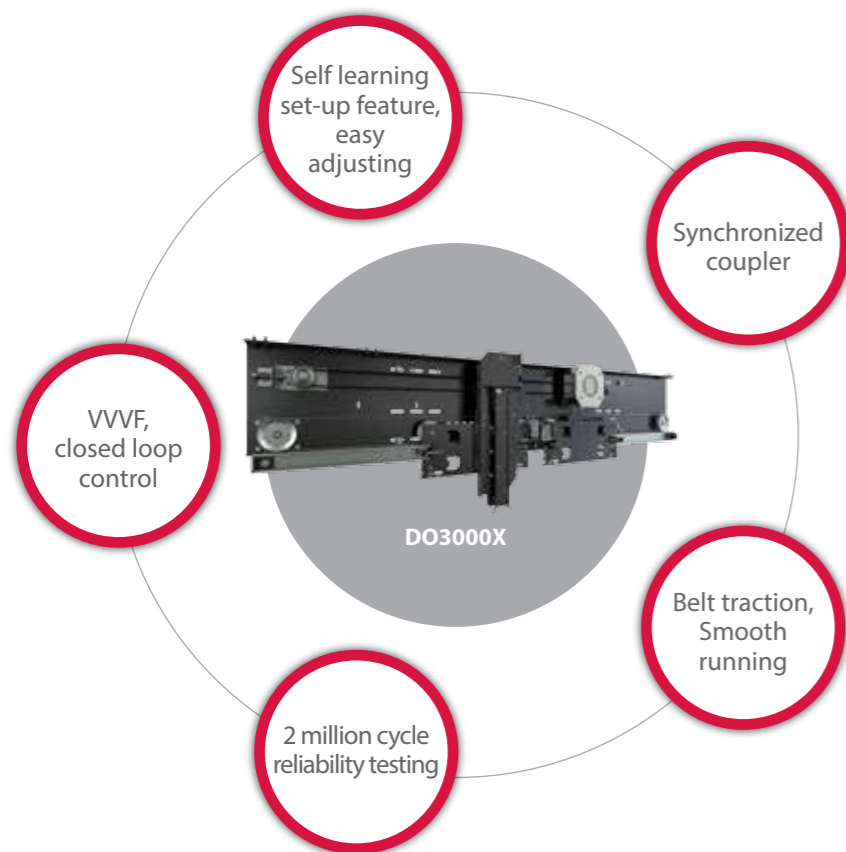
Energy Saving Environmental Protection

A permanent magnet synchronous gearless elevator traction machine is used in the Solon Premium with drive efficiency of up to 90%, which increases the operating efficiency and saves energy. No lubricating oil is required which helps to reduce oil pollution. The Solon Premium adopted advanced control technology with an integrated controller which saves energy and building space. The SIN/COS speed encoder offers high flexibility, accurate leveling and smoother elevator braking, thus improving ride comfort for customers.



Reliable Quality Upgraded Safety

By strictly complying with the highest safety standards, the Solon Premium ensures passenger safety. The Solon Premium is equipped with 11 different elevator safety components, such as protection device for light curtain, secure identification device, overload protection device, protection device for end station and man-machine interaction device. All safety devices have passed E3 global product safety certification.



Intelligent Design Easy Maintenance

The main components of the Solon Premium are installed in the hoistway where the traction machine is installed on a hoistway rail. The integrated controller is installed outside the landing door at the top floor for easy maintenance and inspection operation. The permanent magnet synchronous gearless traction machine used in the Solon Premium has a remote brake release system, which allows brake release for rescue outside the landing in case no external power supply is provided. Sufficient maintenance space is reserved in the hoistway to facilitate maintenance of Solon Premium traction machine. Besides, parameter adjustment ports are reserved in the control system where controller maintenance can be carried out without entering the hoistway.

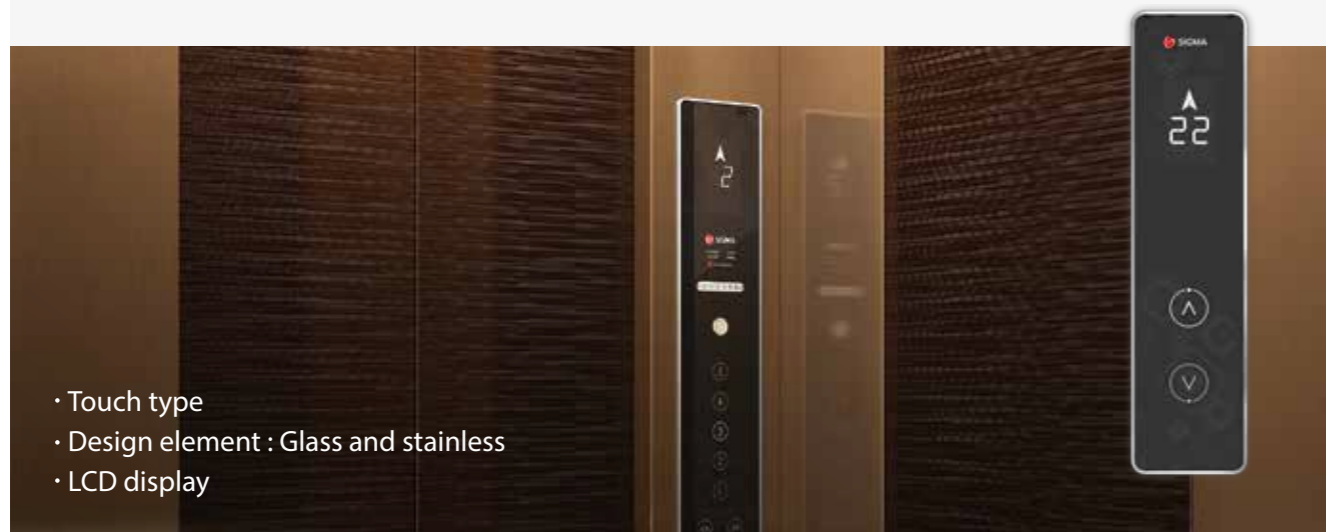


New Fixtures & Materials

New Fixtures



- FRP type
- Design element : Plain and Arc
- LCD display



- Touch type
- Design element : Glass and stainless
- LCD display

New Materials



White



Black



Bronze



Modern | Black |



| Front View |



| Rear View |

Specification

CEILING	C-PS1
COP	COP30VG-C
CAR WALL FINISH	PCM-S01+PCM-S02
HANDRAIL	HR038POL
FLOOR	DT01

! The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

Modern | Bronze |



| Front View |



| Rear View |

Specification

CEILING	C-LA1
COP	COP30VG-C
CAR WALL FINISH	PCM-S04+PCM-S07
HANDRAIL	HR038POL
FLOOR	DT03

! The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

Classic | Mirror



Front View



Rear View

Specification

CEILING	C-NS1
COP	COP29FH-C
CAR WALL FINISH	Stainless Steel Mirror Etching (EW4-034)
HANDRAIL	HR038POL
FLOOR	DE103

The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

Entrance



JAMB FINISH	Wide Tapered Jamb(STSMR)
DOOR FINISH	PCM-S07
HALL IND & BUTTON	VHB30BG-C



JAMB FINISH	Narrow Jamb(STSMR)
DOOR FINISH	PCM-S01
HALL IND & BUTTON	VHB30BG-C



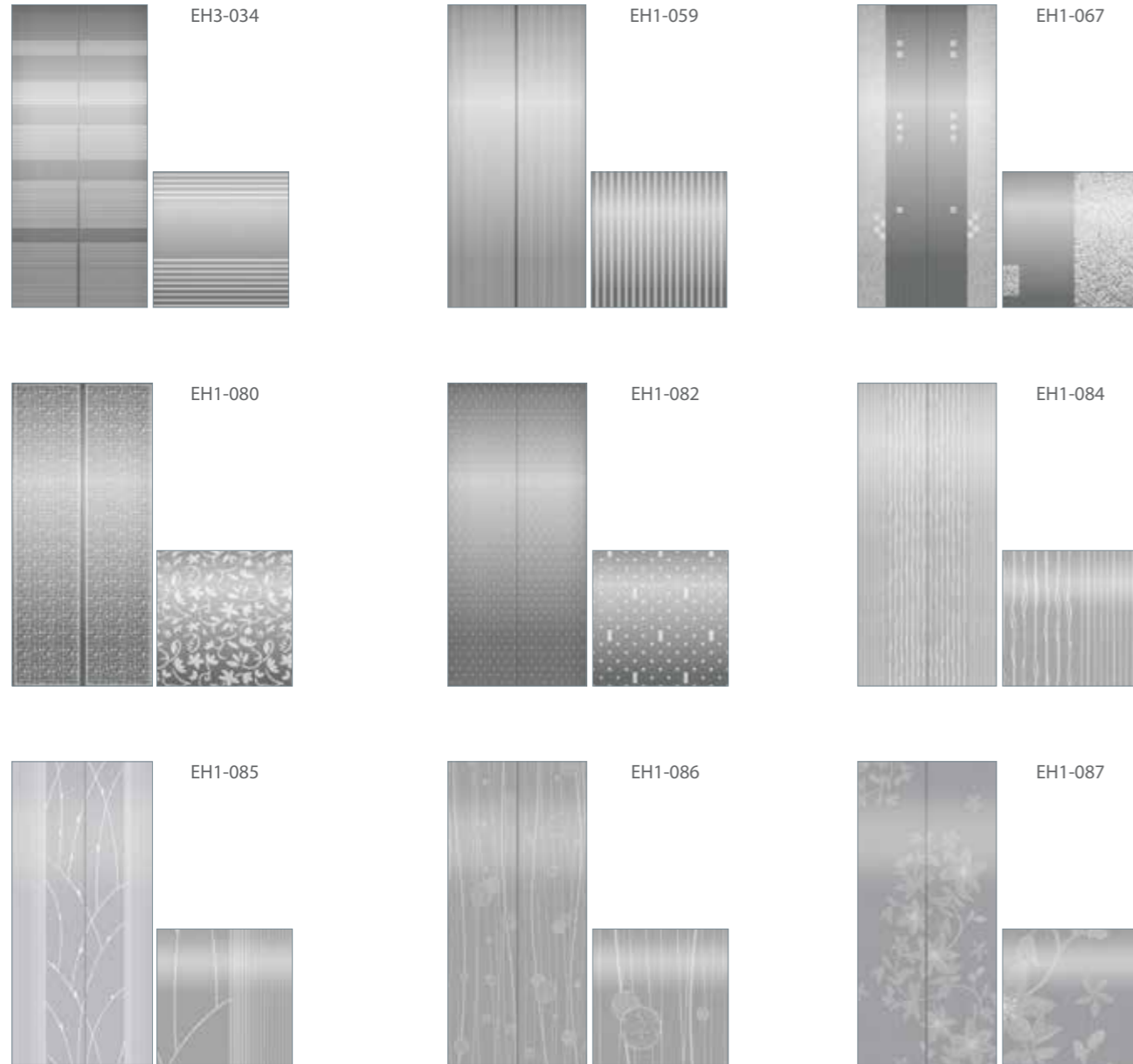
JAMB FINISH	Narrow Jamb(STSHL)
DOOR FINISH	STSHL
HALL IND & BUTTON	VIX-M652



JAMB FINISH	Wide Tapered Jamb with Transom Panel(STSHL)
DOOR FINISH	Stainless Steel Hairline Etching Finish(EH1-085)
HALL IND	HIX-A162
HALL BUTTON	HBM-S49

The actual product can be different (changed) depending on design

Etching Pattern



Colors



! The actual product can be different (changed) depending on design

Ceiling

Standard



Option



! The actual product can be different (changed) depending on design

COP

Standard



CBL-82C CBX-22C CBX-16C



CBL-85CN COP27H-A COP25H-A

Option



COP30VG-C COP29FH-C CBX-64C

! The actual product can be different (changed) depending on design

HPI & HBT

Standard



HIX-C162



HIX-A162



HIL-A193



HIL-C193



HBM-R45 HBM-RA55 HBM-R95 HBM-S49



HBM-SA9S HBM-S99 HBM-RBBS HBM-R65

VPI

Standard



VIX-M652 VIX-M692 VIX-MA52S VIX-MA92S



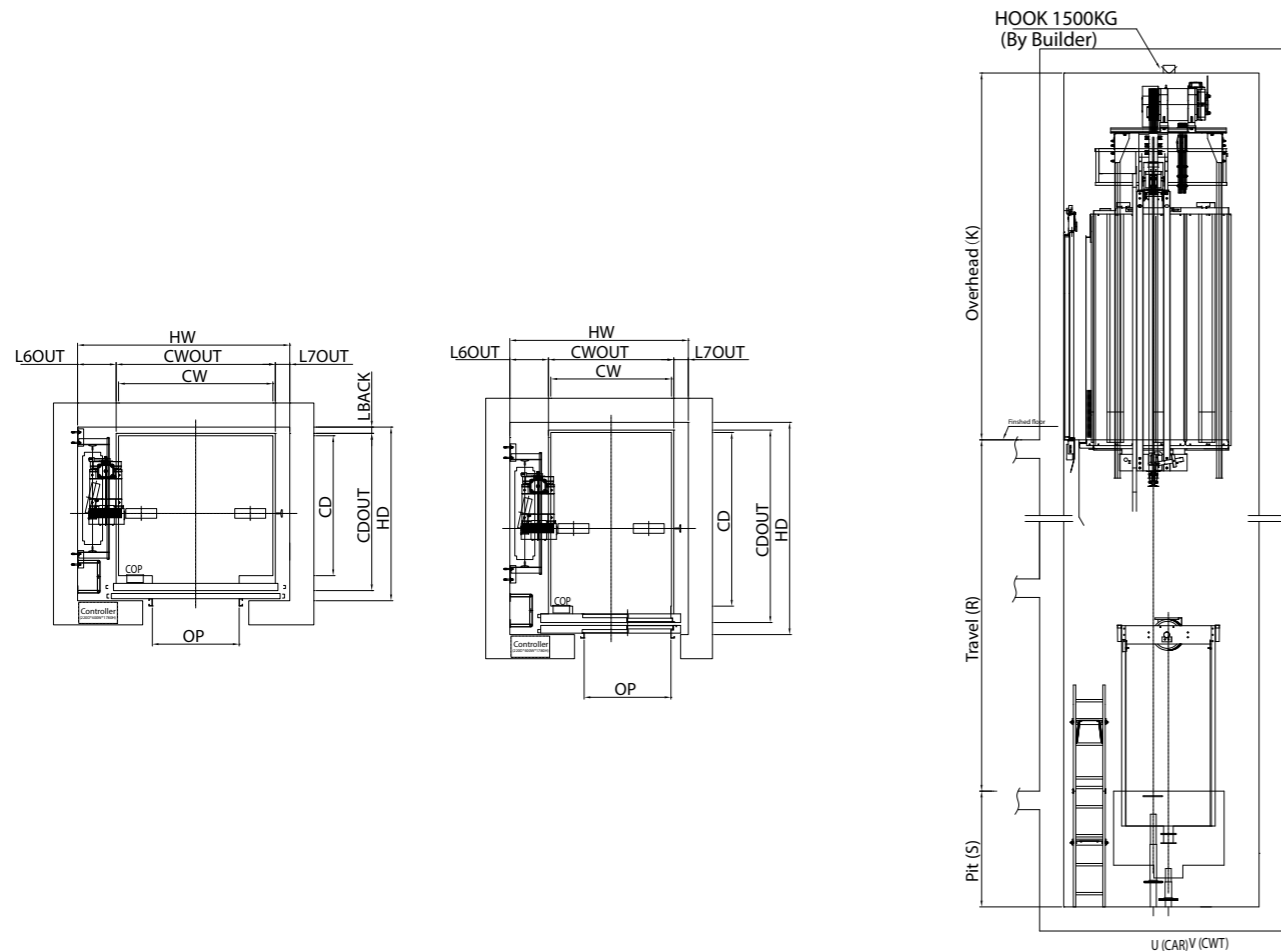
VIL-MBB2SN VHB30BG-C VHB29H-C



VHB27H-AS VHB25H-AS

! The actual product can be different (changed) depending on design

Technical Data



Overhead, Pit

Application Regulation[CODE]	Speed(m/s)	Ceiling Height (mm)	Overhead(mm)	Pit Depth (mm)
EN81-20	1.0	2300	4000	1250
	1.5		4200	1350
	1.75		4250	1400
	1.0	2400	4100	1250
	1.5		4300	1350
	1.75		4350	1400
Standard	1.0	2300	3850 (4000)	1250
	1.5		4050 (4200)	1350
	1.75		4150 (4250)	1400
	1.0	2400	3950 (4100)	1250
	1.5		4150 (4300)	1350
1.75	4250 (4350)	1400		
MS2021	1.0	2300	4050	1250
	1.5		4200	1350
	1.75		4250	1400
	1.0	2400	4150	1250
	1.5		4300	1350
1.75	4350	1400		

() Overhead is for Mongolia and Venezuela market

Technical Data

| Layout Dimensions | Speed : 1.0m/s ~ 1.75m/s

[Standard / EN code]

Speed (m/s)	Capacity		Opening Width (mm)	Opening Type	Car Size		Hoistway Size				Reaction Load (N)	
	Person	Load(kg)			CW	CD	Simplex		Duplex		Pit	
							HW	HD	HW	HD	U (Car)	V (CWT)
1.0~1.75	6	450	700	CLD	1000	1250	1750	1600	3700	1600	53955	45126
	7	550	800		1100	1250	1900	1650	4000	1650	59450	48560
	8	630	800		1100	1400	1900	1750	4000	1750	63960	48658
	8	630	800		1250	1250	1950	1650	4100	1650	63960	48658
	10	800	800		1350	1350	1950	1750	4100	1750	73380	53366
	13	1000	900		1600	1450	2200	1800	4600	1800	85543	65432
	6	450	800	TLD	1000	1250	1600	1650	3400	1650	53955	45126
	7	550	800		1100	1250	1700	1650	3600	1650	59450	48560
	8	630	900		1100	1400	1700	1800	3600	1800	63960	48658
	10	800	900		1200	1450	1800	1850	3800	1850	73380	53366
	13	1000	900		1250	1800	1850	2200	3900	2200	85543	65432

[Malaysia]

Speed (m/s)	Capacity		Opening Width (mm)	Opening Type	Car Size		Hoistway Size				Reaction Load (N)	
	Person	Load(kg)			CW	CD	Simplex		Duplex		Pit	
							HW	HD	HW	HD	U (Car)	V (CWT)
1.0~1.75	7	480	700	CLD	1100	1200	1750	1600	3700	1600	53955	45126
	8	545	700		1100	1300	1750	1700	3700	1700	59450	48560
	9	615	700		1150	1400	1800	1750	3800	1750	63960	48658
	10	685	800		1250	1400	1950	1750	4100	1750	66708	51600
	11	750	800		1350	1400	2000	1800	4200	1800	73380	53366
	13	885	900		1550	1400	2200	1800	4600	1800	77990	57682
	15	1025	900	1600	1550	2200	1900	4600	1900	85543	65432	
	7	480	700	TLD	1100	1200	1700	1600	3600	1600	53955	45126
	8	545	700		1100	1300	1700	1700	3600	1700	59450	48560
	9	615	700		1150	1400	1750	1800	3700	1800	63960	48658
	10	685	800		1250	1400	1850	1800	3900	1800	66708	51600
	11	750	800		1250	1550	1850	1950	3900	1950	73380	53366
	13	885	900		1250	1750	1850	2150	3900	2150	77990	57682
	15	1025	900		1250	2000	1850	2400	3900	2400	85543	65432

| Power Supply Plan | Speed : 1.0 ~ 1.75m/s

Speed (m/s)	Capacity		Motor Capacity (kW)	MCCB Capacity of Building (A)	Power Supply Capacity (kVA)	Lead-in Wire Size (mm ²)		Earth Wire Size (mm ²)		Heat Output (kcal/H)	Starting Power (kVA/set)
	Person	Load(kg)				Simplex	Duplex	Simplex	Duplex		
7/8	550(545)	5	30	15	6	6	6	6	825	6	
8	630(615)	5	30	15	6	6	6	6	945	6	
10/11	800(750/685)	5	40	15	6	6	6	6	1200	6	
13/15	1000(1025/885)	6.3	40	15	6	10	6	10	1500	7.6	
1.5	6	450(480)	8	60	15	6	10	6	10	1013	9.6
	7/8	550(545)	8	60	15	6	10	6	10	1238	9.6
	8	630(615)	8	60	15	6	10	6	10	1418	9.6
1.75	10/11	800(750/685)	8	60	15	10	10	10	10	1800	9.6
	13/15	1000(1025/885)	10	60	20	10	16	10	16	2250	12
	6	450(480)	9	60	20	6	10	6	10	1181	10.8
	7/8	550(545)	9	60	20	6	10	6	10	1444	10.8
	8	630(615)	9	60	20	6	10	6	10	1654	10.8
10/11	800(750/685)	9	60	20	10	10	10	10	2100	10.8	
13/15	1000(1025/885)	11.7	60	27	10	16	10	16	2625	14	

() Load is for Malaysia market

Technical Data

Technical Features

● standard ○ option

Function	Description	
Automatic Operation	Elevator operates automatically	●
Anti-nuisance Operation	In case of a significant difference between the number of calls registered on the car operating panel and actual load in the elevator, the elevator prevents unnecessary operation by canceling all registered calls when it arrives at the nearest floor.	●
Car Call Cancellation	Allows cancellation of an incorrectly registered car call if a passenger accidentally push an incorrect button, the call can be cancelled by pressing the same button once more.	●
Nearest Stop	When the car stops between the floors due to a mechanical malfunction, it will move to the nearest floor to enable passengers to exit safely.	●
Automatic Door Open & Close Time Adjustment	Door open and close are automatically adjusted depending on whether it is a hall call or a car call, increasing the operating efficiency.	●
Car Door Safety Shoe	Extending the full height of the car door, this device enables the doors to return to the fully open position, should the door encounter a person or obstacle while closing.	●
Automatic Car Light & Fan Switch	Car illumination and fan are turned off automatically to save energy.	●
Bypass Operation (80%)	If the actual load exceeds 80% of the allowable maximum load, the elevator will not react to calling signals from other floors.	●
Over Load (110% of rated load) Holding Stop	When the load of passengers exceeds the maximum capacity, a buzzer will activate and the elevator remains at that floor. When passengers step out of the elevator, the buzzer will stop and the elevator doors will close and operation continues.	●
Car Position Display	Car position display in car or hall, operated by car indicator or hall indicator.	●
Over Speed Governor	Located at the top of the hoistway, engages the governor rope, and helps activation of the elevator safety device, should the elevator car accelerate beyond the predetermined maximum speed for both "up and down" direction.	●
Emergency Lighting Feature	In case of power failure, the emergency light will be turned on and the light will maintain on for certain period of time	●
Changeable Reference Floor	The reference floor can be changed by the customer.	●
Inspection Mode	When checking and repairing, the elevator will operate at a lower speed as to ensure technician's safety.	●
Terminal Limit Switches	Prevents the elevator from traveling beyond a terminal landing.	●
Intercom	Provides emergency communication between passengers in the car and the machine room or the building personnel in a security or maintenance room.	●
Car Chime	Arrival signal	●
Duplex	2 Unit duplex control	○
Firemen Operation	In case of fire, firemen can use the elevator which is stopped at the specified floor in order to support fire-fighting.	○
Fire Return Operation	In case of fire, every car will return to the specified floor to evacuate passenger safely.	○
Automatic Rescue Device	In case of power failure, when the building has no emergency power supply, the elevator is sent to the nearest floor by DC power battery to prevent passengers from being trapped inside the car.	○
Supervisory Interface	Provide dry contact (BA Interface)	○
Earthquake Sensor	When earthquakes occur, the device will force the elevator to stop at the nearest floor with door fully opened, and the elevator will stop operating. The elevator will not operate until reset.	○
Voice Synthesizer	Automatic broadcast of status information of the elevator.	○
Night Noise Restriction	When a timer or RTC (Real Time Clock) reaches designated time, chime and/or gong is deactivated.	○
CCTV	Provide CCTV signal from car to supervisory room. Customer provides CCTV equipment and CCTV cable from machine room to supervisory room. Sigma provides CCTV cable from car to controller and hole position of CCTV equipment on ceiling.	○

SOLON[®] Premium

Gearless Machine Room Elevator
technologies that deliver a greener future

