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บริษัท มหาจักร อิเล็กทริก (ประเทศไทย) จำกัด

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Specially Designed for Hospital Environment

SMEC LEHY-III B Hospital Bed Elevator is designed to meet the requirements for using in special environment of hospital to the maximum extent. User-friendly car design, simple and bright, combined with a large number of antibacterial materials, creating a clean and comfortable space for operation. Complement to modern medical environment and facilities in every way with harmonious unity. Creating a caring and comfortable space for the patients.

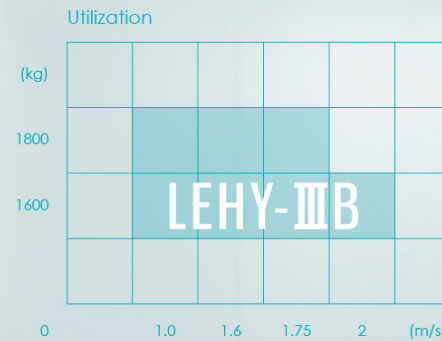
3 Major Concepts

LEHY-III B Compact Machine Room hospital elevator is designed for hospital environments, combined variable voltage variable frequency (VVVF) speed control technology, permanent magnet synchronous (PM) traction machine technology, intelligent power module (IPM) technology and data network control technology, and many other advantages of science and technology of Mitsubishi. Adhering to the consistent technical advantages of Mitsubishi, LEHY-III B has made a perfect integration of intelligence, comfort, safety, energy-saving, delicacy, disturbance rejection and other professional features, providing hospital elevator with perfect ride quality. LEHY series Compact Machine Room hospital elevator has obtained world-wide acclaim and been highly acknowledged by major professional hospitals.

Professional
Quality

Humanized
Design

Antibacterial Car



5 Breakthroughs	P.3	General
5 Innovations	P.5	
Safe and Comfort Configuration	P.7	
Antibiotic Decoration Part	P.9	
A new generation of Decoration system	P.10	

Antibacterial Car Design	P.11	Design
Design of Car Roof	P.12	
Car Operation Panel	P.14	
Landing Display and Landing Call	P.17	
Hall Design	P.19	
LCD Display Series	P.21	
Corresponding Material	P.22	

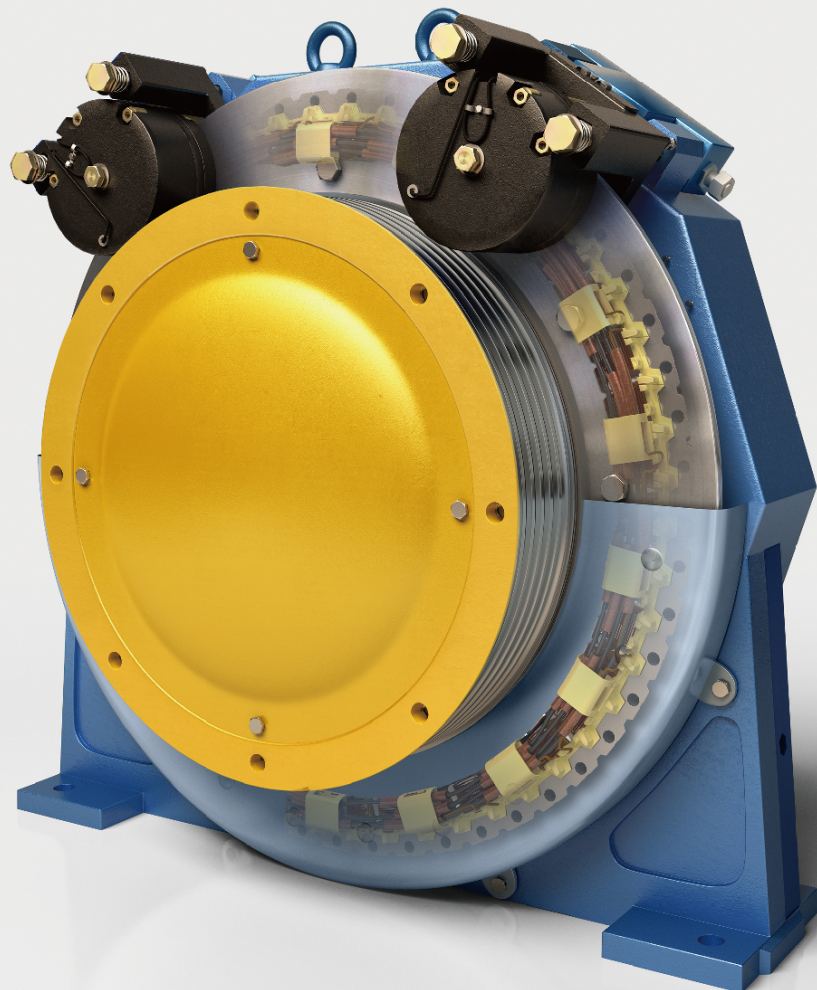
Feature List	P.23	Functions
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Civil Construction Table	P.25	Civil
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Basic Specifications	P.26	Specifications
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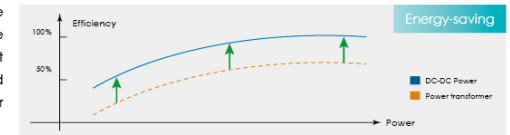
Traction Machine Absolute Upgrade

The new generation PM synchronous traction machine with high performance uses high quality rare earth material and PM body positioning technique with high precision, meanwhile it comprehensively uses motor techniques such as separate punching and riveting iron core and auto integral coil, which not only makes traction machine output more efficiency, less energy consumption, more peaceful and stable, but also makes traction machine has shorter axle distance and more compact structure; The latest large-scale brake plate and disk brake with low noise are adopted, which are safer, more reliable and more durable, ensuring that brake noise can be significantly reduced while outputting brake torque with abundant safety.

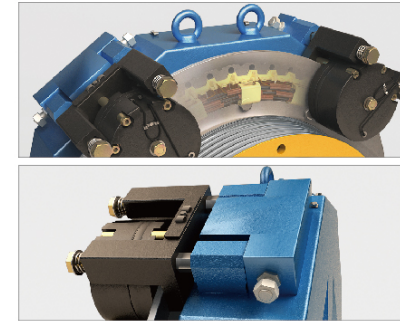


All-digit Intelligence Power System

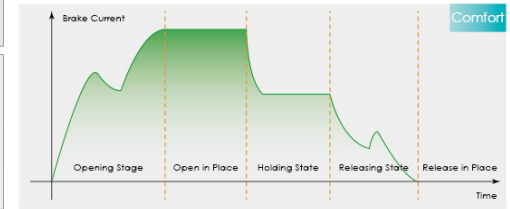
It utilizes all-digit control intelligent DC-DC power as the substitution for three-phase power transformer to provide power for elevator control system. New power system is not only more stable and reliable, invulnerable to grid fluctuation, but also consume less energy, with higher efficiency and more comprehensive protection.



Mute Brake Control Technology

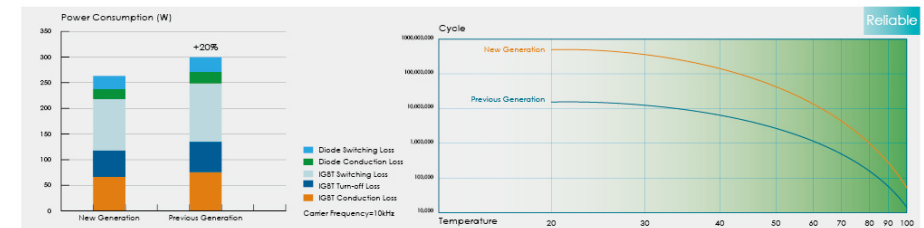


Compared to traditional open-loop voltage control, more accurate closed-loop current control mode is now employed to control the action speed and braking torque at all stages of the brake. This has remarkably reduced the noise from the brake during action and improved the comfort of the passengers while taking the elevators.



The Latest Generation of High-power Module

Take the lead in employing the sixth generation of high-power module system in the industry. Multiple fast protection circuit can better protect the power module, further improving the reliability of the drive system. Meanwhile, the drive control circuit of power module connects with the power module by direct plugging, further enhancing the system's anti-jamming ability.



High-performance and Intelligent CPU Control System

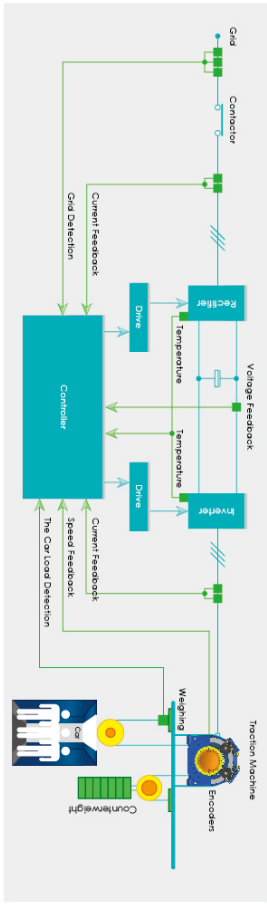
Apply new generation of high-performance CPU technology and PCB system architecture and realize elevator's main control system with multi-chip architecture of motor drive, elevator control management, elevator communication and FPGA logic control. Cooperation work of multiple CPUs has greatly improved the elevator system performance. The redundancy protection with multiple CPUs and the FPGA hardware monitoring have improved system stability and security.



Reliable and Comfortable

AC VVVF Speed Regulation Control Technology, Full Digital Control Technology

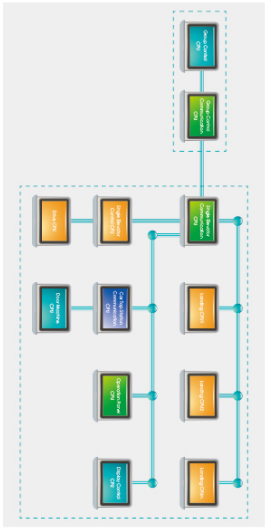
Adhering to the philosophy of steadily and slowly releasing of profound knowledge and constantly using latest technologies and components in VVVF drive of elevators enable Shanghai Mitsubishi VVVF speed regulation technology to develop rapidly toward high performance, high reliability, digitalization and initialization. Employing space vector pulse width modulation (SVPWM) technology to realize elevator speed regulation, taking the lead in adopting international latest sixth generation of high-power module, 32-bit high speed digital signal controller (DSC) and large scale integrated circuit and other advanced electrical components, enabling the elevator to accurately regulate the motor rpm completely according to optimum speed variation curve and operate following the perfect speed curve optimized according to modern ergonomics principle. These have realized full digital control and motor drive in true sense and enabled the elevator run smoothly, safely and efficiently.



High-speed Network

Data Network Control Technology

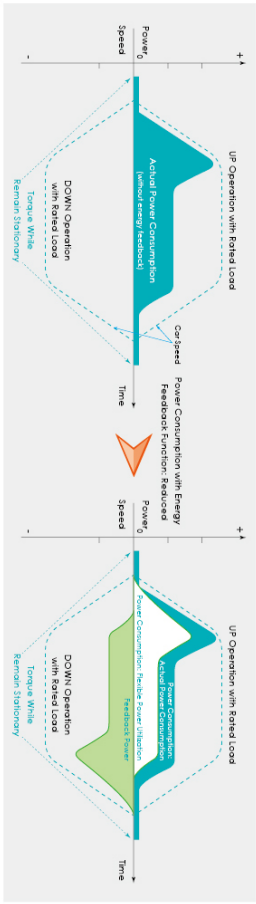
Data network control technology based on CANBUS (field bus) features high communication rate, large data volume. Independent microprocessors are used separately in elevator car command controller, floor indicators inside the car, door machine controller, each landing button and floor indicators and various subsystems. The communication between the various subsystems needs only a few signal lines. This has greatly improved system reliability, electromagnetic interference immunity and flexibility, and reduced the maintenance costs.



Green and Energy-saving

Energy Feedback Technology (Optional)

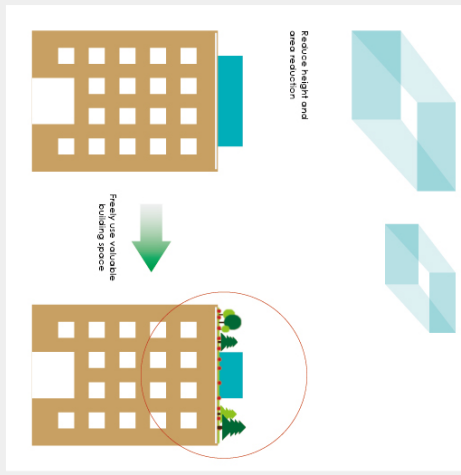
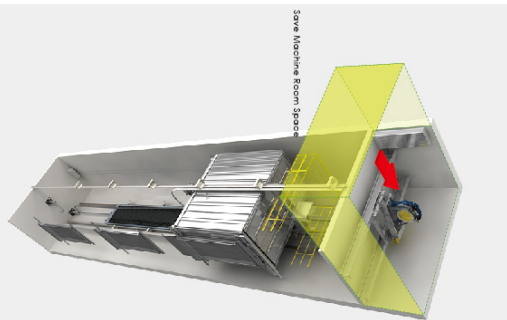
Highly energy-saving energy feedback technology based on dual-PWM control can feed the renewable green electric energy, which was consumed through energy consumption resistors, back to the grid without pollution. This can save more than 30% energy compared to common VVVF elevators on average, and so to meet national power quality standards.



High Adaptability

Really Small Machine Room Design

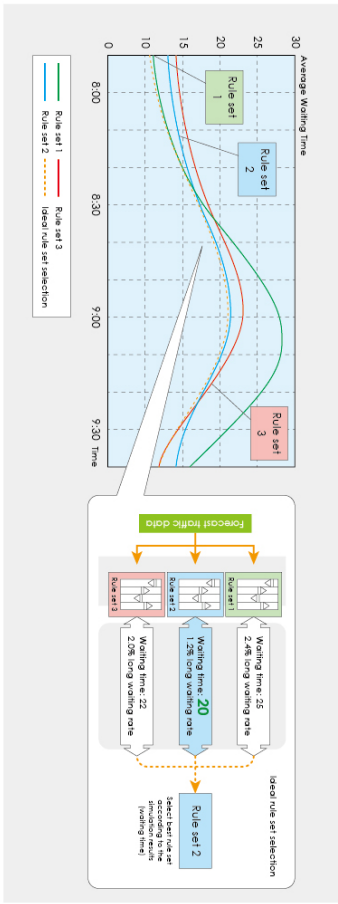
LEHY-III adopts really small machine room design with the machine room size equal to shaft. This saves machine room space, improves building utilization rate, allows more free building design, and compared to traditional machine room, provides more convenient and safe maintenance of the traction machine, control cabinet, over speed governor and other components.



Efficient Group Control

Intelligent Group Control System (Optional)

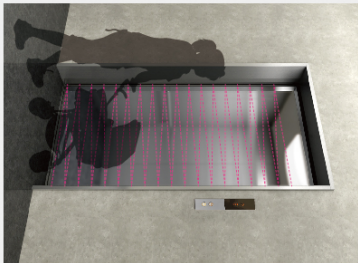
ITS-21, ITS-2100 group control systems use a high-performance CPU processor for computing and achieving high-speed processing of complex algorithms. High-speed data network has effectively improved the system throughput and scalability. Expert system, fuzzy logic technology and neuron technologies are adopted. Dispatching plan can be given in an intelligent way according to different traffic conditions. This can substantially reduce passengers' waiting time and riding time and reduce elevator operation energy consumption throughout the building by reducing invalid elevator operation.



Safe and Comfort Configuration

Multi-beam Safety Edge (MBS)

Safety edge with multi-beam. Provide double protection by multi-beam and safety edge. During door closing, when a passenger or object is detected, the doors will open again. (Standard)



Extended Door-open Button (DKO-TB)

By pressing this button, you can keep the elevator door open for a longer time to facilitate the access of passengers within the hospital. (Standard)



False Call Cancelling – Manual (FCC-P)

If the wrong car button is pressed, it can be canceled by quickly pressing the same button again twice. (Optional)



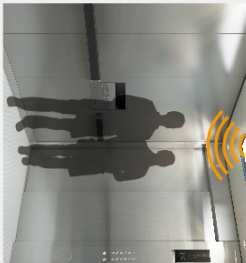
Voice Announce Device (AAN-S)

In case of car overload, control operation during disaster or misuse, etc., the speech unit will remind the passengers by broadcasting about how to deal with the emergency, so that to mitigate and eliminate passengers' confusion and anxiety. (Optional)



Car Arrival Chime (AECC)

4-5 seconds prior to the arrival of elevator at the call floor, the car arrival chime will prompt the passenger that the car is about to arrive at the destination floor. (Optional)



Barrier-free Design

To facilitate the ride of passengers with disabilities or reduced mobility, by setting full-height mirror, handrails and wheelchair control panel inside the car.



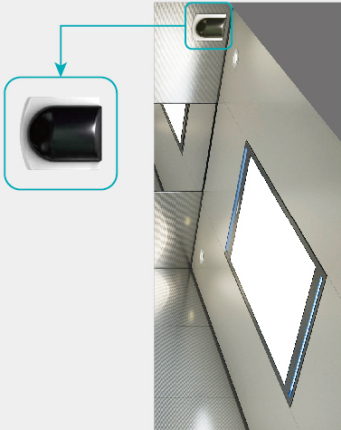
Power Failure Emergency Landing Device (ELD)

When normal power supply breaks, this device will supply power to move the car to the nearest floor, level and open the doors, and allow the passengers to leave safely. (Optional)



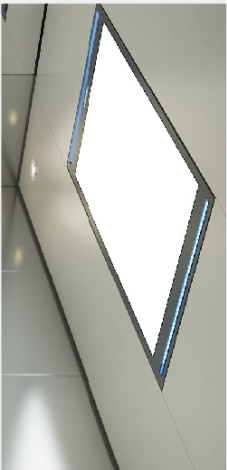
Elevator car video surveillance feature (ITV)

By placing cameras inside the car, you can monitor the status of car from control room, thereby suppressing crime, as well as playing certain role in early detection of the accident. (Optional)



Car Ceiling | Air Purification | Anti-bacterial Collision-resistant Handrail | Non-slip Flooring | Scratch-proof Car Wall

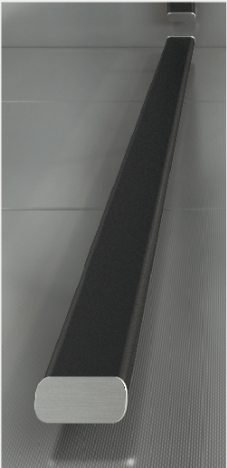
Car Ceiling Dimmable Lighting Air Purification



Lighting effect of LCP is soft and even, and may not bring discomfort of glaring to the patient and is also durable with stable lighting effects and hard for fouling.

Air purification and ventilation unit is set at center of car ceiling (at the blue outlet), which can effectively alleviate the sweltering when crowded; at the same time, the using of a light hydrogen ion sterilization technology can effectively kill bacteria in the air inside the car, reducing the risk of spreading germs.

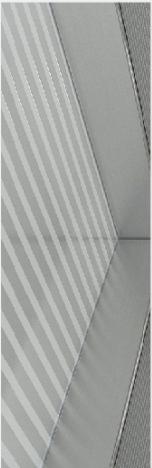
Handrails Antibacterial Collision-resistant



The handrail dimensions are even bigger, which can protect the car wall more effectively, being covered in a polyurethane buffer layer, which can effectively slow the discomfort to the patient that may caused by collision of the hospital beds with car wall.

Highly efficient antimicrobial silver ions have been added to the polyurethane buffer layer on the handrail surface, which can effectively kill bacteria on handrail surface, reducing the risk of spreading germs.

Flooring Non-slip Durable



The full stainless steel flooring, designed with optimized lateral bump texture, can greatly reduce the risk of patients' slipping inside the car. Taking into account both the appearance and the anti-slip effect, the full stainless steel flooring is durable and won't easily be deformed and warped due to long-term use.

Car Wall Scratch-proof

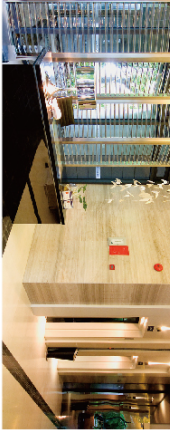


Color No.: ZYH-001

The selection of lensless stainless steel is with higher surface hardness, which can effectively prevent the car wall against the scratches from the access of medical devices.

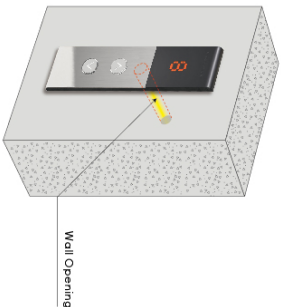
A new Generation of Decoration System

Universal decoration system applies to all LEHY elevators of Shanghai Mitsubishi, including LEHY-III, LEHY-MRL, LEHY-AH, LEHY-H and etc. On the basis of full preliminary surveys and demand collection analysis, the flexibility and responsiveness of the brand new developed decoration configuration are enhanced greatly, providing the customers with choices of different grades and styles.



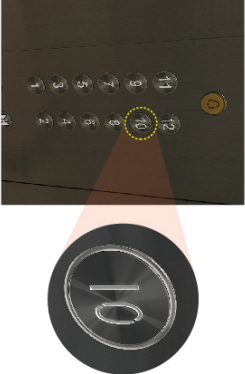
Easy to install Wall-mounted Call

Call without bottom box does not require reservation of rectangular holes on the wall but small round holes on the wall for installation. The construction is easier and the installation is more convenient.

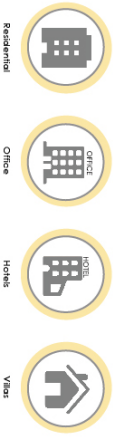


Easily Recognizable Micro-light Buttons

Micro-light design for standby status of buttons improves the recognition of the button numbers, ensuring that the floor numbers on the buttons may be read fast under dim environment.



Brand new Designed Integrated Cars Apply to a Variety of Architectural Styles

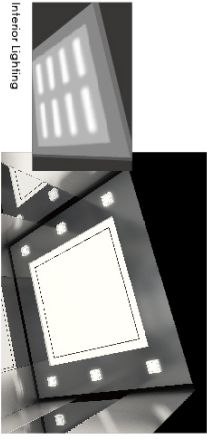


The brand new designed integrated cars apply to a majority of architectural occasions, providing various styles and satisfying diversified customer requirements:

- No additional decoration layer, and saving more space and cost;
- One-time delivery save both time and labour;
- Original quality, safe and secure.

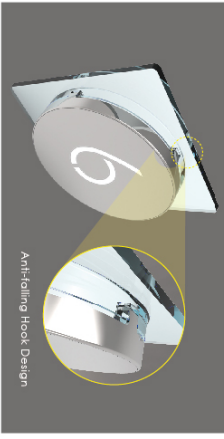
Energy Saving and Environment Friendly LED Lighting

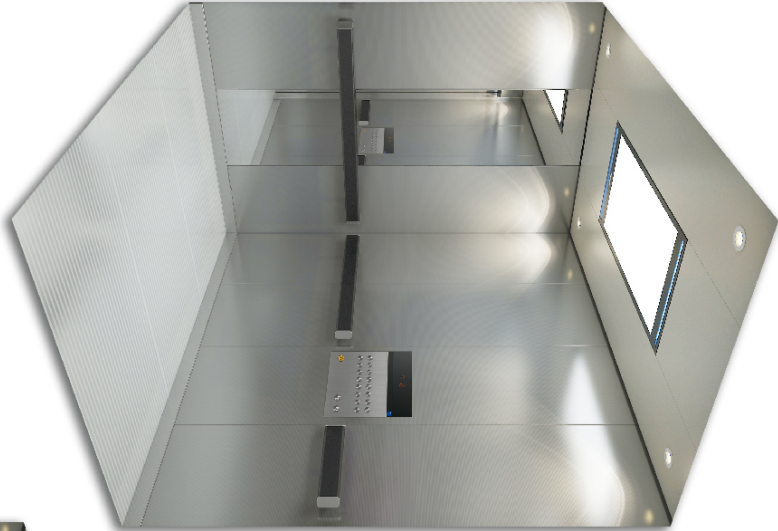
The car roofs of LEHY-III-B are all changed into LED lighting, which has 5 times longer service life than the traditional fluorescent tubes, saving at least 50% electrical cost and thus greatly reducing the maintenance and use costs.



Durable Buttons

The button life reaches up to 5 million times. The reinforced stainless steel button caps designed dedicated for residential elevators adopts anti-falling hook design, which may be resistant to sabotage. (1kg block falling from a height of 0.5m to the button surface for three times and the button can still work normally.)





Antibacterial Car Solution

Car Ceiling

ZCL-GN01

Operation Panel

ZCBA02-C110 (Can select other models)

Wheel Chair Operation Panel

ZCBA04-F110

Lighting

Full-LED lighting, central creamy white (CSP lighting, dimmable downlight auxiliary lighting at four corners)

Air purification and ventilation unit

Air purification and ventilation unit is set at center of car ceiling (or the blue outlet)

Front Wall

Hairline Stainless Steel

Two Sides of the Side Walls and Back Wall

Lentil embossed stainless steel (ZYH-001)

Mirror

Full-body

Car Door

Hairline Stainless Steel

Lintel

Hairline Stainless Steel

Handrails

Single antibacterial handrail on three sides (ZYH-SF01) (Can provide none or select other models)

Floor

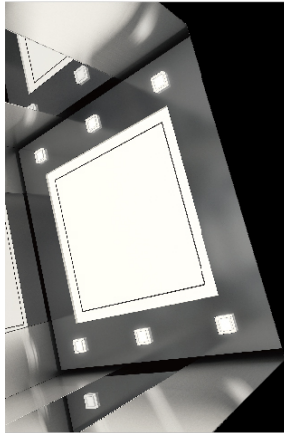
Non-slip stainless steel floor (Can select other models)

The R&D team of SMEC has visited hospitals, carried out research interviews to patients, doctors, elevator drivers, care workers and maintenance personnel and gathered first-hand design requirements from users. Based on the market demand, the R&D team has extracted design concept for professional hospital elevator, such as, antibacterial, air purification, central ventilation, collision-resistance and scratch-proof, and so on, so that to deal with the weaknesses of existing products. With careful design, organic integration of product functionality and appearance, SMEC has introduced to our customers the professional hospital elevator solutions with distinctive characteristics.

LEHY-III B Antibacterial Overall Car Design

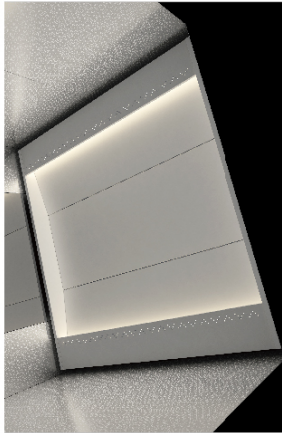


ZCL-GS06 (Optional)



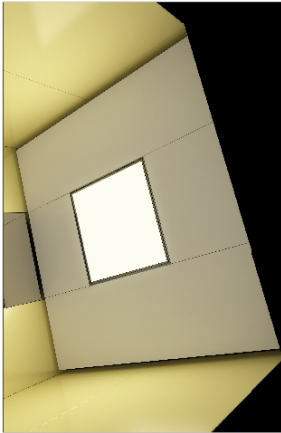
Lighting: central direct lighting, two-side auxiliary lighting.
Material: central milk white printed acrylic lighting board, ambient metallic painting steel sheet.
Thickness: 200mm

ZCL-SS06 (Optional)



Lighting: two-side warm floodlight lighting.
Material: Powdered steel sheet ceiling plate (color code: Y033).
Thickness: 200mm

ZCL-SN03 (Optional)



Lighting: central direct lighting.
Material: central milk white light guide plate, peripheral coating steel sheet ceiling (color code: Y033, if other colors are in need, select color in accordance with Shanghai color palette).
Thickness: 100mm

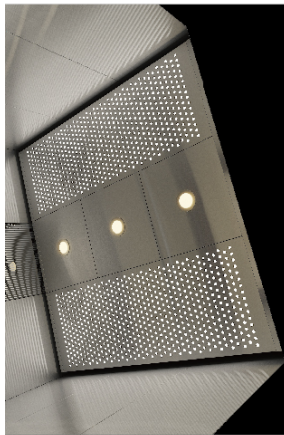
ZCL-CN01 (Empty Car Roof)

By others. (ceiling thickness 100mm).

ZCL-CN08 (Empty Car Roof)

By others. (ceiling thickness 200mm).

ZCL-GN02 (Optional)



Lighting: central down lamp lighting, two-side lighting board lighting.
Material: Hairline stainless steel ceiling panel.
Thickness: 200mm

ZCL-SS08 (Optional)



Lighting: central direct lighting.
Material: lighting board, two-side coating steel sheet (color code: Y033, if other colors are in need, select color in accordance with Shanghai color palette).
Thickness: 200mm

ZCL-GN01 (Optional)

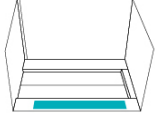


Lighting: Central milk illumination, with temporary downlight at corners or auxiliary lighting.
Material: Central ivory-white light guide plate, with coated steel plate suspended ceiling at corners.
Thickness: 200mm

Note:

All car roofs adopt LED lighting.
Safety windows are optional for car roof. Consult sales persons for details.

Front Wall Half Height Operation Panel



Amber LED, classic and durable.

5.7" Color segmented LCD, fine and vivid.

5.7" TFT LCD, fine and vivid.



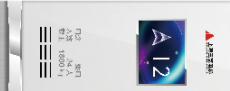
Stainless Steel Panel

The buttons are exchangeable. The figure shown is A02 button.



Stainless Steel Panel

The buttons are exchangeable. The figure shown is A11 button.



Stainless Steel Panel

The buttons are exchangeable. The figure shown is A13 button.

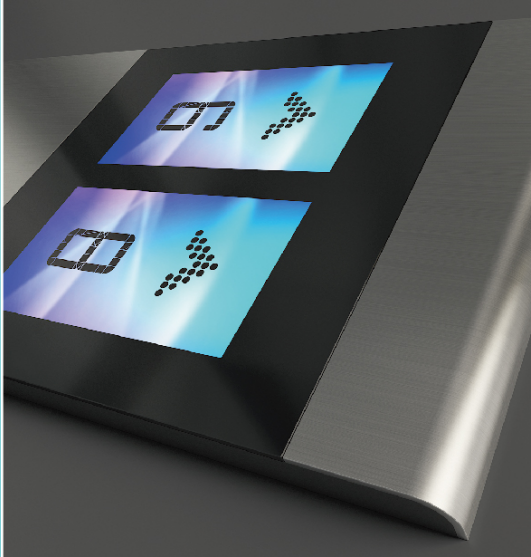
ZCB-C110 (Primary)
ZCB-C160 (Auxiliary)

ZCB-C510 (Primary)
ZCB-C560 (Auxiliary)

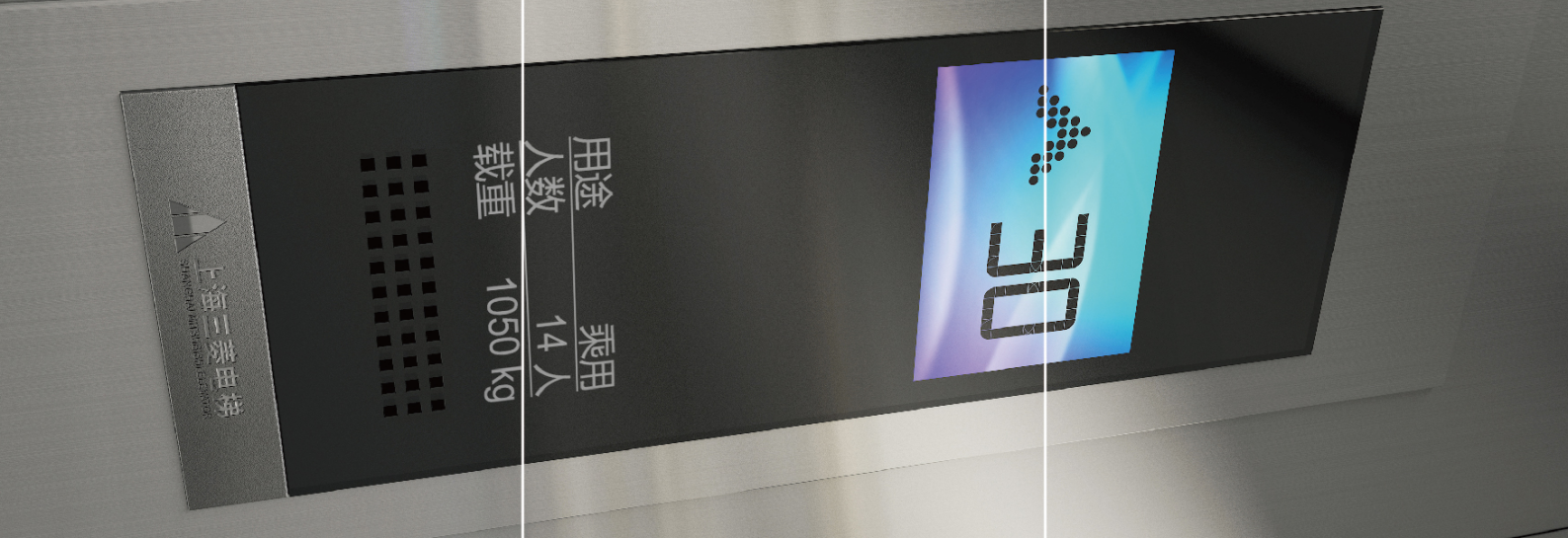
ZCB-C210 (Primary)
ZCB-C260 (Auxiliary)

Note:

- *1 Configurable when front wall width $\geq 250\text{mm}$.
- *2 The symbol  represents the button model, please select the button model from Page 18, it is recommended to select A01~A06 buttons when the parking floors of front wall half-height operation panel exceed 20 floors.
- *3 Please refer to Page 21 for LCD.



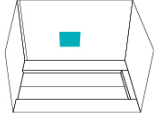
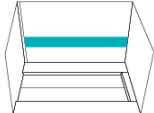
Human-machine Component Design



Side Wall Full-height Operation Panel

Side Wall Full-height Operation Panel
Comply with GB/ T24477 Standard

Wheel Chair
Operation Panel



Amber LED, classic
and durable.

5.7" Color segmented
LCD, fine and vivid.

5.7" TFT LCD, fine and vivid.

Amber LED, classic
and durable.

5.7" Color segmented
LCD, fine and vivid.

5.7" TFT LCD,
fine and vivid.

Stainless Steel Panel

Stainless Steel Panel

Stainless Steel Panel

Stainless Steel Panel

Stainless Steel Panel

Stainless Steel Panel

The buttons are
exchangeable.
The figure shown
is A02 button.

The buttons are
exchangeable.
The figure shown
is A11 button.

The buttons are
exchangeable.
The figure shown
is A13 button.

The buttons are
exchangeable.
The figure shown
is A04 button.*1

The buttons are
exchangeable.
The figure shown
is A04 button.*1

The buttons are
exchangeable.
The figure shown
is A04 button.*1

ZCB ■ -F130 (Primary)
ZCB ■ -F180 (Auxiliary)
Comply with GB/ T24477 Standard

ZCB ■ -F110 (Primary)
ZCB ■ -F160 (Auxiliary)

Note:
*1 Configurable when front wall width <250mm.
*2 The symbol ■ represents the button model, please select button from Page 18.
*3 Please refer to Page 21 for LCD.

Note:
*1 Signal ■ represents the button model. The optional buttons of the operation panel in this page are A04, A05, A06 (complying with GB/T24477 standard). See details in Page 18.
*2 Please refer to Page 21 for LCD.
*3 The difference of the appearance of ZCB ■ -F130 and ZCB ■ -F110: the button of the first floor is protruding and the frames of the two sides are black.

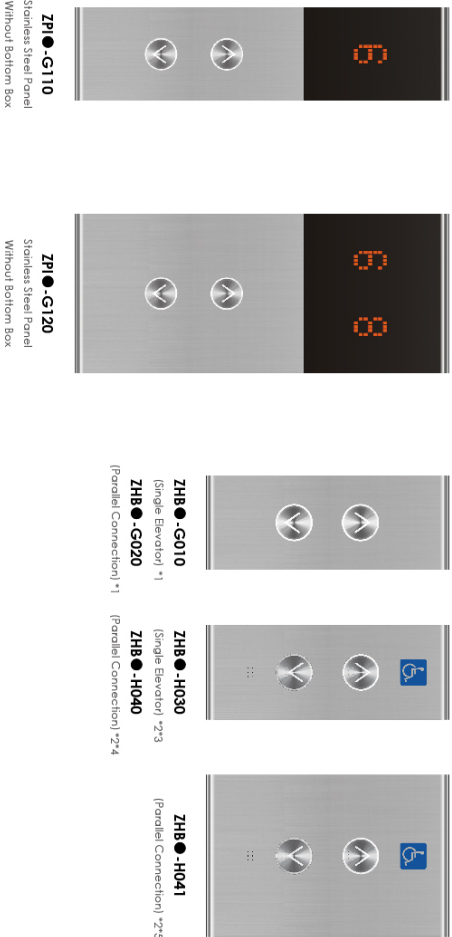
Landing Display and Landing Call

Wall-mounted Landing Call

Wall-mounted Landing Call (Without Bottom Box)

LED Dot Matrix Display

Barrier-free design response,
complying with GB/T24477 standard.



4.3" Color Segmented LCD

4.3" TFT LCD

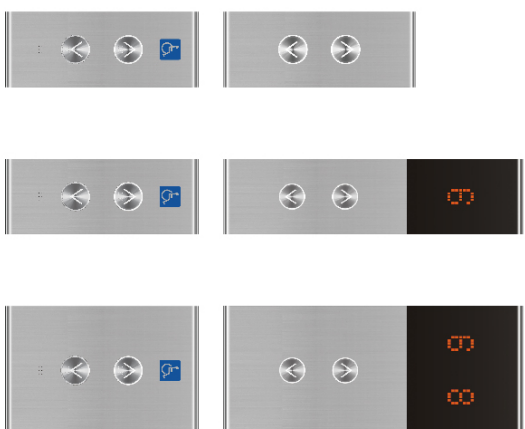


Note:

- *1 The symbol ● represents the button model, please select button from Page 18.
- *2 The symbol ● represents the button model. The optional buttons are A14, A15, A16 (complying with GB24477 standard). See details in Page 18.
- *3 Required to be used together with ZHB●-G010 or ZPI●-G010.
- *4 Required to be used together with ZHB●-G020.
- *5 Required to be used together with ZPI●-G020.
- *6 If bottom box is needed, contact the sales person for non-standard installation of bottom box. The appearance of the landing indicators with or without bottom box will be consistent.

Matching Diagram (Respond to the requirements of the handicapped)

Single elevator and parallel connection calls should be corresponding one by one.



Flexible and Replaceable Button Series

Basic Buttons



- A11 White Light Flat Words
- A12 Orange Light Flat Words
- A13 Blue Light Flat Words
- A14 White Light Protruded Words with Braille
- A15 Orange Light Protruded Words with Braille
- A16 Blue Light Protruded Words with Braille



- A01 White Light Flat Words
- A02 Orange Light Flat Words
- A03 Blue Light Flat Words
- A04 White Light Protruded Words with Braille
- A05 Orange Light Protruded Words with Braille
- A06 Blue Light Protruded Words with Braille

Diameter 38mm, Mochireny Fine Motion Standby Micro-light, Stainless Steel Surface

Diameter 31mm, Mochireny Fine Motion Standby Micro-light, Stainless Steel Surface

Illustration of the Button Samples



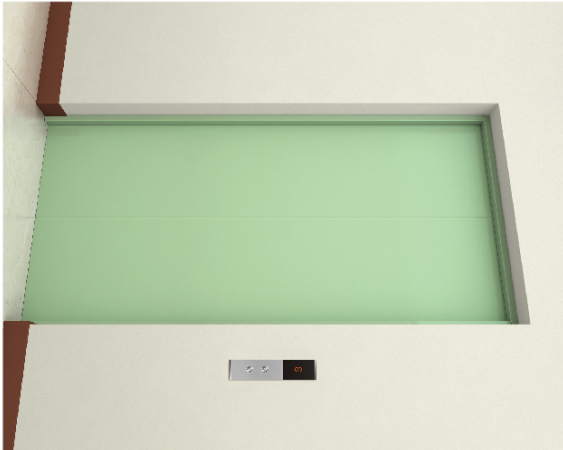
Note:

- *1 It is recommended to select A11~A16 buttons for hall call buttons when the car operation panel selects A01~A06 buttons.
- *2 A01~A06 are not optional for hall call buttons.

Hall Door and Jamb

E-102

Narrow Door Jamb
Applicable for wide cor., deep cor.



Landing Display Coll: ZPMQ-C-110
Landing Door Material: Painted Steel Sheet
Jamb Material: Painted Steel Sheet

E-302

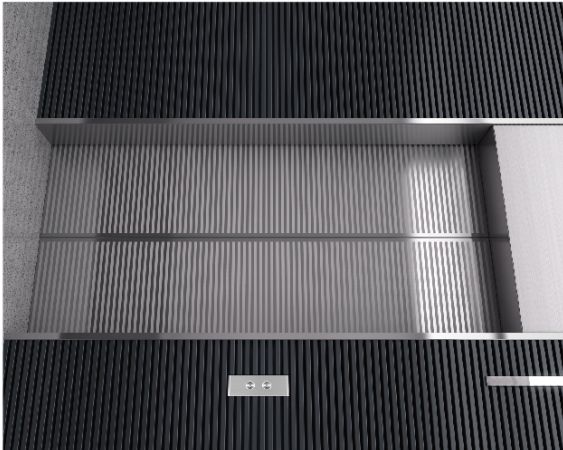
Bevel (10°) Large Door Jamb
Applicable for wide cor., deep cor.



Landing Display Coll: ZPA-11-GS10
Landing Door Material: Hairline Stainless Steel
Jamb Material: Hairline Stainless Steel

E-312

Curtain Plate Type Bevel (10°) Large Door Jamb
Only applicable for wide cor.



Landing Direction Light: ZHLV-H010
Landing Coll: ZHBA-11-G010
Landing Door Material: Hairline Etched Stainless Steel (ZHY-004)
Jamb Material: Hairline Stainless Steel

E-322

Slant Curtain Plate Bevel (10°) Large Door Jamb
Only applicable for wide cor.



Landing LCD: ZPH-N301 (Bergott Brown)
Landing Coll: ZHBA-11-G010
Landing Door Material: Mirror Barbed Double-color Titanium-coated Stainless Steel (ZPH-001)
Jamb Material: Mirror Titanium-coated Stainless Steel (ZDT-002)

Landing Direction Light

Should be used together with the landing call button components referred to Page 17.



ZHLV-H021 Hairline/Mirror Stainless Steel Panels
Mini white acrylic of the lighting part

ZHLV-H030 Without Panel
Mini white acrylic of the lighting part

ZHLV-R061 Hairline/Mirror Stainless Steel Panels
Mini white acrylic of the lighting part

ZHLV-R070 Without Panel
Mini white acrylic of the lighting part

ZHLV-R050 Without Panel
Mini white acrylic of the lighting part

ZHLV-B031 Hairline/Mirror Stainless Steel Panels
Transparent acrylic of the lighting part (Prepared and drilled)

ZHLV-B040 Wall-Mounted Type
Transparent acrylic of the lighting part (Prepared and drilled)

* The above landing direction lights are all LED lighting, which are energy saving and with prolonged service life.
Each model of direction lights provides, white light, warm white light and blue light at your choice.

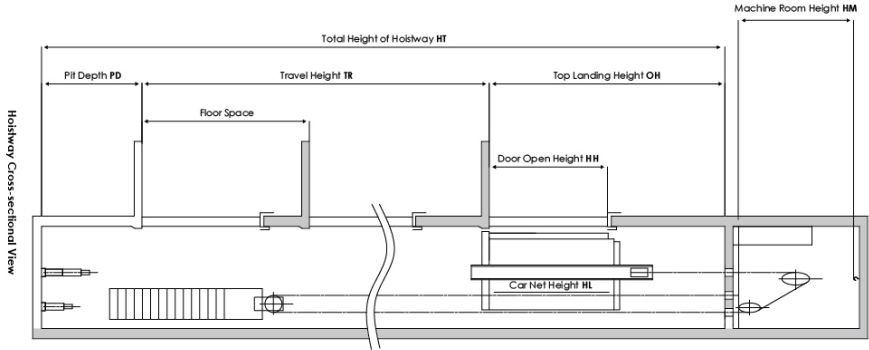
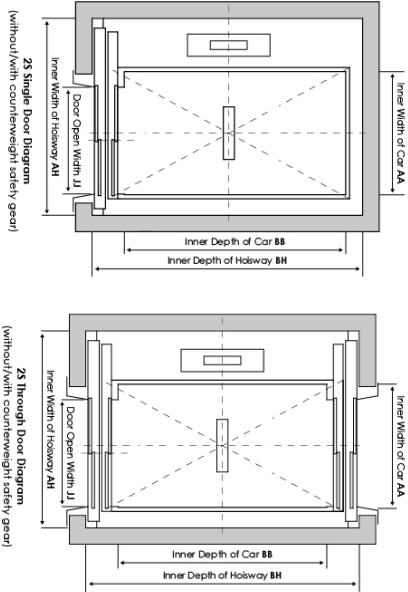
Diagram of the lighting color of each landing direction light



Features

Feature		Description	C-04a	C-CM401	1E-21	1E-23.10	3E-20
■ Control and Safety Features							
Automatic Landing with Predefined Leveling			When the car starts at a station, if the vertical difference between the upper part of the car sill and top of the landing door sill exceeds predetermined value, the elevator will automatically level.				
Artificial Travel			When the traction rope slips or motor stall occurs predetermined time, the elevator will stop.				
Brake Retardation Protection			When a group of brakes fails, the remaining brakes will car relate effective braking of the elevator.				
Energy Feedback			Feed energy generated during operation back to the grid to save energy.				
Electric Safe Lock Protection			Prevent the elevator from operating once the electrical safety devices connected together in series act.				
Automatic Story Height Measuring			Automatic measure and record story height.				
Head Operation			Inspection operation mode for emergency personnel.				
Load Weighing System			The elevator adjusts its load, works according to the car load to act to allow smooth start.				
Over-current Protection			Stop elevator when the current through the rectifier or inverter is detected too high.				
Over-speed Protection			Stop elevator when the running speed is detected over allowable value.				
Over-temperature Protection			Stop elevator when over temperature of motor is detected.				
Over-voltage Protection			Stop elevator when the voltage across the rectifier or inverter is detected too high.				
Power Failure Protection			Stop elevator when open-phase, under-voltage or other faults of power occur.				
Reverse Running Protection			Stop elevator when it is detected running in reversed direction.				
Selector Connecting			The selector connects the selector during operation.				
Safe Landing			If a car has stopped between floors for some reason, the controller checks the cause, and if it is considered safe to move the car, the car will move to the nearest floor and doors will open.				
Stop Open			The car doors open automatically after the car stops at a floor.				
Inverter High-temperature Detection			Stop elevator when inverter high temperature is detected.				
Terminal Forced Deceleration			If the car runs off the terminal but the speed has not been reduced to specified value, the system will force it to decelerate and thus enable it to leave normally.				
Under speed Protection			Stop elevator when the running speed is detected under allowable value.				
■ Operational and Service Features							
Automatic Stop			When the car load exceeds 80% (adjustable rated capacity), the elevator does not respond hall call from other floors along its travel.				
Attenant Service			Normal operation of the elevator is conducted by an attendant.				
Car Compulsive Stop Operation			When an abnormally occurs on the car computer, the car stops at nearest floor and the elevator cannot return to automatic operation, when a car has responded to the final car call or landing call in one direction, the system automatically checks and doors returning car call from the memory.				
Car Call Canceling			There are no calls for a specified period, the car ventilation fan will automatically be turned off to conserve energy.				
Car Fan Shut Off: Automatic			The car ventilation fan is turned off by combination buttons on the operation panel.				
Car Fan Shut Off: Manual Button Type			If there are no calls for a specified period, the car light will automatically be turned off to conserve energy.				
Car Light Shut Off: Automatic Button Type			The car light is turned off by combination buttons on the operation panel.				
Car Light Shut Off: Manual Button Type			To ensure normal operation of elevator in a whole group, when a certain elevator cannot respond registered landing call, it will be excluded from landing call service, and service is provided by other elevator.				
Continuity of Service			As conditioning for elevator car.				
Behavior Dedicated Air Conditioning			Diagnose abnormalities and faults occurred during elevator operation.				
Exit Alarms			Switch for detecting state of exit.				
Fast Call Canceling: Automatic			The number of registered calls not agree with the number of passengers, it is cancel all calls to avoid unnecessary stops.				
Fast Call Canceling: Manual (button type)			If the wrong car button is pressed, it can be canceled by quickly pressing the same button again twice.				
Hall Call Bypass: Manual Call button type			If the wrong hall calling button is pressed, it can be canceled by quickly pressing the same button again twice.				
Automatic Hall Call Registration			When one elevator cannot take all passengers, the landing button remains registered state, and the system will assign another elevator to provide service.				
Group Control Backstop Service			Abnormal service / Individual elevator when group control becomes invalid due to failure of the group control controller or failure of communication between the group control and individual stations.				
Hall Computer Back Up: Operation			When an abnormally occurs on the hall computer, the car stops at nearest floor and the elevator cannot return.				
Hospital Emergency: Stop Sign			By pressing the Door Open button and the DOCB button simultaneously, the elevator will respond only to the car call.				
Hall Out-of-service Operation			Turn on or shut off the elevator in the operation panel, the car can respond only to car calls without interrupting service.				
Independent Service			Using the independent switch in the operation panel, the car can respond only to car calls without interrupting service.				
Non-response to Specific Floor (bypass type)			Operating this switch can cancel service to specified floors.				
Non-response to Specific Floor (bypass type)			Cancel service to specific floor / Operating buttons on the operation panel and the landing switch.				
Non-response to Specific Floor (bypass type)			When landing call of car call is registered but the car cannot start when predetermined time, it will clear the assigned landing call, reserve the car call light, and the elevator will respond to subsequent calls.				
Next Landing			When the car is at the station, the door will not open fully, it will close the door and continue to run to the next floor until the doors can open fully and then restore normal operation.				
Overload Holding Stop			When the car is overloaded, the doors remain open and a buzzer sounds.				
Remote Control Stop			Start or stop the car through the remote control switch.				
Return Operation			Operating return switch to immediate call the car back to specified floor and park there.				
Second Call Service (car button type)			Call certain floor on the operation panel by setting password. The buttons of these specified floors can only be registered after the password is entered on the operation panel.				
Second Call Service (IC card type)			The buttons of certain specified floor can only be registered via IC card.				
■ Emergency Operation Features							
Emergency Car Lighting			Immediately provide car lighting when normal lighting power supply breaks.				
Emergency Evacuation Alarm (buzzer)			When a buzzer anti-invasion detector calls, the car immediately parks at the nearest floor with door opened.				
Power Failure Emergency Landing Device			When normal power supply fails, this device will supply power to move the car to the nearest floor, level and open the doors, and allow the passengers to leave safely.				
Alarm Bell			Press the alarm bell in emergency, the bell and intercom will sound.				
Operation by Emergency Return Source - Like Automatic			When the fire Emergency Return switch cuts out, all landing calls and car calls are cancelled, and the car immediately return to predetermined floor and park with door opened.				
Operation by Emergency Return Source - Like Automatic			When normal power supply breaks, the pre-assigned cars will be powered by the emergency power source of the building and automatically return to the predetermined floor in order. Once all cars have arrived at the predetermined floor, the specified car can operate normally.				
Working System			The system can complete to monitor the elevator's operation and position status, and provide operation commands as necessary.				
■ Door Operating System							
Door Close Limit Switch on Start			When the car doors can not close completely, they will reverse and open.				
Double Limit Operation			When car doors are in open state, if there is no car call or landing call in forward direction and the landing call in reverse direction of this floor has been registered, the car will close doors and then immediately open again.				
Extended Door-opens Button			Press and hold this button can extend door-open time.				

Code	1C-2AC	1C-2AC	3-AC	3-AC	Feature	Description
■ Door Operating Features					Door Closed Detect	If the car door cannot fully open or close due to overload, the door will not in reverse direction.
					No-Door-Open Feature	If car door is blocked while opening, it will close immediately.
					Automatic Door-Open Time Adjustment	Automatically adjust door-open time according to loading ratio or car call.
					Door Close Torque Up Control	When car door encounters extra resistance while closing, the door system will automatically increase the torque.
					Door Nudging Feature	After the car door is stopped at a station and the door has opened, pressing Door button can make the door to close immediately.
					Multi-Beam Safety Edge	If the door-open time exceeds the predetermined value, the car will temporarily ignore the action of car-occupied door sensor and close the door locally.
					Door Closing Feature with buzzer	If the door-closing time exceeds the predetermined value, it will give alarm sound to alert the passenger and try to close the door.
					Repeated Door-Close	If car door is blocked while closing, the elevator will repeat the closing action until the obstacle is removed.
					Response with the Button	During door closing, when hall calling button in the same direction is pressed, the door will reopen.
	■ Information and Display Features					Voice Announce Device
					Voice Announce Device	Voice announce device (Chinese and English in turn) informs the passengers of related elevator information.
					Voice Announce Device	Voice announce device (English) informs the passengers of related elevator information.
					Car Arrive Chime (Chim)	The chime prompts the passengers the car has arrived at the destination floor. (The chime is installed on the car roof and floor.)
					Once a passenger has registered a starting call, it will immediately react on elevator motor subbase for responding the call and inform the passengers of its visual display signal.	
					The landing indicator displays the elevator's is in automatic operation state.	
					Output basic operation state signal of the elevator via the device	
					The landing indicator displays the elevator's is in "Typical operation" state.	
					Indicate running direction with arrow on the hall.	
						The Door-Close button light illuminates at the same time when the button is pressed
The Emergency Return - Completed					When the Extended Door-Open button is pressed, the indicator light illuminates for certain period.	
					The Door-Open button light illuminates at the same time when the button is pressed	
					Record number of run and turning time of the elevator.	
					Can provide audio/video or other information for the passengers (installed in the car).	
					Can provide audio/video or other information for the passengers (installed on the wall).	
					Display hall the elevator in active service floor.	
					A CF signal is outputted after the EFR running is completed.	
					Flashing lamp indicator shows arrival or call and running direction.	
					Hand Operation Signal Light	Indicate running direction with arrow on the hall.
					Telephone	In emergency, persons in car, on car top, or in pit can use this device to communicate with persons in machine room or monitoring room.
■ Group Control Features					TV cable (monitoring)	The cable used for video (camera/monitor) installed in the car for user to monitor the real image in the supervisory room.
					TV cable (for SMOCS)	The cable used for video camera equipped with SMOCS system.
					ITV cable (for SMOCS)	A CF signal is outputted after the operation by emergency power source is completed.
					Overload Indication in Car	When the elevator is overloaded, the overload indicator lamp illuminates.
					Out-of-Service Indication	Indicate the elevator is out of service on the hall.
						In group control, the group control system adjusts car assignment according to actual location in real time.
					Car Assignment Time	When temporary competition occurs due to meeting or other events, the system will try to sort to arrange cars to the congested floor.
					Congested Floor Priority Service	When responding landing call, the car nearest to the floor is assigned first.
					Car Meeting Priority Service	When considering passenger flow, volume and meeting passengers' demand, when the elevator's service level has exceeded the specification, the system will reduce number of car put into service to save energy.
					Emergency Operation (Number of)	Car putting a certain floor are forced stop at this floor.
Main Floor Parking					Special Floor Forced Stop	When there is no landing call or car call, the car returns to main floor and parks there.
					Strategic Overall Assignment	For group control elevator, the car part differently of the main station and middle floor.
					Prevention of Simultaneous Running	This feature prevents simultaneous running within total running region of elevator installed in the same well to avoid noise in the car.
					Peak Hour Control	To alleviate temporary peak traffic, heavy traffic floor (the floor or main floor) will be given priority service.
					Specified car Priority Service	Specified cars is sent first for the landing call from specified floor in group control system (e.g. glass elevator or the elevators with basement service).
					Main Floor Characteristic Operation	Provides preferential car service to a specified floor where a hall call is made at that floor.
					Light-based Car Priority Service	Main floor can be changed by pressing the Changeprior button.
					VF Service	When the traffic is light, the car with no light load (load is less than 10%) is assigned first.
						A specified car can be withdrawn from group service for special VF service.
■ Non-standard					11 Non-standard	
					12 Optional in the case where the number of landing stations is equal or more than 5 and SC-CHC feature is not provided.	
					13 Optional in the case where SC-CHC feature is provided.	
					14 When two or more elevator are in parallel or group control, the non-service floor of each elevator shall be consistent.	
					15 One of two or more elevator can be selected, the customer or SMOCS is provided a free control signal to the control cabinet.	
					16 Distance to the adjacent floor will not be greater than 1.6m, a different distance won't be greater than 20m.	
					17 Diversion to the adjacent floor will not be greater than 1.6m, a different distance won't be greater than 20m.	
					18 Users are required to provide the normal signals of normal and emergency power sources respectively as well as to provide automatic control dry contact signals. The user shall provide these signals to the machine room control cabinet.	
					19 Users are required to provide the normal signals of normal and backup power supply, and also to provide automatic control dry contact signals. The user shall provide these signals to the machine room control cabinet.	
					20 Application example of the data is attached.	
■ Application example of the data is attached					11 Application example of the data is attached.	
					12 Application example of the data is attached.	
					13 Only one of AUL/BBP/REEL can be selected at most.	
					14 BA output, open contact output; Output signals are UP, DOWN, Integrated fault, Landing station code signal, the output signal terminal are in the control cabinet in the machine room. No R232/RS485 output.	
					15 Non-standard. No R232/RS485 output.	
					16 Standard when RE is provided. Output in the control cabinet.	
					17 The output signal is provided from the machine room to the monitoring room and their installation.	
					18 The output signal is provided from the machine room to the monitoring room and their installation.	
					19 Non-standard, applicable for other than 220V, and 3C-IT-21 or 4C-IT-21 is selected. Installation floor and setting floor for VF switches shall be specified.	
					20 Non-standard, applicable for other than 220V, and 3C-IT-21 or 4C-IT-21 is selected. Installation floor and setting floor for VF switches shall be specified.	



Item	Specifications	Remarks
Capacity(kg)	1600	1800
Inner Width of Car AA(mm)	1500	1500
Inner Depth of Car BB(mm)	2300	2500
Top Landing Height OH(mm)	≥ 4500	When capacity is 1.0m/s.
	≥ 4600	When capacity is 1.6m/s.
	≥ 4600	When capacity is 1.75m/s.
	≥ 4700	When capacity is 2.0m/s.
Door Open Width JJ(mm)	1200	Two panel sliding door
	1100	Center opening door
Door Open Height HH(mm)	2100	2100
Pit Depth PD(mm)	≥ 1370	When capacity is 1.0m/s.
	≥ 1360	When capacity is 1.6m/s.
	≥ 1390	When capacity is 1.75m/s.
	≥ 1490	When capacity is 2.0m/s.
Inner Width of Hoistway AH(mm)	≥ 2370	Center opening door, single side opening
	≥ 2370	Side opening door, through opening
	≥ 2570	Center opening door, single side opening
	≥ 2570	Center opening door, through opening
Inner Depth of Hoistway BH(mm)	≥ 2725	Center opening door, single side opening
	≥ 2954	Side opening door, through opening
	≥ 2650	Center opening door, single side opening
	≥ 2810	Center opening door, through opening
Inner Width of Machine Room AM(mm)	≥ 2370	Center opening door, single side opening
	≥ 2370	Side opening door, through opening
	≥ 2570	Center opening door, single side opening
	≥ 2570	Center opening door, through opening
Inner Depth of machine room BM(mm)	≥ 2725	Center opening door, single side opening
	≥ 2954	Side opening door, through opening
	≥ 2650	Center opening door, single side opening
	≥ 2810	Center opening door, through opening

Note:
1. The civil engineering dimensions in the above table are calculated according to the car net height HL=2300
HH=2100, when HL>2300 or HH>2100, please refer to civil engineering information.
2. Refer to files of civil construction for AA, BB, HL, HH applicable to standard elevator.

Item	Specifications				Remark
Speed(m/s)	1	1.6	1.75	2	
	1800	1800	1800		
	Capacity(kg)	1600	1600	1600	
Travel Height TR(m)	3.4-55	7.3-90	7.3-90	9.1-120	
	2-18	2-32	2-32	2-36	
The Number of Stops (Stations)					
Operation Mode	1C-2BC, 2C-SM21, 2C-IIS-21, 3C-IIS-21, 4C-IIS-21				Nonstandard
	3C-IIS-2100, 4C-IIS-2100, 5C-IIS-2100, 6C-IIS-2100, 7C-IIS-2100, 8C-IIS-2100				
Control Mode	VFHL				
Door Opening Type	1D1G				
	1D2G, 2D2G				
Door Opening Mode	Center opening, side opening				
Door Opening Bearing	Left opening, Right opening				Side opening
Dynamic Power	380V 50Hz 3-phase 5-wire				
Lighting Power	220V 50Hz single phase				
Minimum Landing Height (mm)	2800				In the case where the nosing is concrete and provided by others, Door opening height is 2100, car net inner height is 2200. For details please refer to the civil drawing.
	2600				
					In the case where the nosing is steel and provided by SMEC, Door opening height is 2100, car net inner height is 2300. For details please refer to the civil drawing.
Nosing (Door Sill Bracket)	Concrete nosing by others, Steel nosing by SMEC.				
Door Jamb Temporary Sealing Plate	Provided, Not provided				
Car Protective Device	Provided, Not provided				
Delivery Code	SMT				
CWT Position	Side Mounted				
CWT Safety Gear	Provided, Not provided				
Display Range of Landing	B, B1, B2, B3, G, M, L, -2, -3, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48				