



02

VERTIZ  
SERVICE ELEVATORS





# About Us

VERTIZ Pte Ltd, established in Singapore, provides Vertical Transportation and lifting solutions globally.

Our partnerships in Europe, China and Japan to name a few, has enabled us in providing various vertical and inclined transportation solutions such as Elevators, Escalators, moving walks, platform lift, dumbwaiters, scissors table car lifting platform to name a few.

We take pride in offering specially tailored solutions such as for Singapore Grand Prix, the only formula one night race and large scale villa projects in South east Asia, among others.

We aim to become a one stop solution, providing premium services for all our customers through our expertise and our keen appetite to improve our products and services to our valued customers and agents.

Working through our agents in the Asia Pacific Region and other parts of the world, we have established an extensive network of expertise, band together with experience in Marine vertical Transportation, high end boutiques project, villa projects, hotel projects to name a few.



## Facilities

With advanced R&D technology, and global standardized parts for productions, Vertiz Elevator ensures the reliability of each product in our production.



## Certifications

Our products are EN81 certified and TUV SUD, CE and other certificates can be provided on request. Please do not hesitate to contact us, our team will be glad to assist.







## Get a Lift with V.E.R.T.I.Z

We pride ourselves to provide the best Vertical transportation, with high Efficiency, Robust design, up to date Technology and Innovation from our Zealous Team.

**VERTIZ, Safe, Intelligent, Green, Intuitive**



VTP500/VPL600



### Safe



Comprehensive Enhancement  
Safety Guarantee

### Intelligent



Smart Technology  
Internet Connectivity



### Green



Green  
Eco-Efficient



### Intuitive



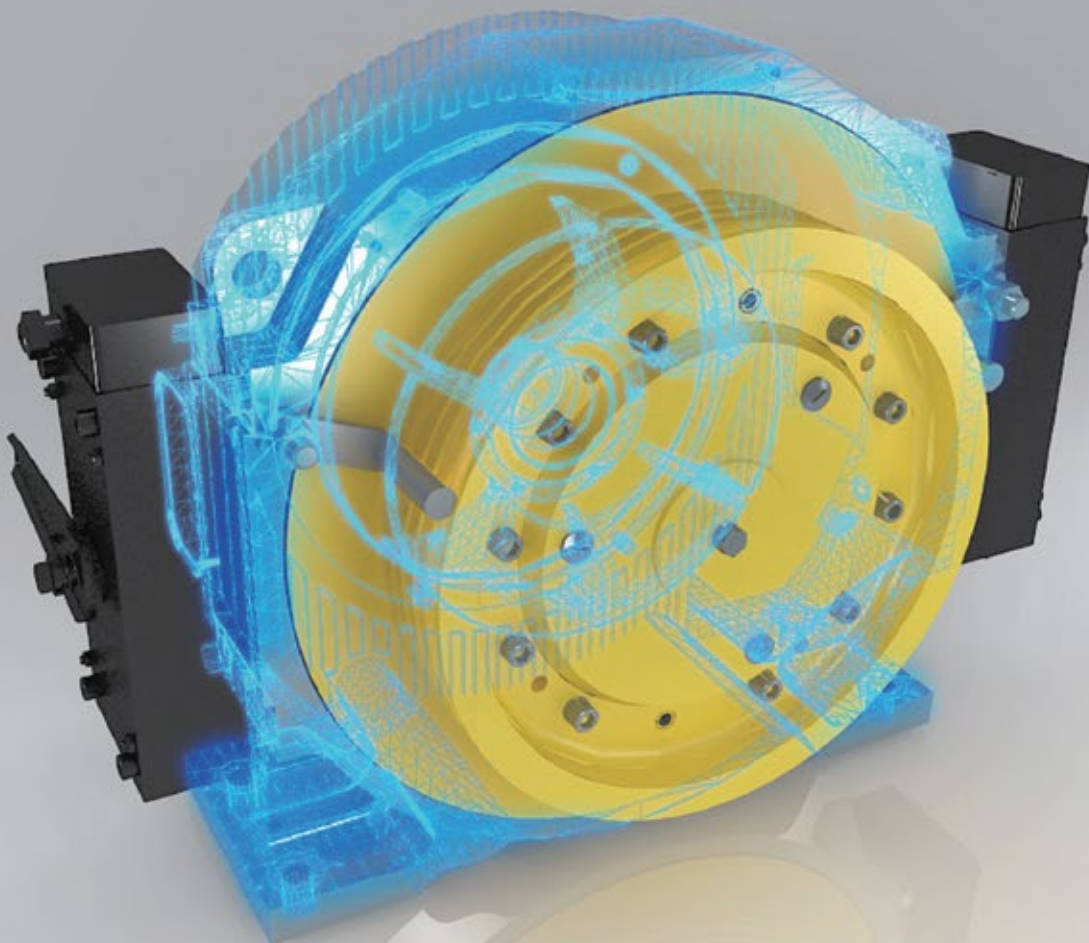
Universal Design  
Ease of use





# Permanent Magnet Synchronous Gearless Traction Machine

- Application of quality precision permanent magnet and traction machine automated winding technology produces a new generation of PM machine enhancing comfort and safety.
- Implementation of innovative and silent braking system has allow the machine to be safer and quieter.
- Self-testing of traction machine brake force ensures safety and continuous operation.



# Comprehensive Enhancement Triple Security Guarantee

1. New design of landing door mechanism to prevent passengers from accidental falling into the lift shaft.
2. New design of linkage device for landing door and car door to prevent passengers from accident when attempting self-rescue in the car.
3. Prevent passengers from accident when entering or exiting the car should there be unintended car movement.

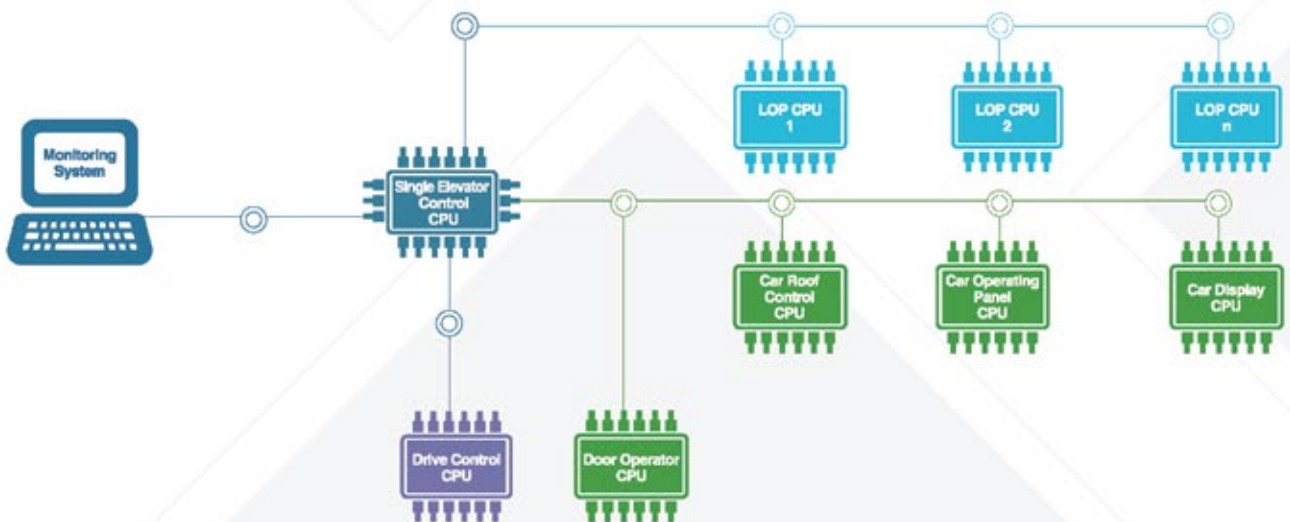




# Digital Control Technology



- Adopting the sixth generation module for the system hardware, extending the service life of the control system.
- Adopting dual 32-bit embedded processor and drive control processor, to achieve double safety protection on the control system, and ensuring the efficiency of elevator operation.
- Application of new PWM compensation technology and dynamic PWM carrier modulation technology, effectively reduce the noise of motor and motor loss.
- Implementing the CANBUS based Data Network Controlling Technology, to ensure reliability of the system communication between elevator control components, and suppressing the electromagnetic interferences.



## Permanent Magnet Synchronous Door Operator Motor

Using the permanent magnet synchronous door operator motor, we can now produce a more compact and efficient door machine structure.

A 3 in 1, 32 bit high speed digital signal processor, Speed current double closed loop feedback control and VVVF System, ensures that the door can achieve perfect action in strict accordance with the best velocity curve and strength each time.

Reacting to the weight and opening/closing resistance change of each landing door, the system intelligently adjust the opening and closing torque, make the operation smooth, efficient, safe and reliable.





# Smart Technology Functions

## Smart Elevator

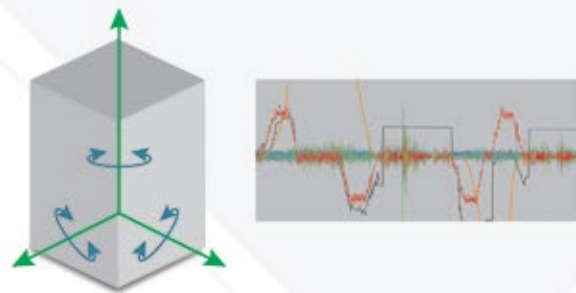
1. Active remote sensing detection to find the potential risk
2. Predict failure ahead of time, determine accurate fault location
3. Remote monitoring health status

## Internet Enabled Functions

- Automatic Mantrap Alarm
- Automatic Breakdown Alarm
- Automatic Auxiliary Announcement
- Remote Communication
- Automatic fault warning
- Internet Background Dispatching System
- Big Data Analytics System
- Automatic Recording of Maintenance Log

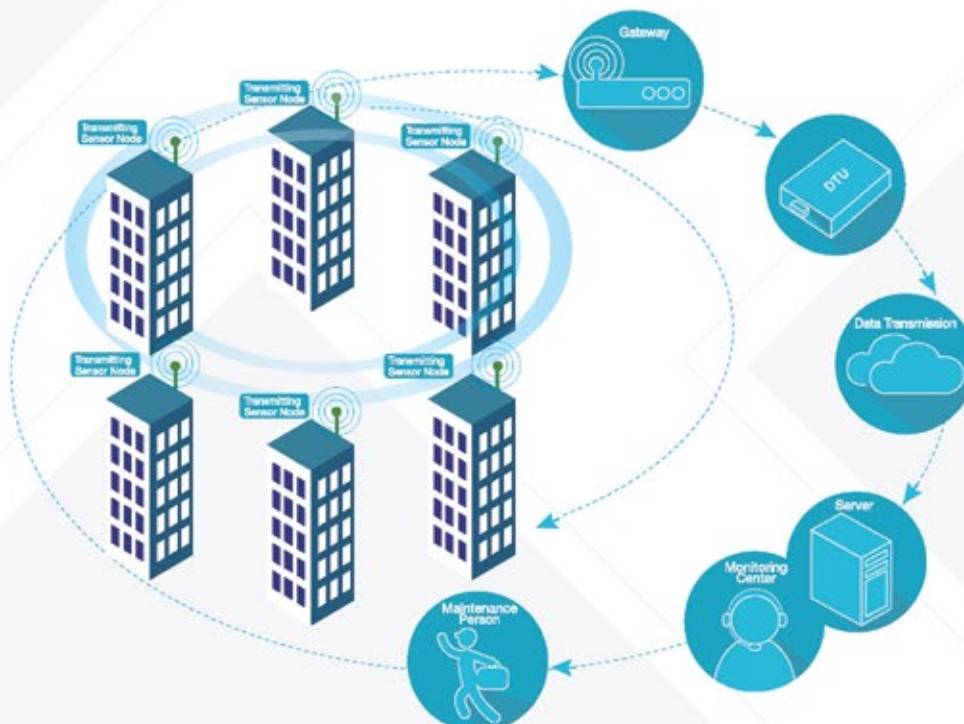
## Remote Smart Diagnosis

Remote monitoring of velocity curve at any position in the elevator running process, with the option of remote assistance and supervision of installation and maintenance personnel's quality of work to ensure that passengers comfort.



## Functions+

- Brake Force Monitoring
- Protection Against Unintended Car Movement
- Rope Slip Monitoring
- Power Source Monitoring
- Door Operator Driving Operation Monitoring



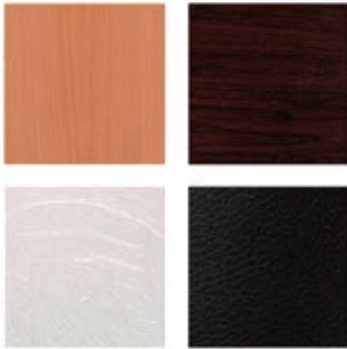
## Integrated Cabin Design

A wide variety of cabin design, finishes, buttons and other parts of the cabin with high degree of versatility and flexibility are available. We have carefully introduced a selection of integrated cabin design for residential, commercial, hotel and other application. personalized, customized design for cabins to suit your overall design are welcome as well.



## The Application of Innovative Materials

The application of the new green Choi steel and variety of decorative motifs, would meet the different requirements of clients and reducing the dependence on those dated and expensive traditional elevator decorative materials.



### Diversity

A wide variety of wood grain and modern pattern is available to suit your design intend.

### Fire resistance

Refractory polymer material with fire retardant properties to prevent fire from spreading.

### Mildew resistance and Nontoxic

High quality surface material, membrane and plating with insulation from air and moisture providing resistance from mould.

## Safety, Care, Usage



### Non-contact Infrared Curtain Light Sensors

Non-contact infrared curtain light sensors ensure the safety of the passengers.



### Cancel Error Calls

The registration of a call or operation can be canceled by double pressing the lit button before the elevator begins to move. This function will cease when the elevator starts moving for safety reasons.



### Anti-Nuisance Car Call Protection

If there is only one passenger in the car, and an excessive number of car calls is registered, nuisance is detected and all car calls will be cancelled.



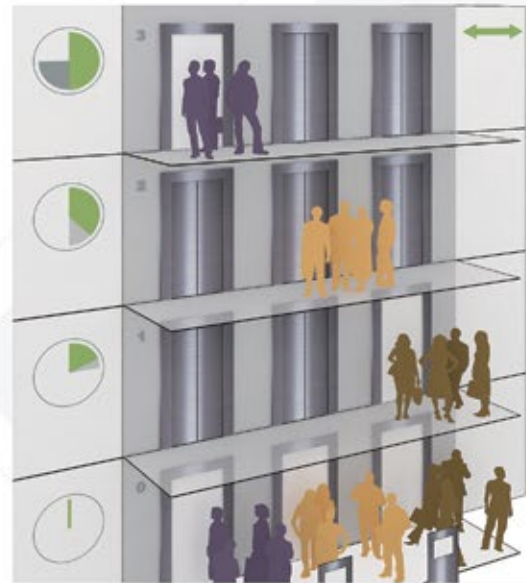
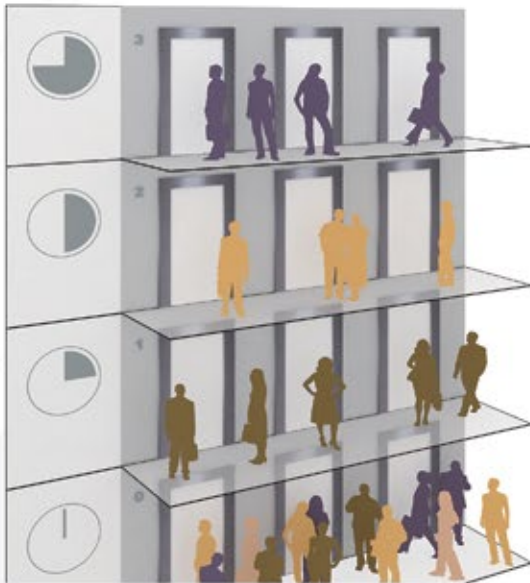
### Automatic Adjustment on Door Opening Time

According to the types of hall calls and car calls registration for various designated floors, every door opening time will be automatically adjusted to accommodate entering and exiting passengers with comfortable timing and to minimize the waiting time to other floors.



# Efficient Group Control

Adjusting to the different elevator traffic conditions, our group control system will dispatch the elevators intelligently, greatly reduce passengers' waiting time in and out of the elevators.



## IC Card Intelligent Management

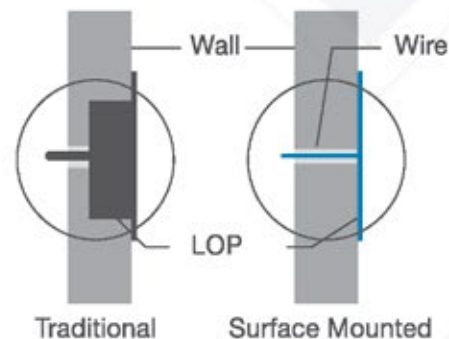
IC card intelligent setting system in the car: IC card intelligent identification system, Ensuring quick operation after IC card has been scanned.

1. Calling at landing LOP
2. IC Card scanning at entrance
3. Enter the car
4. Select authorized floor in the car

Can select any one floor, no button to reach the house floor automatically.



## Surface Mounted Landing Operation Panel



An option for the next generation of ultra-thin call indicator, more refined in appearance with greater ease for installation.

## Operation Panel

Clear, easy to read, warm dot matrix display and Universal Design Operation interface, with ergonomic button configuration.





CEILING:	ECC203 (COLOR NUMBER:ESP300)
CAR OPERATION PANEL	EC0700(COLOR NUMBER:HAIRLINE STAINLESS STEEL)
DOOR PANELS	PAINTED STEEL (ESP300)
DOOR TRANSOM	PAINTED STEEL (ESP300)
DOOR JAMB	PAINTED STEEL (ESP300)
FRONT PANELS	PAINTED STEEL (ESP300)
SIDE PANELS	PAINTED STEEL (ESP300)
REAR PANELS	PAINTED STEEL (ESP300)
FLOOR	TREAD PLATE





**Freight  
Lift**



Vehicle  
Lift





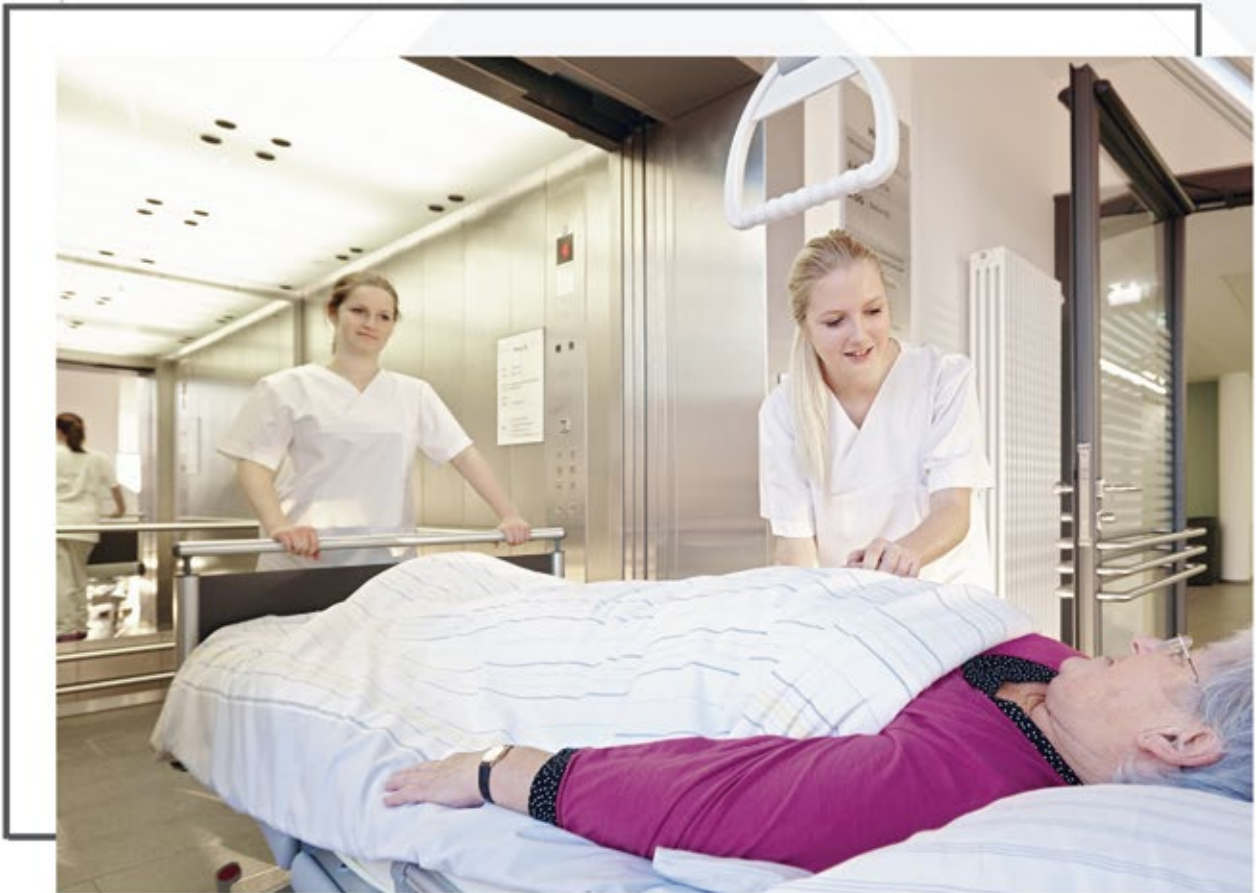
CEILING:	ECC203 (COLOR NUMBER:ESPLOO)
CAR OPERATION PANEL	EC0700(COLOR NUMBER:HAIRLINE STAINLESS STEEL)
DOOR PANELS	HAIRLINE STAINLESS STEEL
DOOR TRANSOM	HAIRLINE STAINLESS STEEL
DOOR JAMB	HAIRLINE STAINLESS STEEL
FRONT PANELS	HAIRLINE STAINLESS STEEL
SIDE PANELS	HAIRLINE STAINLESS STEEL
REAR PANELS	HAIRLINE STAINLESS STEEL
FLOOR	TREAD PLATE





CEILING:	ECC201 (COLOR NUMBER:ESPL00)
CAR OPERATION PANEL	EC0202 (COLOR NUMBER:HAIRLINE STAINLESS STEEL)
DOOR PANELS	COLOR-COATED STEEL (ECP100)
DOOR TRANSOM	COLOR-COATED STEEL (ECP100)
DOOR JAMB	COLOR-COATED STEEL (ECP100)
FRONT PANELS	COLOR-COATED STEEL (ECP100)
SIDE PANELS	COLOR-COATED STEEL (ECP100)
REAR PANELS	COLOR-COATED STEEL (ECP100)
HANDRAIL	ECH200 (HAIRLINE STAINLESS STEEL)
FLOOR	SINGLE COLOR PVC FLOOR(ECF100)

CEILING:	ECC571 (COLOR NUMBER:ESPL00)
CAR OPERATION PANEL	EC0201 (COLOR NUMBER:HAIRLINE STAINLESS STEEL)
DOOR PANELS	HAIRLINE STAINLESS STEEL
DOOR TRANSOM	HAIRLINE STAINLESS STEEL
DOOR JAMB	HAIRLINE STAINLESS STEEL
FRONT PANELS	HAIRLINE STAINLESS STEEL
SIDE PANELS	HAIRLINE STAINLESS STEEL
REAR PANELS	HAIRLINE STAINLESS STEEL
HANDRAIL	ECH200 (HAIRLINE STAINLESS STEEL)
FLOOR	SINGLE COLOR PVC FLOOR(ECF110)







Hospital  
Lift





# Human Interface

## Integrated Car Operation Panel

Standard ECO202; Free optional ECO201; Optional ECO301, ECO302  
Standard hairline finished stainless steel; optional mirror stainless steel



ECO201

ECO301

ECO202

ECO302

Handicapped COP

ECO912

Handicapped COP

ECO914

## Surface Mounted LOP

Standard EHO302; Free optional EHO301, EHO401, EHO402  
Standard hairline-finished stainless steel; optional mirror stainless steel



EHO301

EHO401

EHO302

EHO402

Button  
EVB200

Braille button  
EBB200

Stainless steel surface  
Micro switch  
Orange light

Button  
EVB110

Braille button  
EBB110

Stainless steel surface  
Micro switch  
Orange light



### LOP (flush mounted)

Optional



EHO501    EHO601    EHO502    EHO602

### Horizontal type indicator (flush mounted)

Optional



EHD100

### Horizontal type indicator with hall lantern (flush mounted)



EHD400

### Hall lantern (flush mounted)



EHD300    EHD200    EHD201

### LOP (flush mounted)

Optional



EHB101    EHB201    EHB102    EHB202

### Color-coated Steel



ECP100  
Creamy White



ECP200  
Champaign Gold

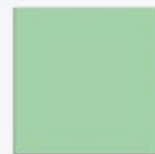


ECP300  
Volcanic Gray

### Painted Steel



ESP100  
Technology Gray



ESP200  
Pastel Blue

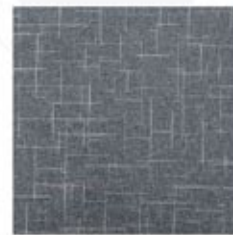


ESP300  
Light Ivory

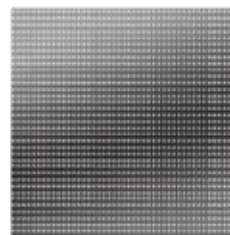
### Painted Steel



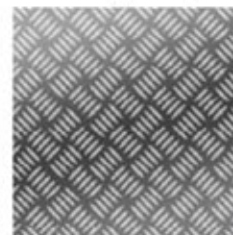
ECF100 | Single Color  
PVC Floor



ECF110 | Single Color  
PVC Floor (Optional)



ECF120 | Single Color  
PVC Floor (Optional)



ECF130 | Single Color  
PVC Floor (Optional)

### Fire Switch



EHF500



EHF510

Standard EHF500  
surface mounted  
Optional EHF510  
flush mounted  
Hairline-finished  
stainless steel panel



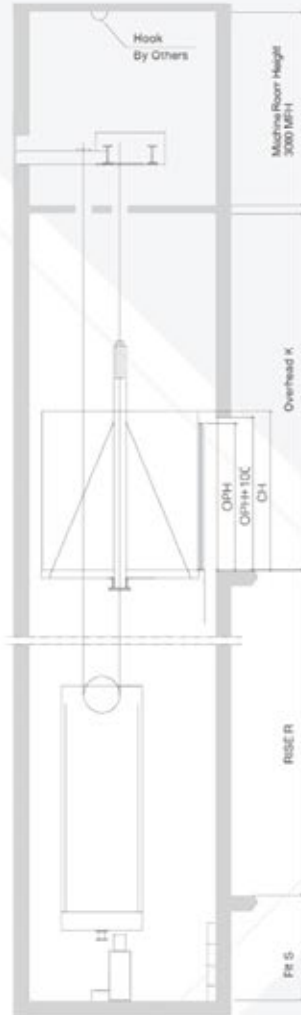
Function Code	Function Name	Description	Operation method and configuration	
			1C-CSC	2C-CSD
AERP	End Protection	If the speed is not slowed to the preset value while the car reach the end floor, a forced deceleration will be carried out by system in order to protect the safety of the car.	•	•
ALM	Alarm Bell	An alarm sound signal will be given out to the outside in specific conditions.	•	•
AMCT	Cancelation Run	When the power recovered from a cut, if the car is out of the leveling area, it will be driven in to leveling area at a low speed automatically. Once entered the leveling area, door will open and the car back to normal.	•	•
AMS	Automatic Rescue Device	Use computer screen to monitoring the running state of the elevator, including the elevator floor, running direction, open the door, overload, fire, fault etc.	○	○
ANS	Anti Nuisance Car Call	If there is only one passenger in the car, and an excessive number of car calls is registered, nuisance is detected and all car calls will be canceled, requiring registration or a proper number or calls.	○	○
ARBS	Floor of Lobby	Main stop can be preset regardless of architecture lobby of the building according to practice requirements for customization. If no registration of calls or operations after preset timeout, the car will return to preset main stop and wait here. And the preset main stop should be the floor with maximum passenger flow or the default lobby floor.	•	•
ADLP	Anti-slip Protection	When the elevator not running in overhaul state, if the elevator continuous running beyond the F9-02 set time (maximum 45 seconds) and the leveling switch not act. System will regard this as detect the rope slip fault, so stop the car all running.	•	•
AST	Blocked Stalling Protection	When traction rope slipping or motor is stuck to the expected time, the elevator stops running.	•	•
ATT	Attendant Service Operation	The Attendant Operation feature allows semi-automatic operation with manual control.	•	•
BA	Building Monitor Ports	Elevators with BA function can provide scattered elevator status for computed management of the buildings, such as running directions, floor numbers, safety signals, door signals.	○	○
BAM	Automatic Fault Detect	System can detect all the fault happened automatically.	•	•
BPM	Brake Operation Detection	The brake is operated by getting and losing power, and a micro-switch confirm the brake operated normally or not. System will stop when micro-switch found fault on brake operation.	•	•
BS	Fault Storage	System fault code will be stored in EEPROM, it will help for trouble-shooting.	•	•
BSM	Brake Operation Monitor	If system detected the brake operated abnormally, elevator will stop run immediately.	•	•
BTUP	Backup/forward Brake Protection	When a group of brake failure occurs, the rest of the brake also can realize the effective braking.	•	•
CBC	Cancel Error Calls	Before the car starts, the registration of a call or operation can be canceled by double click of this button. After the car starts, registration cancel will not allowed for the sake of passengers' safety.	•	•
GDJ	Car Direction Indicator	Persons can see the elevator run direction show on GDJ.	•	•
GPI	Car Position Indicator	Persons can see the elevator position show on GPI.	•	•
GTTL	Car Register	Persons can press button on GDP to register command, and the button light will on.	•	•
DBP	Door Time Protection	If the car door does not close or open completely within an adjustable time after the door close or open command, the door will try open or close again and again.	•	•
DDS	Door Self-learning	Self learning door width, speed reduce position, open/close limit position to optimize the door move curve by door motor encode and door controller.	•	•
DHB	Door Hold Button	Pressure on the Door Hold button 'DHB' in the car operating panel opens the door and keeps the door open for a specified adjustable door hold time.	○	○
DOCP	Door Open/Close Protection	When the door controller detected the over-load on door operator several times, door operator will stop and accept command after a while.	•	•
DOL	Open Button Response Instructions	The button lights up at the same time when press the open button to open the door.	•	•
DOLP	Door Overload Protection	In order to protect the door motor, the door motor will execute reversed operates when the door move force exceed a preset value.	•	•
DSFP	Deceleration Switch Fault Protection	Under the conditions of deceleration switch failure, the elevator will emergency stop to prevent collide the head or squat down bottom.	•	•
EDU	Emergency Light	Emergency light in the car will start whenever there is a power out.	•	•
EER	Emergency Electrical Operation	EER device in the controller can raise the car bypassing the final limit switch and buffer switch in case of emergency situation such as the car is rest on the buffer.	○	○
EPS	Emergency Fireman Service	While the switch with lock is pushdown start, EPS will be triggered to clear all the hall calls, and the car will response only to commands from the car. The door only open/close by press door open/close button manual.	○	○
ELI	Elevator Lock Service	Eliminate all landing station call registration and only respond to the car inside instruction when the elevator lock switch is after setting. After returned to the base station, the elevator stopped running.	•	•
ESC	Smart Light and Ventilation	After a preset timeout, the car will suspend in a minor power consuming mode, the light and ventilation device in the car will be shut down if no operations are registered.	•	•
FAL	Car Fan	One or two fans installed on car ceiling for car ventilation. There is a switch in GDP to control the car fan on or off.	•	•
FB	Emergency Fireman Operation	Upon recognition of fireman's signal, a car shall return non-stop to the designated return landing and park with the doors fully open.	•	•
FDL	Full Collection Operation	All car and/or hall calls registered are answered in the order in which the landings are reached. Direction of travel will be established by the first car command / hall call registered. All calls on its way will be served, irrespective of the time sequence in which the calls were registered.	•	•
FIS	Floor Indicator Setting	The display content can be set accord with customer's demand.	○	○
HDI	Hall Direction Indicator	Persons can see the elevator run direction show on HSD.	•	•
HPI	Hall Position Indicator	Persons can see the elevator position show on HBP.	•	•
HPS	Hoistway Self-learning	Under the self-learning operation, elevator will study the switch position in hoistway and record it for normal running.	•	•





Function Code	Function Name	Description	Operation method and configuration	
			1C-CSC	2C-CSD
HTI	Hall Register	Persons can press button on COP and HRP to register command, and the button light will on.	●	●
HWL	Holeway Lighting	Installed in the holeway, provide light for maintenance in holeway.	●	●
IC	IC Card Management	COP or HRP equipped with card reader, passengers using IC card can reach any floor.	○	○
IOU	Intercommunication	The communication can among car – porter's lodge – machine room – pit – top of car. Two communication mode can be provided, one to one or one to many. The max. elevator in communication group is 64.	●	●
IOP	Inverter Overheat Protection	Elevator will stop when detected drive overheated.	●	●
IPR	Inspection Run	When elevator in inspection mode, automatic run and door operator will be disabled. Press up/down and common button can move car in inspection speed.	●	●
ITV	Itv Cable	The cable for video device in the car	○	○
LC	Light Curtain	Light curtain for special purpose enhance the safety of elevator, an infrared curtain can be formed in front of the car door, and a quick response to reopen will be implemented once something entering this area.	●	●
LNG	Load Non Stop	When a car is loaded to a predetermined percentage of its capacity, it is considered "full load", Additional passengers would be unable to enter. The car will bypass further hall call.	●	●
MCP	Main Circuit Protection	Emergency stop will excute when fault in main circuit happened. And also the elevator can't start when this fault existing.	●	●
MDC	Door Close Constrainedly	In order to improve system performance the door will close constrainedly with slow speed after a long door hold time.	●	●
MOHP	Motor Overheat Protection	Elevator will stop when detected motor overheated.	●	●
OCP	Drive Overcurrent Protection	When the driver output over-current, the system will self-protecting	●	●
ODB	Open Button to Open	When the elevator stop in layer, can press open button in the car to make the door have been closed or not yet closed open again, and light up the light in the process of closing the door, press the same direction call button, the elevator will open the door again	●	●
ODL	The Interfacial Layer Landing Door Open	In the process of closing the door, press the same direction call button, the elevator will open the door again	●	●
OLD	Overload Protection	If the load exceeds the rated load, the sound signal will be given out by speaker, and "OVERLOAD" will be displayed, the car door will not close, the elevator will not start.	●	●
OLHL	Overload Protection	Overload indicator light when the elevator overload.	●	●
OLP	Drive Overload	If the motor overloaded and drive will detect the output current exceed the preset value, elevator will stop with fault.	●	●
OSP	Overspeed Protection	When detected running faster than allowable values, stop the elevator running.	●	●
PADO	Not Open the Door Outside Door Level	For the sake of safety, the elevator can not be opened outside the door	●	●
PC	Parallel Running	Two elevators can share station calls, and coordinated response station call signal	-	○
PCDB	In Advance Door Open with Close Button	When the automatic operation, press the close button, can cancel the door holding function, and closed door immediately in place	●	●
PFPP	Power Failure Protection	When the power supply fault phase, under-voltage fault occurs, stop the elevator running.	●	●
RCAC	Run Curve Automatic	Systems automatically computing the most suitable for the principle of human-machine function curve according to the distance needed to run, and is not subjected to restrictions on short floor and the number of constraints.	●	●
RCC	Call In Opposite Direction Auto-clear	Calls in opposite direction can be cleared automatically while the car moves up and down.	●	●
RDC	Repeat Door Closed	If the door is blocked, the elevator will repeat the action of closing the door until the obstruction is eliminated or achieve fault protection	●	●
RM	Remote Monitoring System	Provide remote monitoring function to monitor elevator operation situation.	○	○
RSP	Retrogradation Protection	Set protection in order to prevent the elevator appear inconsistent with the given direction	●	●
SCOP	Second COP	Passengers can operate elevator via second COP. For example register the destination floor, open/close door.	○	○
SCP	Safety Circuit Protection	If safety circuit was disconnected under normal run, elevator will make a emergency stop. And elevator will not able to run before safety circuit connected.	●	●
SR	Self-rescue Run	If the car stopped out of door zone in normal run, a self-rescue run will be performed to move the car in door zone with inspection speed, than open the door automatically	●	●
TBP	Can Communication Protection	If system detected the fault on CAN communication, elevator will stop at the nearest landing and open the door for unloading.	●	●
TER	Test Run	The function design for testing or checking the new elevator. When the control system of one certain parameter is set to test running, the elevator will automatically run.	●	●
TRIC	Trip Counter	The elevator total run times can be show via special service tool	●	●
USP	Low Speed Protection	When detected running lower than allowable values, stop the elevator running.	●	●
WDT	Cpu Watchdog	If system detected the fault on CAN communication, elevator will stop at the nearest landing and open the door for unloading.	●	●
WWSC	No Pre Torque Start	The elevator can start move smoothly without pre torque.	●	●

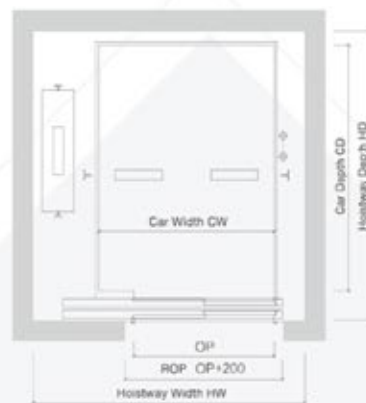
Mark: ● Standard ○ Optional for free ○ Optional for value



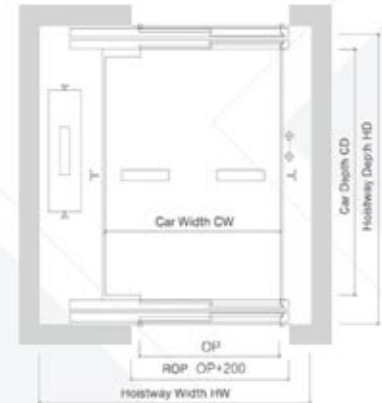
Hoistway Elevation



Machine Room Plan



Hoistway Plan(Single door)



Hoistway Plan(Opposite door)

## ENF200 Machine Room Freight Elevator

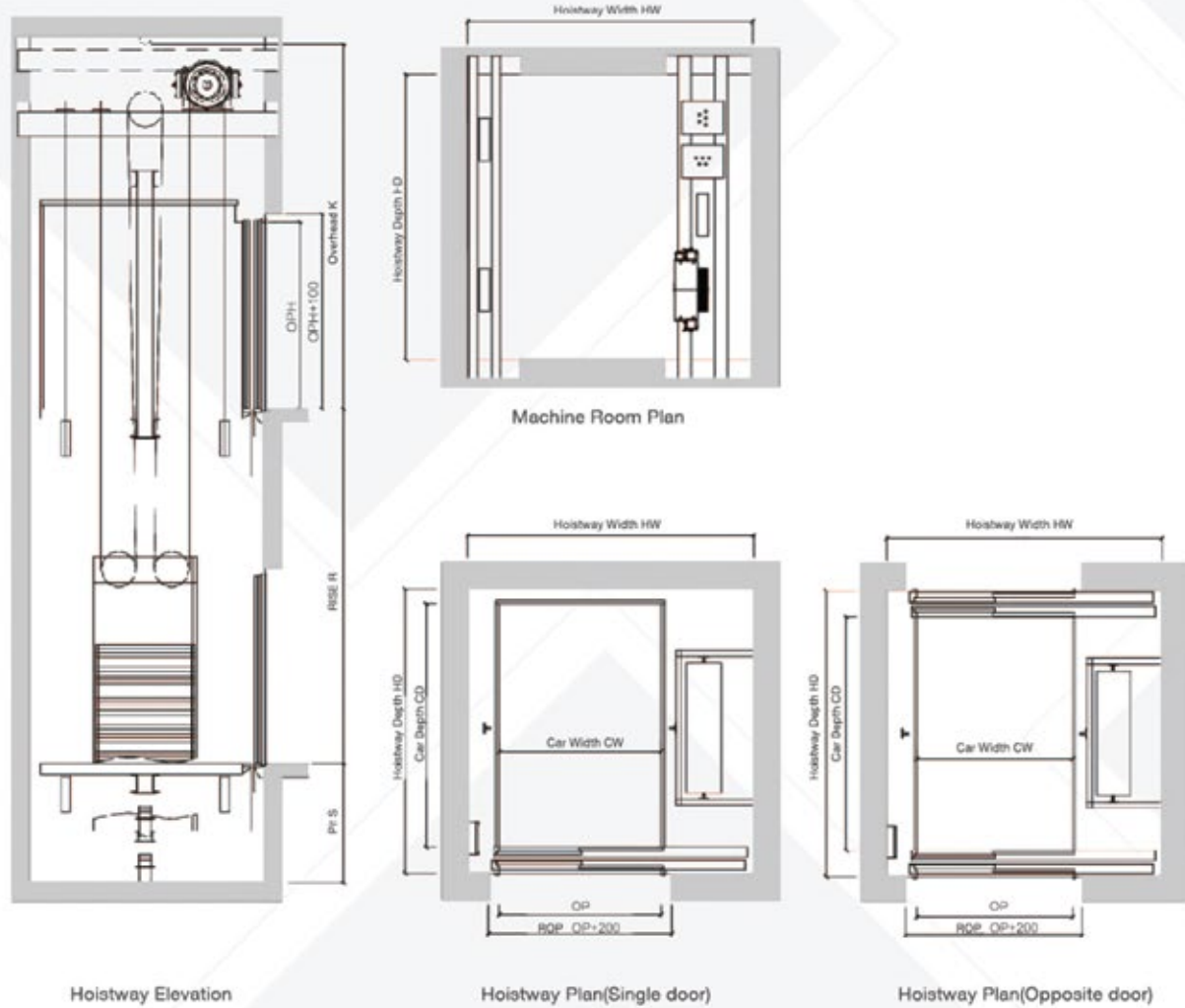
Rated load(kg)	1600			2000			3000			5000			
	0.5	0.63	1.0	0.5	0.63	1.0	0.5	0.63	1.0	0.5	0.63	1.0	
Speed(m/s)	0.5	0.63	1.0	0.5	0.63	1.0	0.5	0.63	1.0	0.5	0.63	1.0	
Open Size(OP x OPH) (mm)	1500*2100(250)			1500*2100(250)			1600*2100(250)			2400*2100(400)			
Car Size (CW x CD x CH) (mm)	Single door	1500*2250*2300			1500*2700*2300			2000*2800*2300			2400*3600*2300		
	Opposite door	1500*2250*2300			1500*2700*2300			2000*2730*2300			2400*3600*2300		
Hoistway Size (HW x HD) (mm)	Single door	2650*2650			2650*3100			3100*3300			3950*4000		
	Opposite door	2650*2750			2650*3200			3100*3400			3950*4100		
Overhead K(mm)	4300			4300			4300			4500			
Pit S(mm)	1600			1600			1600			1600			

# SPECIFICATIONS



Item	Specification			Remark
Speed(m/s)	0.5	0.63	1.0	
Duty Load(kg)	1600	1600	1600	
	2000	2000	2000	
	3000	3000	3000	
	5000	5000	5000	
Max. Rise(m)	25	35	50	
Max. Numbers of Stop	8	12	16	
Operation style	1C-CSC , 2C-CSD			Single control, Duplex control, Group management control
Control Mode	VFGD-L/S			
Decorateon Scheme	Whole solution, optional solution			
Car Type	Deep Car			
Counterweight Location	Side			
Open Type	Single door, Opposite door			
Open Mode	2SO Side Opening , 4CO Center Opening			Side Counterweight
Open Direction	2SO (L) 2SO (R)			2 Speed Telescopic doors for 2SO
Integrative Car Code	ECD200 , ECD201			When Choosing Integrative Car Decoration as Solution
Counterweight Safety	None, Deploy			
Power Supply	380V / 50Hz 3P/5W			
Lighting Supply	220V / 50Hz			
Supply Code	ENF200			
Min Floor Height	2700			OPH=2100
Floor Designation	B3 , B2 , B1 , -3 , -2 , -1 , B , G , M , 1 , 2 , 3.....14 , 15 , 16			





## ENF202 Machine Roomless Freight Elevator




Rated load(kg)	1600			2000			3000			
	0.5	0.63	1.0	0.5	0.63	1.0	0.5	0.63	1.0	
Open Size(OP x OPH) (mm)	1500*2100(250)			1500*2100(250)			1800*2100(400)			
Car Size (CW x CD x CH) (mm)	Single door	1500*2250*2300			1500*2700*2300			2000*2800*2300		
	Opposite door	1500*2250*2300			1500*2700*2300			2000*2730*2300		
Hoistway Size (HW x HD) (mm)	Single door	2650*2650			2650*3100			3300*3300		
	Opposite door	2650*2750			2650*3200			3300*3400		
Overhead K(mm)	4200			4200			4500			
Pit S(mm)	1600			1600			1600			

# SPECIFICATIONS



Item	Specification			Remark
Speed(m/s)	0.5	0.63	1.0	
Duty Load(kg)	1600	1600	1600	
	2000	2000	2000	
	3000	3000	3000	
Max. Rise(m)	25	35	50	
Max. Numbers of Stop	8	12	16	
Operation style	1C-CSC , 2C-CSD			Single control, Duplex control, Group management control
Control Mode	VFGL-L/S			
Decorateon Scheme	Whole solution, optional solution			
Car Type	Deep Car			
Counterweight Location	Side			
Open Type	Single door, Opposite door			
Open Mode	2SO Side Opening , 4CO Center Opening			Side Counterweight
Open Direction	2SO (L) 2SO (R)			2 Speed Telescopic doors for 2SO
Integrative Car Code	ECD200 , ECD201			When Choosing Integrative Car Decoration as Solution
Counterweight Safety	None, Deploy			
Power Supply	380V / 50Hz 3P/5W			
Lighting Supply	220V / 50Hz			
Supply Code	ENF202			
Min Floor Height	2700			OPH=2100
Floor Designation	B3 , B2 , B1 , -3 , -2 , -1 , B , G , M , 1 , 2 , 3.....14 , 15 , 16			



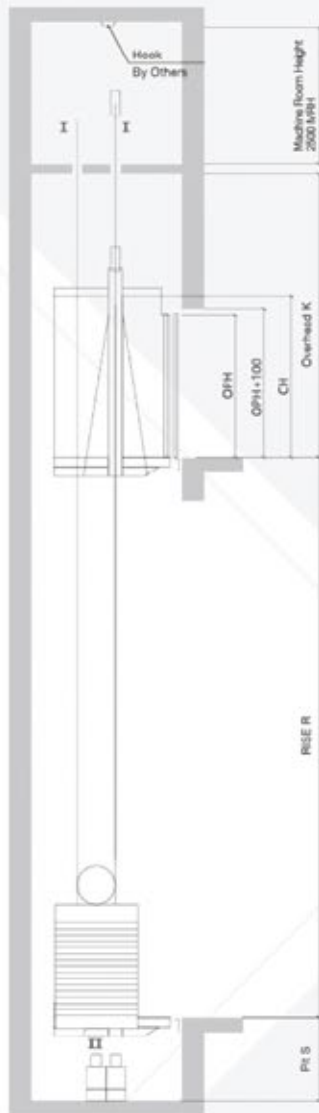
Category	Function Code	Function Name	Description	Operation method and configuration		
				1C-CSC	2C-CSD	3C-3C GMC
 Safe Operation	AERP	End Protection	If the speed is not slowed to the preset value while the car reach the end floor, a forced deceleration will be carried out by system in order to protect the safety of the car.	●	●	●
	ALM	Alarm Bell	An alarm sound signal will be given out to the outside in specific conditions.	●	●	●
	AMQT	Correction Run	When the power recovered from a out, if the car is out of the leveling area, it will be driven in to leveling area at a low speed automatically. Once entered the leveling area, door will open and the car back to normal.	●	●	●
	ASLP	Anti-slip Protection	When the elevator not running in overhaul state, if the elevator continuous running beyond the T9-02 set time (maximum 45 seconds) and the leveling switch not act, System will regard this as detect the rope slip fault, so stop the car at running.	●	●	●
	AST	Blocked Stalling Protection	When traction rope slipping or motor is stuck to the expected time, the elevator stops running.	●	●	●
	SAM	Automatic Fault Detect	System can detect all the fault happened automatically.	●	●	●
	DNM	Brake Operation Detection	The brake is operated by getting and losing power, and a micro-switch confirm the brake operated normally or not. System will stop when micro-switch found fault on brake operation.	●	●	●
	DSM	Brake Operation Monitor	If system detected the brake operated abnormally, elevator will stop run immediately.	●	●	●
	BTUP	Redundant Brake Protection	When a group of brake failure occurs, the rest of the brake also can realize the effective braking.	●	●	●
	DSFP	Deceleration Switch Fault Protection	Under the conditions of deceleration switch failure, the elevator will emergency stop to prevent collide the head or squat down bottom.	●	●	●
	COU	Emergency Light	Emergency light in the car will start whenever there is a power out.	●	●	●
	EER	Emergency Electrical Operation	EEB device in the controller can raise the car bypassing the final limit switch and buffer switch in case of emergency situation such as the car is rest on the buffer.	○	○	○
	FAL	Car Fan	One or two fans installed on car ceiling for car ventilation. There is a switch in COP to control the car fan on or off.	●	●	●
	HP	Inverter Overheat Protection	Elevator will stop when detected drive overheated.	●	●	●
	IPR	Inspection Run	When elevator in inspection mode, automatic run and door operator will be disabled. Press up/down and common button can move car in inspection speed.	●	●	●
	MCP	Main Circuit Protection	Emergency stop will execute when fault in main circuit happened. And also the elevator can't start when this fault existing.	●	●	●
	MOHP	Motor Overheat Protection	Elevator will stop when detected motor overheated.	●	●	●
	OCP	Drive Overcurrent Protection	When the driver output over-current, the system will self-protecting.	●	●	●
	OLD	Overload Protection	If the load exceeds the rated load, the sound signal will be given out by speaker, and "OVERLOAD" will be displayed, the car door will not close, the elevator will not start.	●	●	●
	OLP	Drive Overload	If the motor overloaded and drive will detect the output current exceed the preset value, elevator will stop with fault.	●	●	●
	OSP	Overspeed Protection	When detected running faster than allowable values, stop the elevator running.	●	●	●
	PFP	Power Failure Protection	When the power supply fault chases, under-voltage fault occurs, stop the elevator running.	●	●	●
	RSP	Retraction Protection	Set protection in order to prevent the elevator appear inconsistent with the given direction.	●	●	●
	SCP	Safety Circuit Protection	If safety circuit was disconnected under normal run, elevator will make a emergency stop. And elevator will not able to run before safety circuit connected.	●	●	●
	SR	Self-rescue Run	If the car stopped out of door zone in normal run, a self-rescue run will be performed to move the car in door zone with inspection speed, then open the door automatically.	●	●	●
	TTSP	CAN Communication Protection	If system detected the fault on CAN communication, elevator will stop at the nearest landing and open the door for unloading.	●	●	●
	TRR	Test Run	The function design for testing or checking the new elevator. When the control system of one certain parameter is set to test running, the elevator will automatically run.	●	●	●
	USP	Low Speed Protection	When detected running lower than allowable values, stop the elevator running.	●	●	●
	WDT	Cpu Watchdog	If system detected the fault on CAN communication, elevator will stop at the nearest landing and open the door for unloading.	●	●	●
	 Comfortable and Energy-saving	ENC	Smart Light and Ventilation	After a preset timeout, the car will suspend in a minor power consuming mode, the light and ventilation device in the car will be shut down if no operations are registered.	●	●
HCL		Fall Collection Operation	All car and/or hall call registered are answered in the order in which the landings are started. Direction of travel will be established by the first car command / hall call registered. All calls on its way will be served, irrespective of the time sequence in which the calls were registered.	●	●	●
HPS		Hoistway Self-learning	Under the self-learning operation, elevator will study the switch position in hoistway and record it for normal running.	●	●	●
LNS		Load Non Stop	When a car is loaded to a predetermined percentage of its capacity, it is considered "full load", Additional passengers would be unable to enter. The car will bypass further hall call.	●	●	●
RC&C		Run Curve Adjustment	System automatically computing the most suitable for the principle of human-machine function curve according to the distance needed to run, and is not subjected to restrictions on short floor and the number of constraints.	●	●	●
REL		Re-Leveling Operation	Stopping errors shall be corrected by re-leveling. The size of a possible stopping error depends on the type of drive and the accuracy of the position sensors.	○	○	○
 Friendly Interface	WWSO	No Pre Torque Start	The elevator can start move smoothly without pre torque.	●	●	●
	ALC	Hall lantern	The hall lantern indicator the elevator run direction and tell passenger elevator comes.	○	○	○
	RRT	Rescue Return	Optional when needing a rescue characters return.	○	○	○
	CAG	Passing chime in car	Installed on the top of car, it will emit ringing to inform passengers the car is parking.	○	○	○
	CBC	Cancel Error Calls	Before the car starts, the registration of a call or operation can be canceled by double click of this button. After the car starts, registration cancel will not allowed for the sake of passengers' safety.	●	●	●
	CDI	Car Direction Indicator	Persons can see the elevator run direction show on COP.	●	●	●
	CPi	Car Position Indicator	Persons can see the elevator position show on COP.	●	●	●
	CTTL	Car Register	Persons can press button on COP to register command, and the button light will on.	●	●	●
	ODI	Open Button Response Instructions	The button lights up at the same time when press the open button to open the door.	●	●	●
	ELI	Elevator Lock Service	Eliminate all landing station call registration and only respond to the car inside instruction when the elevator lock switch is after setting. After returned to the base station, the elevator stopped running.	●	●	●
FIS	Floor Indicator Setting	The display content can be set accord with customer's demand.	○	○	○	





Category	Function Code	Function Name	Description	Operation method and configuration		
				1C-CSC	2C-CSD	3C-6C GMC
 Friendly Interface	HDI	Hall Direction Indicator	Persons can see the elevator run direction show on HSP.	●	●	●
	HPI	Hall Position Indicator	Persons can see the elevator position show on HSP.	●	●	●
	IHTL	Hall Register	Persons can press button on COP and IOP to register command, and the button light will on.	●	●	●
	OLHL	Overload Protection	Overload indicator light when the elevator overload.	●	●	●
	RCC	Call in Opposite Direction Auto-clear	Calls in opposite direction can be cleared automatically while the car moves up and down.	●	●	●
	TRIC	Trip Counter	The elevator total run times can be show via special service tool.	●	●	●
	VI	Speech Synthesis	As the landing is reached the floor name is announced for the benefit of elevator passengers who are visually impaired.	○	○	○
 Door Manipulation Functions	ADO	Advanced door opening	In order to accelerate traffic, automatic door opening starts while the elevator car approaches a landing.	○	○	○
	DBP	Door Time Protection	If the car door does not close or open completely within an adjustable time after the door close or open command, the door will try open or close again and again.	●	●	●
	DDS	Door Self-learning	Self-learning door width, speed reduce position, open/close limit position to optimize the door move curve by door motor encode and door controller.	●	●	●
	DIID	Door Hold Button	Pressure on the Door Hold Button "DHB" in the car operating panel opens the door and keeps the door open for a specified adjustable door hold time.	○	○	○
	DOCP	Door Open/Close Protection	When the door controller detected the overload on door operator several times, door operator will stop and accept command after a while.	●	●	●
	DOLP	Door Overload Protection	In order to protect the door motor, the door motor will execute reversed operate when the door move force exceed a preset value.	●	●	●
	LC	Light Curtain	Light curtain for special purpose enhance the safety of elevator, an infrared curtain can be formed in front of the car door, and a quick response to reopen will be implemented once something entering this area.	●	●	●
	MBS	Mutual Broadcasting System	Safety board with touch screen using the touch screen and safety board to detect passengers or objects during the close, then the elevator will open the door again.	○	○	○
	MDC	Door Close Constrainedly	In order to improve system performance the door will close constrainedly with slow speed after a long door hold time.	●	●	●
	OOS	Open Button to Open	When the elevator stop in layer, can press open button in the car to make the door have been closed or not yet closed open again, and light up the light in the process of closing the door, press the same direction call button, the elevator will open the door again.	●	●	●
	ODL	The Interfacial Layer Landing Door Open	In the process of closing the door, press the same direction call button, the elevator will open the door again.	●	●	●
	PAOD	Not Open the Door Outside Door Level	For the sake of safety, the elevator can not be opened outside the door.	●	●	●
	PCOB	In Advance Door Open with Close Button	When the automatic operation, press the close button, can cancel the door holding function, and closed door immediately in place.	●	●	●
	RDC	Repeat Door Closed	If the door is blocked, the elevator will repeat the action of closing the door until the obstruction is eliminated or achieve fault protection.	●	●	●
 Value-Added Services	JNS	Anti-Nuisance Car Call	If there is only one passenger in the car, and an excessive number of car calls is registered, nuisance is detected and all car calls will be cancelled, requiring registration of a proper number of calls.	○	○	○
	ANBS	Floor of Lobby	Man stop can be preset regardless of architecture style of the building according to practical requirements for customization. If no registration of calls or operations after preset time, the car will return to preset man stop and wait there. And the preset man stop should be the floor with maximum passenger flow or the default lobby floor.	●	●	●
	ATT	Attendant Service Operation	The Attendant Operation feature allows semi-automatic operation with manual control.	●	●	●
	BS	Fault Storage	System fault code will be stored in EEPROM, it will help for troubleshooting.	●	●	●
	DS	Separate Standby	This function must hang together with group function. Different elevator will standby at the different floor to reduce response time.	-	○	○
	FB	Emergency Fireman Operation	Upon recognition of fireman's signal, a car shall return non-stop to the designated return landing and park with the doors fully open.	●	●	●
	GRP	Group control function	Two or more elevators in same series should adopt this function for better response performance, avoiding repeated response, shorten the system response.	-	-	○
	HWL	Holway Lighting	Installed in the holway, provide light for maintenance in holway.	●	●	●
	ICJ	Intercommunication	The communication can among car - porter's lodge - machine room - pit - top of car. Two communication mode can be provided, one to one or one to many. The max. elevator in communication group is 64.	●	●	●
 Extensive Functions	INU	Independent Service	When switched on independent service the elevator will only answer any registered car call deviating from group control.	-	-	○
	PTS	Moderate Incoming & Out coming Traffic	Aiming at relieving the traffic peak in the building. In this model the elevator will always go to lobby or designated floor automatic after all registered finished.	-	-	○
	AC	Air Conditioner	It is optional to choose air conditioner to adjust car temperature, and create a comfortable environment for passengers.	○	○	○
	AMS	Automatic Rescue Device	Use computer screen to monitoring the running state of the elevator, including the elevator floor, running direction, open the door, overload, fire, fault etc.	○	○	○
	AHD	Automatic Rescue Device	This device is used by rescue operation in case of power shutdown. It is powered by a rechargeable battery. When a sudden power cut happens, a sound signal will comfort the trapped passengers with VR function, then the car will move towards to the near floor, keep the door open to unload the passengers.	○	○	○
	BA	Building Monitor Ports	Elevators with BA function can provide scattered elevator status for computer management of the buildings, such as running directions, floor numbers, safety signals, door signals.	○	○	○
	EFS	Emergency Fireman Service	While the switch with lock is positioned start, EFS will be triggered to clear all the hall calls, and the car will response only to commands from the car. The door only open/close by press door open/close button manual.	○	○	○
	EQD	Earthquake Operation	Once an earthquake has happened, all the calls and operations will be cleared after the earthquake signal. The car will stop at the nearest floor to unload passengers.	○	○	○
	HCU*	Handicap UUI*	The handicap car operation panel is served for handicapped.	○	○	○
	IC	IC Card Management	COP or HSP equipped with card reader, passengers using IC card can reach any floor.	○	○	○
	ITV	Itv Cable	The cable for video device in the car.	○	○	○
	MIR	Hall Mirror	Hall mirror on rear car wall.	○	○	○
	PC	Parallel Running	Two elevators can share station calls, and coordinated response station call signal.	-	○	-
	RM	Remote Monitoring System	Provide remote monitoring function to monitor elevator operation situation.	○	○	○
	SCOP	Second COP	Passengers can operate elevator via second COP. For example register the destination floor, open/close door.	○	○	○

Mark: ● Standard ○ Optional for free ○ Optional for value



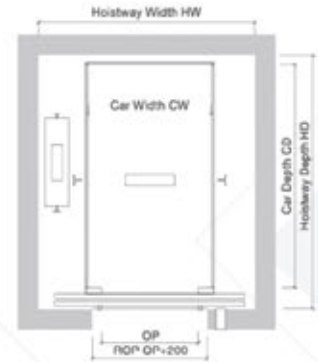
Hoistway Elevation



Machine Room Plan



Side Opening Hoistway Plan



Center Opening Hoistway Plan

Rated load(kg)	1600(P21)				
Speed(m/s)	1.0	1.6	1.75	2.0	2.5
Open Size(OP x OPH) (mm)	1100 x 2100				
Car Size (CW x CD x CH) (mm)	1400 x 2400 x 2400				
Hoistway Size (HW x HD)(mm)	2450 x 2750(2CO)				
	2150 x 2850(2SO)				
Overhead K(mm)	4200	4400	4500	4650	5000
Pit S(mm)	1250	1500	1600	1700	1900

# SPECIFICATIONS



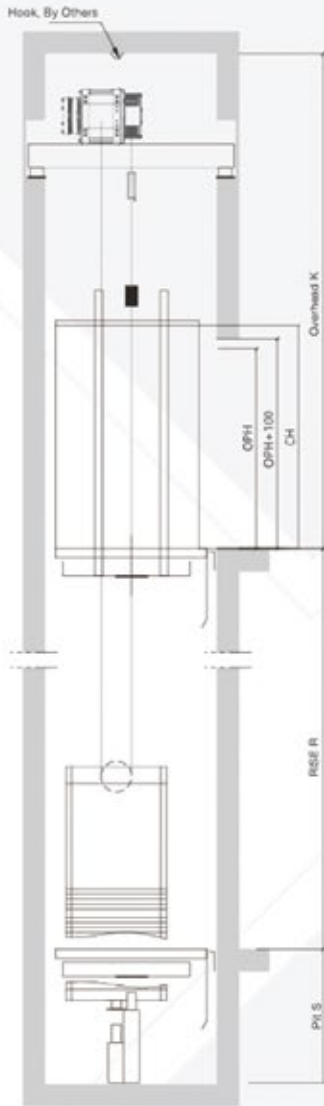
Item	Specification					Remark
Speed(m/s)	1.0	1.6	1.75	2.0	2.5	
Duty Load(kg)	1600	1600	1600	1600	1600	
Max. Rise(m)	50	75	90	105	130	
Max. Numbers of Stop	16	24	32	36	42	
Operation style	1C-CSC , 2C-CSD , 3C – 8C-GMC					Single control, Duplex control, Group management control
Control Mode	VFGL-L/S					
Car specifications	CW1400*CD2400*CH2400					Duty Load1600kg
Decorateon Scheme	Whole solution, optional solution					
Car Type	Deep Car					
Counterweight Location	Side					
Open Type	Single door, Opposite door					
Open Mode	2CO Center Opening, 2SO Side Opening					Side Counterweight
Open Direction	2SO (L) 2SO (R)					2 Speed Telescopic doors for 2SO
Integrative Car Code	ECD700 , ECD701					When Choosing Integrative Car Decoration as Solution
Counterweight Safety	None, Deploy					
Power Supply	380V 50HZ 3P/5W					
Lighting Supply	220V/50Hz					
Supply Code	ENB500					
Min Floor Height	2500					OPH=2100
Floor Designation	B1,B2,B3,B,G,M,-1,-2,-3,1,2,3.....40,41,42					



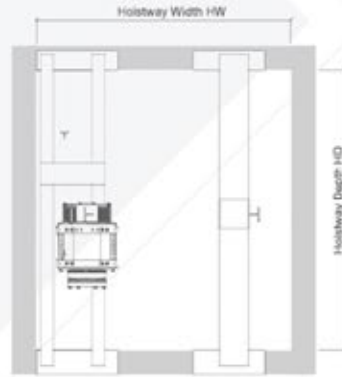
# LAYOUT



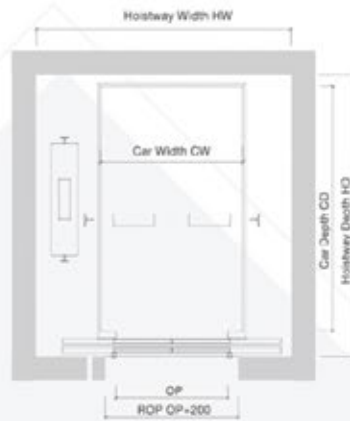
## Machine Roomless Hospital Elevator



Elevation



Plane of the top of well



Hoistway Plan

Rated load(kg)	1600(P21)			2000(P26)		
Speed(m/s)	1.0	1.6	1.75	1.0	1.6	1.75
Open Size(OP x OPH) (mm)	1100 x 2100			1100 x 2100		
Car Size (CW x CD x CH) (mm)	1400 x 2400 x 2400			1700 x 2400 x 2400		
Hoistway Size (HW x HD)(mm)	2500 x 2750(2CO)			2850 x 2750(2CO)		
	2250 x 2850(2SO)			2750 x 2850(2SO)		
Overhead K(mm)	4250	4350	4400	4750	4850	4900
Pit S(mm)	1500	1600	1650	1500	1600	1650

# SPECIFICATIONS



Item	Specification			Remark
Speed(m/s)	1.0	1.6	1.75	
Duty Load(kg)	1600	1600	1600	
	2000	2000	2000	
Max. Rise(m)	50	75	90	
Max. Numbers of Stop	16	24	32	
Operation style	1C-C5C , 2C-C5D , 3C ~ 8C-GMC			Single control, Duplex control, Group management control
Control Mode	VFGL-L/S			
Car Specifications	CW1400*CD2400*CH2400			Duty Load 1600kg
	CW1700*CD2400*CH2400			Duty Load 2000kg
Decorateon Scheme	Whole solution, optional solution			
Car Type	Deep Car			
Counterweight Location	Side			
Open Type	Single door, Opposite door			
Open Mode	2CO Center Opening, 2SO Side Opening			Side Counterweight
Open Direction	2SO (L) 2SO (R)			2 Speed Telescopic doors for 2SO
Integrative Car Code	ECD700 , ECD701			When Choosing Integrative Car Decoration as Solution
Counterweight Safety	None, Deploy			
Power Supply	380V 50HZ 3P/5W			
Lighting Supply	220V/50Hz			
Supply Code	ENB600			
Min Floor Height	2500			OPH=2100
Floor Designation	B1,B2,B3,B,G,M,-1,-2,-3,1,2,3.....32			



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