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Specifications subject to change without notice
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Attraction due to its advantage.
Flexibility due to its space.

Machine-Room-Less Passenger Elevator

LEHY-MRL-Ⅱ

Innovative LEHY Advanced Technology

Maintain Superiority and Nobility

LEHY Machine-Room-Less Elevators (LEHY-MRL-II) are a new generation of standard machine-room-less elevators developed by Shanghai Mitsubishi in response to market demands. With higher technology content and decoration quality, LEHY-MRL-II elevators maintain the superior quality of Shanghai Mitsubishi and the nobility of LEHY-MRL elevators.

Leading Technologies Ensuring Safety and Reliability

The new-generation of LEHY-MRL-II Elevators is designed based on high standards. By applying sophisticated technology, such as configuring functions of auto braking torque detection and brake noise reduction, the elevators provide a safer ride environment to passengers. In addition, the novel layout also provides a safer maintenance space for maintenance persons. Besides the basic functions, LEHY-MRL-II elevators have car models suitable for the disabled and to carry stretchers, thus fully meeting the requirements of elevators for various applications.

Machine-Room-Less System Saving

Space and Making Layout More Flexible

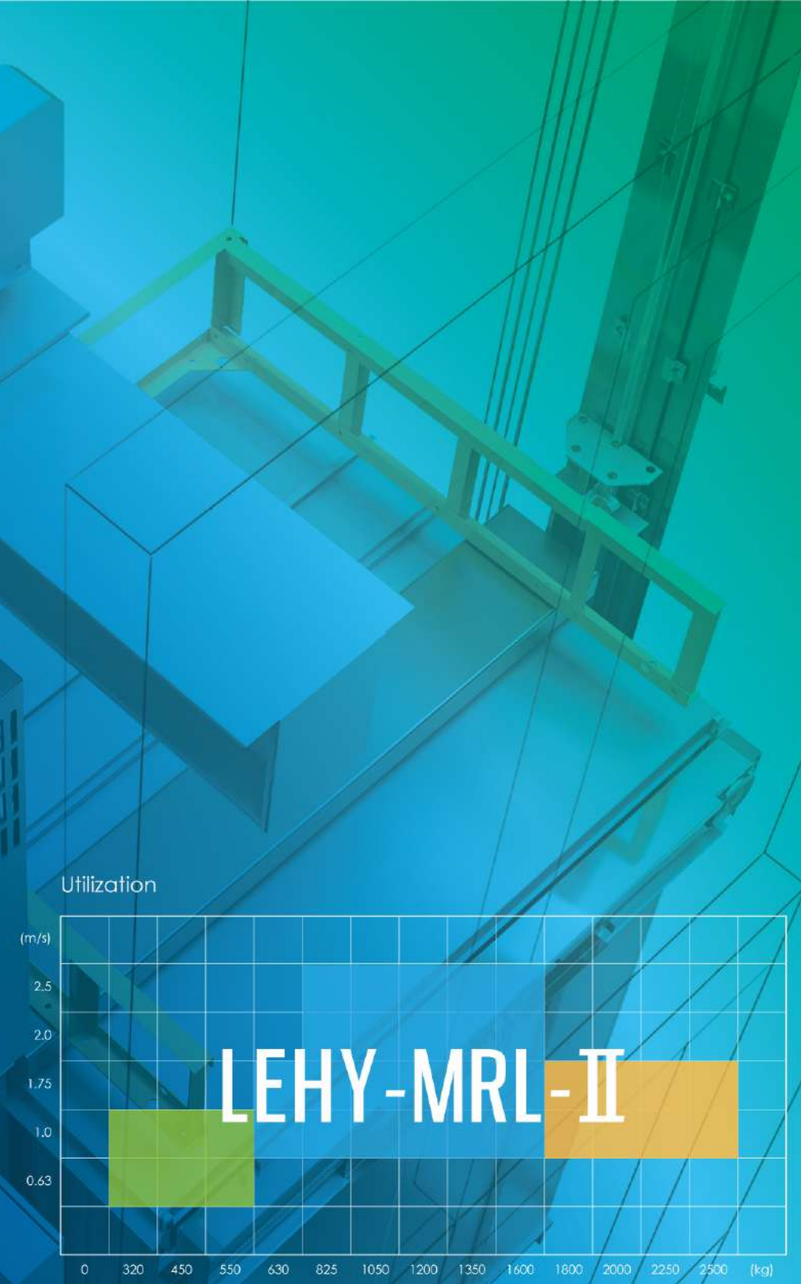
LEHY-MRL-II Elevators use brand new load free-standing structure to realize machine-room-less layout of elevators, thus improving the utilization of the building space and making the space layout more flexible. Saving more space reduces costs for the customer and the impact on the building appearance, providing more choice to the user and making the design for the building freer.

"Green" and "Design" Concept

LEHY-MRL-II Elevators fully incorporates the "Green" and "Design" concept of Shanghai Mitsubishi elevators by applying multiple energy-saving technologies (e.g. PM traction technology, LED lighting technology and energy feedback technology). With a new decoration system, the elevators have better quality and provide passengers with more comfortable ride experience.

New benchmark in safety, comfort, energy-efficiency and technology for the elevator industry.

Significantly improve the cost-efficiency and competiveness of products.



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LEHY-MRL-II

Unique Design

Give LEHY-MRL-II Elevators an Edge

Innovative Machine-Room-Less Structure

load free-standing Structure

Greatly reduces civil engineering costs for the customer increases the utilization of the building space.

Slim Design

Superior PM Traction Machine

Slimness, less energy consumption, simple structure and easy maintenance

Small Control Panel

All-digitalization of control and motor drive

Ultra-slim PM Door Operator System

Making the door operator system run in a more efficient and energy-saving manner, the opening and closing of doors more steady and the maintenance more convenient, and saving space required for installation.

Intelligent Man-machine Interaction

Water ion air conditioner and water ion fan

Intelligent Call System

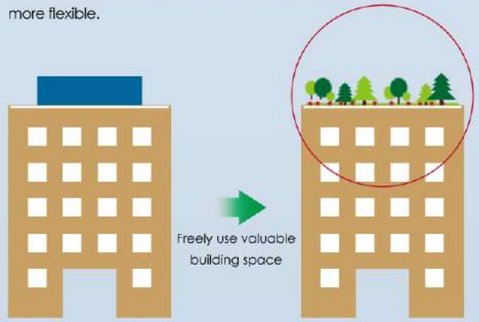
New Intelligent Hall Lanterns

Pet Reminder Function

Intelligent Voice Call

Innovative Machine-Room-Less Structure

The innovative load free-standing structure enables the elevator to achieve a machine-room-less structure, which greatly reduces civil engineering costs for the customer and increases the utilization of the building space. The control panel is arranged in the hoistway, thus reducing the impact of the elevator on the building appearance and making the design and layout of the building more flexible.



Small Emergency and Test Panel (ETP)

The Emergency and Test Panel (ETP) is specially designed for machine-room-less elevators, featured by taking up small space, which can be installed in the hall position indicator or hall call button box at the top floor, making the decoration of the building more pleasant to look.

Rescue staff can provide rescue and emergency drive operations outside of the hoistway, which reduces the risk of rescue operation and makes rescue operation more convenient and efficient.

Slim Design

Superior PM Traction Machine

LEHY-MRL-II Elevators use Shanghai Mitsubishi's latest technology, that is, disc PM synchronous gearless traction machine, which is customized for machine-room-less system and has external brake structure. The traction machine is featured by slimness, less energy consumption, simple structure and easy maintenance while maintaining the high quality and high performance of the original PM traction machine. With the use of advanced current control technology, the brake produces lower noise during braking, creating a quieter dwelling environment for residents at top floors.

Small Control Panel

LEHY-MRL-II Elevators apply large-scale Field Programmable Gate Array (FPGA) and other high-performance chips to make the control panel small and slim, and apply world's advanced Surface Mount Technology (SMT) to truly achieve all-digitalization of control and motor drive and further improve the control performance, reliability and resistance to interference of the system. Shanghai Mitsubishi always upholds the design concept of installing the control panel in the hoistway, which allows the customer the freedom to decorate the top floors.

Ultra-slim PM Door Operator System

LEHY-MRL-II Elevators use ultra-slim PM door operator with direct drive technology and speed-current double closed-loop VVVF technology, making the door operator system run in a more efficient and energy-saving manner, the opening and closing of doors more steady and the maintenance more convenient, and saving space required for installation. By integrating the door weight and changes in resistance to door opening and closing at each landing, the door operator system intelligently adjusts the door opening and closing torque to ensure the doors can be opened and closed smoothly, reliably and safely.

Intelligent Man-machine Interaction

Water Ion Air Conditioners and Fans (optional)

Cleaner

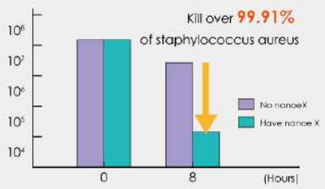
- Equipped with Panasonic nanoeTM X water ion generator imported from Japan, which can kill attached bacteria and viruses.
- Equipped with high-sensitivity VOC sensors, which enable the fan to switch to the maximum speed for quick ventilation when smoke or unpleasant smell is detected.

More User-friendly

- Fan speed can be adjusted according to the load: The fewer the number of passengers is, the slower and the quieter the fan is.
- Fan speed can also be adjusted from a mobile app.

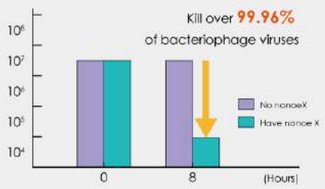
Concentration of bacteria

cfu/Gauze



Number of virus infections

cfu/Gauze



Introduction to nanoe™ X Technology

- nanoe™X are water-wrapped nano-sized particles, which can kill the attached bacteria and viruses by denaturing their protein.
- The eight-hour nanoeTM X test in a 23.3 m3 lab has proved that, nanoeTMX can kill up to 99.91% of Staphylococcus aureus.
- The eight-hour nanoeTMX test in a 23.3 m3 lab has proved that, nanoeTMX can kill up to 99.96% of bacteriophage.
- nanoe, nanoeTMX, nanoe label, and nanoeTMX label are trademarks of Panasonic Corporation

Intelligent Call System (ICS) (optional)

Facial Recognition

√ Allow the elevator to run in case of network disconnection.
√ Deep learning algorithms used to perform recognition in seconds and ensure high accuracy.
√ 2200 MP dynamic wide angle camera to take sharp photos in backlighting.

Fingerprint Identification

√ Latest optical identification module to deliver extremely high rate of fingerprint identification.
√ Encrypted storage of fingerprints to ensure data security.
√ Delicate style fit for various locations.

Voice Recognition

√ No need to touch buttons, hands-free.
√ Able to recognize customized floor information, e.g. dining hall.
√ High accuracy in recognition and high noise immunity. (rate of recognition ≥ 90% at 50dB)

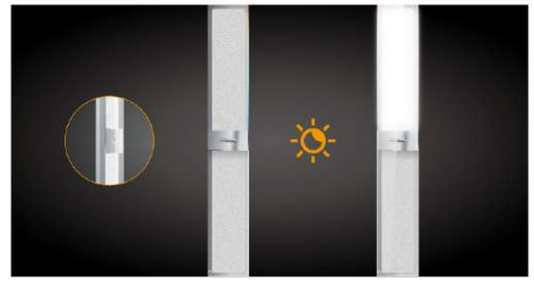
New Intelligent Hall Lanterns (optional)

Adaptive Voice Function

Adjust volume according to the environment to remind passengers of car arrival properly even in a noisy environment.

Adaptive Brightness Function

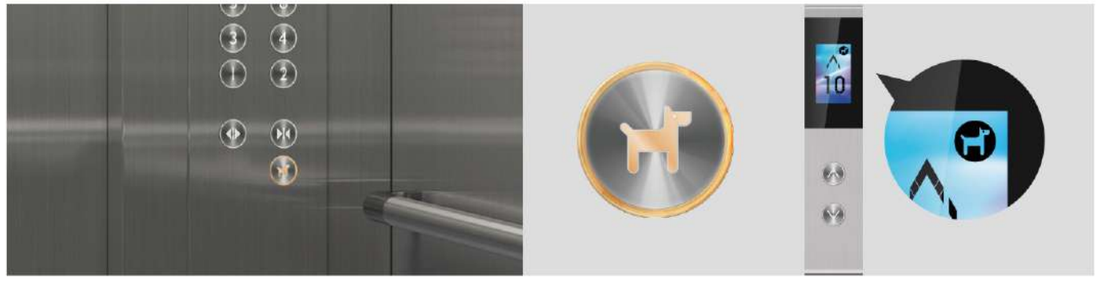
Adjust brightness according to the environment to provide users with bright but not dazzling light.



Pet Reminder Function (optional)

Let Neighbors Feel the Warmth

When riding the elevator with a pet, a passenger can press the pet button to provide a visual indication for passengers at other floors.In so doing, passengers at other floors can decide to or not to ride the elevator as needed, to effectively avoid unexpected pet disturbance.



Intelligent Voice Call (Optional)

√ Touch-free, hands-free buttons
√ Recognition of personalized floor information, e.g. dining hall
√ High accuracy of recognition and strong anti-noise capacity
(50 dB of noise, recognition rate ≥90%)

Energy-saving Devices

Make Good Use of Energy

We have been committed to developing highly effective elevators and have developed intelligent power systems and features.

Milestones of Energy-saving Technologies in the Development Process

	1970	1980	1990	2000	2014
Motor	Induction Motor			Permanent Magnet Motor	
Traction Machine	Traditional Worm and Gear			Gearless	
Motor Drive	AC2 Control	ACVV*1 Control	VVVF*2 Control		
Control Circuit	Relay		Microcomputer		
Power Consumption	100%	93%	74%	37%	30%
Emission (kg/year)*3					1610

Reduce by about **70%**

Notes:

*1: AC and variable voltage

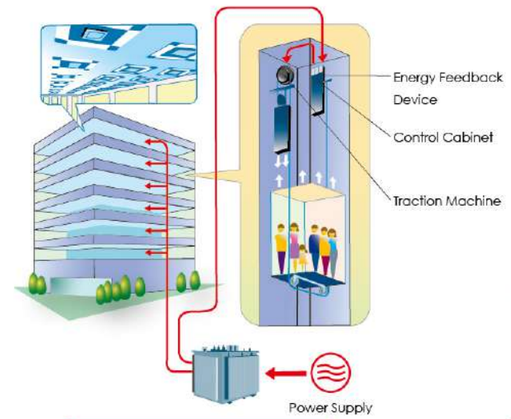
*2: Variable voltage variable frequency (VVVF)

*3:

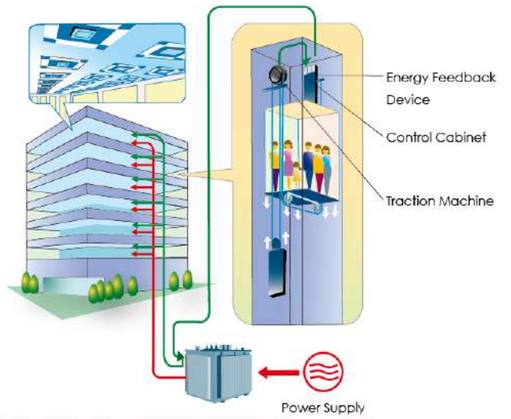
- The emission of CO_2 in the table only refers to the emission during operation of the elevator, excluding the emission of CO_2 generated during manufacturing, transporting and other processes.
- It is calculated by 0.6 kg/kW of power consumption coefficient.
- The value of CO_2 emission in the table may vary against the actual situation.

Energy Feedback Technology

The elevator usually requires electric energy to run (motoring state). When the car runs down in heavy load or runs up in light load, the motor is in power-generating state (energy feedback state) and the electric power generated is usually consumed by resistor heating, which wastes energy and is not environmental-friendly. The PWM control based energy feedback technology (optional) will feed the electric power generated by the motor in power-generating state back to the grid. Compared with elevators without energy feedback device, such elevators can save energy by about 30%. Meanwhile, the input current at power supply side is in sine wave shape, which greatly reduces the harmonic wave pollution to power supply. Also, the voltage at DC side is under control, which helps to improve stability of the elevator operation.



Operation in Electric Mode

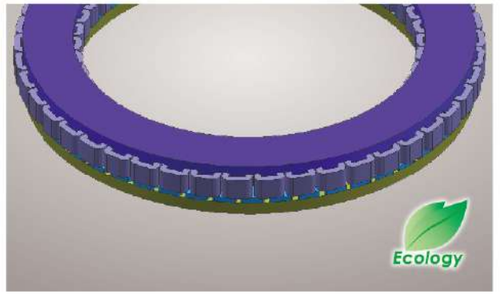


Operation in Power Generation Mode

Note: The above is for reference only. The actual operation may vary by power supply in the building.

PM Gearless Traction Technology

With permanent magnet materials, PM synchronous gearless traction machine does not need exciting current and has no copper consumption, saving energy by about 30% compared with conventional worm gear traction machine. This disc-type traction machine is customized for machine-room-less elevators and featured by small axial dimension, light weight and small size, which is very suitable for machine-room-less elevators with higher requirements for space layout and civil engineering dimensions.



Car Fan/Light Shut Off-Automatic

CFO-A/CLO-A

Car Fan/Light automatically shut off to save energy when the elevator is on standby in no direction for some time.

General Decoration

New-Generation Decoration Options

The general decoration options are applicable to the entire LEHY elevators of SMEC, including LEHY-Pro, LEHY-III, LEHY-M-II, and LEHY-H. With adequate preliminary research and requirement collection and analysis, configurations for the newly-developed decoration options have been greatly improved in flexibility and availability and provide customers with a rich selection of different grades and styles.

Newly-Designed Integrated Car Applicable to Various Architectural Styles

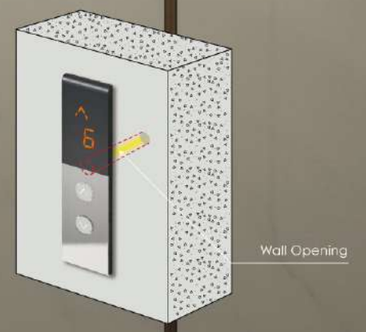
Residential buildings | Office buildings | Hotels | Villas

The newly-designed integrated car is applicable to most buildings, with a range of available styles to meet customer needs:

- No additional decoration layer, saving space and cost;
- One-time delivery, saving time and effort, and
- OEM quality, safe and hassle-free.

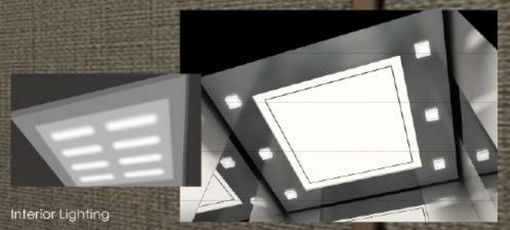
Easy-to-Install Wall-Mounted Hall Call (Except Top Floor)

Bottom-box-less hall call can be installed into a small round opening on the wall, which is easier and faster to install.



Energy-saving and LED Lighting

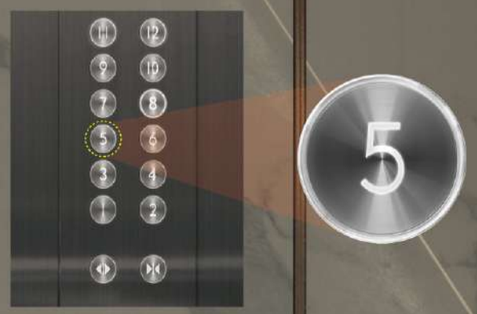
LED lighting is used on ceilings, operating panels, and hall position indicators. Compared with conventional lighting fixtures, LED lighting is more energy-saving, greener, and more durable, significantly reducing the cost of usage and maintenance.



Interior Lighting

Easy-to-Recognize Micro-Light Buttons

A11 and A12 buttons give micro-light during standby, making numbers easier to recognize. Users can quickly recognize the floor number on the buttons even in the dark.



Classical and Durable Button Design

New buttons are more durable, offering a lifespan of 5,000,000 clicks. Their specially-designed reinforced stainless steel button caps use an anti-drop hook design.

(The button can still function properly when a 1 kg ball falls from a height of 0.5 m and hits the surface of the button three times. This is above the requirements for Category 1 elevators as stated in EN 81-71.)

Anti-falling Hook Design

LEHY-MRL-Ⅱ

Integrative Car Design

Advantages offered by original Shanghai Mitsubishi design

Original design | Quality assurance | Time and effort saving | Safe and secure

1. Elaborate design and professional calculation

Specialized design solutions are provided for various types of buildings, with a wide selection of design styles available. The car weight is strictly calculated to prevent it from exceeding the allowed limit when customers redesign the car on their own.

2. Complying with standards and safe & secure

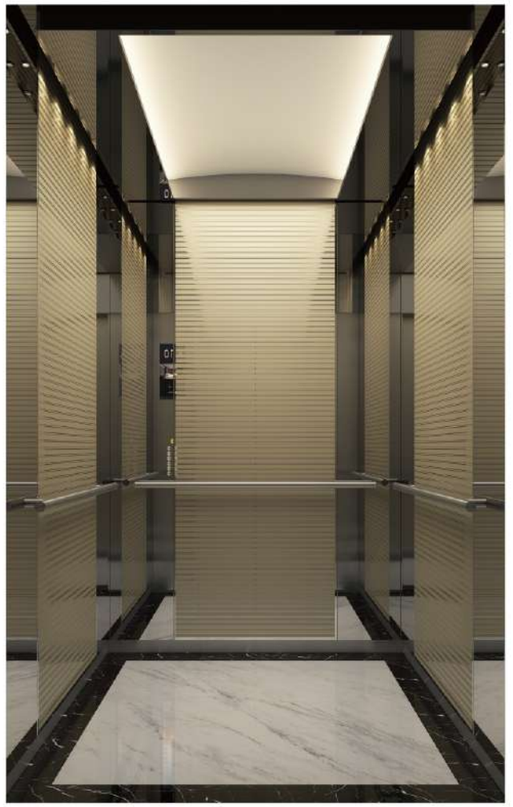
Materials used for car design are in strict conformity with the fire-resistance rating requirements stated in GB 7588, so as to prevent safety risks caused by materials used for customers' redesign.

3. Strict testing and long-lasting quality

Materials, processes and lighting fixtures used in original Mitsubishi design have undergone strict reliability tests, which can better guarantee the quality as compared with the quality displayed when customers redesign the car on their own.

Remark:

1. Car dimensions of the sample elevator: AA = 1600 mm, BB = 1500 mm, HH = 2100 mm, HL = 2400 mm.
2. Ceilings, floorings, handrails, and operating panels are available in other models. See the Material Mapping Table.
3. Front panels, transom panels, and car doors are available in other materials. See the Material Mapping Table.
4. Exquisite Car: integrated design with quality assured
5. Luxury Car: a rich selection of materials; atmosphere rendering technique; superior quality



ZCD-020X

Ceiling

ZCL-GS17

Rear wall

Two sides: Stainless steel, mirror-finish

Central: Etched and painted stainless steel, mirror-finish (ZHF-005)

Side wall

Two sides: Stainless steel, mirror-finish

Central: Etched and painted stainless steel, mirror-finish (ZHF-005)

Handrails

Three-side round stainless steel handrails (ZYH-RH05)

Flooring

Marble flooring (ZSC-012)

Scan the QR code to view the real image of the car

ZCD-022X

Ceiling

ZCL-GS08

Rear wall

Two sides: Laminated steel sheets (ZYM-016)

Central: Etched and antique copper stainless steel, hairline-finish (ZHF-002)

Side wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-006)

Central: Etched and antique copper stainless steel, hairline-finish (ZHF-002)

Handrails

Three-side round stainless steel handrails (ZYH-RH05)

Flooring

Marble flooring (ZSC-014)

Scan the QR code to view the real image of the car

The picture is a schematic; if actual dimensions and appearance vary, the actual specifications shall prevail.

ZCD-039T

Ceiling

ZCL-GS18

Rear wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-004)

Central: Laminated steel sheet (ZTM-056)

Side wall

Laminated steel sheet (ZYM-018)

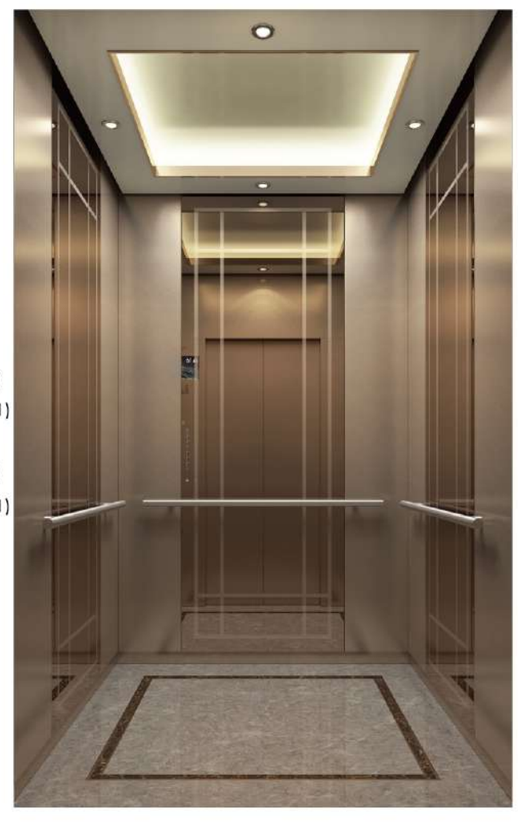
Handrails

Three-side round stainless steel handrails (ZYH-RH05)

Flooring

Marble flooring (ZSC-014)

Scan the QR code to view the real-image of the car



ZCD-040T

Ceiling

ZCL-GS18

Rear wall

Two sides: Random pattern titanium plated stainless steel (ZDT-506)

Central: Brushed titanium plated stainless steel (ZLS-002+ZDT-001)

Side wall

Two sides: Random pattern titanium plated stainless steel (ZDT-506)

Central: Brushed titanium plated stainless steel (ZLS-002+ZDT-001)

Handrails

Three-side round stainless steel handrails (ZYH-RH05)

Flooring

Marble flooring (ZSC-014)

Scan the QR code to view the real-image of the car

ZCD-021X

Ceiling

ZCL-GS22

Rear wall

Two sides: Laminated steel sheets (ZYM-001)

Central: Etched titanium plated stainless steel, mirror-finish (ZHY-027+ZDT-001)

Side wall

Two sides: Titanium plated stainless steel, hairline-finish (ZHY-028+ZDT-001)

Central: Laminated steel sheets (ZYM-001)

Flooring

Marble flooring (ZSC-013)

Scan the QR code to view the real-image of the car

ZCD-022T

Ceiling

ZCL-GS22

Rear wall

Sandblast titanium plated stainless steel, mirror-finish (ZPS-002+ZDT-001)

Side wall

Stainless steel, hairline-finish

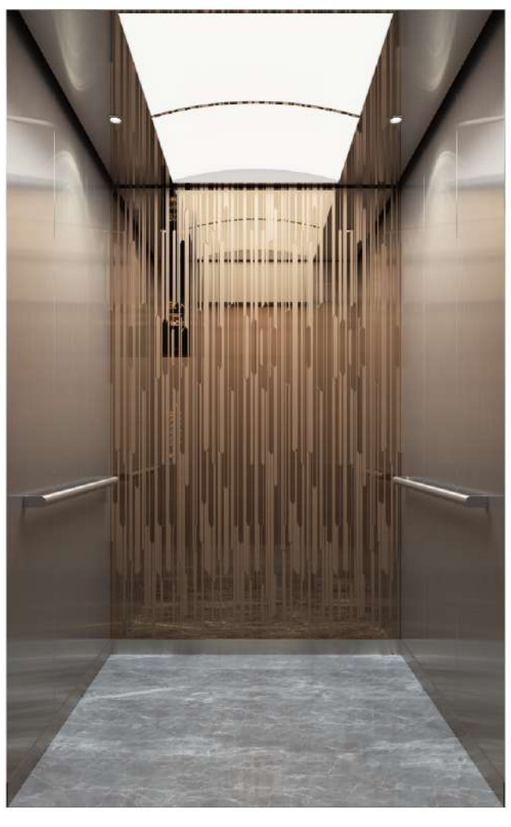
Handrails

Two-side round stainless steel handrails (ZYH-RH06)

Flooring

Marble flooring (ZSC-029)

Scan the QR code to view the real-image of the car



The picture is a schematic; if actual dimensions and appearance vary, the actual specifications shall prevail.

ZCD-030G

Ceiling

ZCL-DN02

Rear wall

Two sides: Random pattern titanium plated fingerprint-resistant stainless steel (ZDT-505)

Central: Stainless steel, mirror-finish

Side wall

Random pattern titanium plated fingerprint-resistant stainless steel (ZDT-505)

Handrails

Three-side round stainless steel handrails (ZYH-RH06)

Flooring

Marble flooring (ZSC-029)

Scan the QR code to view the real-image of the car

ZCD-025G

Ceiling

ZCL-GS06

Rear wall

Two sides: Stainless steel, hairline-finish

Central: Stainless steel, mirror-finish

Side wall

Two sides: Stainless steel, hairline-finish

Central: Stainless steel, mirror-finish

Handrails

Three-side round stainless steel handrails (ZYH-RH06)

Flooring

Parquet PVC flooring (ZPH-034)

Scan the QR code to view the real-image of the car

ZCD-041T

Ceiling

ZCL-GN07

Rear wall

Two sides: Embossed stainless steel (ZYH-002)

Central: Stainless steel, mirror-finish

Side wall

Embossed stainless steel (ZYH-002)

Handrails

Three-side round stainless steel handrails (ZYH-RH06)

Flooring

Marble flooring (ZSC-001)

Scan the QR code to view the real-image of the car

ZCD-042T

Ceiling

ZCL-GN07

Rear wall

Two sides: Laminated steel sheets (ZYM-020)

Central: Sandblast titanium plated stainless steel, mirror-finish (ZPS-003+ZDT-004)

Side wall

Two sides: Laminated steel sheets (ZYM-020)

Central: Titanium plated stainless steel, mirror-finish (ZDT-004)

Handrails

Three-side round stainless steel handrails (ZYH-RH05)

Flooring

Artificial stone flooring (ZRZ-A03)

Scan the QR code to view the real-image of the car

Note: Technical confirmation is required when ZCD-036X, ZCD-031G, ZCD-032G or ZCD-033G is configured.

ZCD-036X

Ceiling

ZCL-GS18

Rear wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-004)

Central: Marble and strips (ZSC-A27+ZYJ-004)

Side wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-004)

Central: Café fabric finishes and strips (ZNH-001+ZYJ-004)

Handrails

Two-side mirror-finish titanium plated rectangular stainless steel handrails ZYH-SH02 (ZDT-504)

Flooring

Marble flooring (ZSC-014)

Scan the QR code to view the real-image of the car

ZCD-032G

Ceiling

ZCL-DN02

Rear wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-007)

Central: Glasses and strips (ZBL-010+ZYJ-003)

Side wall

Rear: Sand pattern titanium plated stainless steel (ZDT-507)

Central and front: Laminated steel sheets and strips (ZYM-021+ZYJ-003)

Handrails

Two-side handrails ZYH-FH03L (ZYM-021+ZDT-503)

Flooring

Marble flooring (ZSC-A25)

Scan the QR code to view the real-image of the car

ZCD-031G

Ceiling

ZCL-GS21

Rear wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-006)

Central: Glasses and strips (ZBL-009+ZYJ-001)

Side wall

Two sides: Titanium plated stainless steel, mirror-finish (ZDT-006)

Central: Laminated steel sheets and strips (ZYM-019+ZYJ-001)

Handrails

Two-side round titanium plated handrails, hairline-finish, ZYH-RH05 (ZDT-506)

Flooring

Artificial stone flooring (ZRZ-A03)

Scan the QR code to view the real-image of the car

ZCD-033G

Ceiling

ZCL-GS21

Rear wall

Thin ceramic sheets and strips (ZRZ-A05+ZYJ-001)

Side wall

Laminated steel sheets and strips (ZTM-055+ZYJ-001)

Handrails

Two-side handrails ZYH-FH03 (ZTM-055+ZDT-506)

Flooring

Marble flooring (ZSC-A08)

Scan the QR code to view the real-image of the car

The picture is a schematic; If actual dimensions and appearance vary, the actual specifications shall prevail.

Design of Car Ceiling

ZCL-DN02 (Optional)

Lighting: Integrated direct lighting
Material: White translucent soft film, hairline-finish stainless steel frame
Thickness: 200mm

ZCL-GS21 (Optional)

Lighting: ambient floodlight lighting, central down light direct lighting
Material: central painted steel plate, Titanium-coated hairline stainless steel frame two-side painted steel plate
Thickness: 200mm

ZCL-SS10 (Standard)

Lighting: Central thin light guide panels; ambient lighting at two sides
Material: coating steel sheet ceiling
Thickness: 100mm

ZCL-SS07 (Standard)

Lighting: down light direct lighting
Material: coating steel sheet ceiling
Thickness: 100mm

ZCL-GS17 (Optional)

Lighting: two-side down lamp lighting, central floodlight lighting
Material: mirror stainless steel
Thickness: 200mm

ZCL-GS08 (Optional)

Lighting: ambient floodlight lighting, central down light direct lighting
Material: central mirror stainless steel, ambient Painted steel plate
Thickness: 200mm

ZCL-SS08 (Standard)

Lighting: central direct lighting
Material: central milk white printed lighting board, two-side coating steel sheet
Thickness: 200mm

ZCL-SS07S (Optional)

Lighting: down light direct lighting
Material: stainless steel ceiling
Thickness: 100mm

ZCL-GN07 (Optional)

Lighting: direct lighting provided by central light guide panel
Material: central hairline stainless steel; two-side painted steel plate
Thickness: 100mm

ZCL-GS18 (Optional)

Lighting: central floodlight lighting, ambient down lamp lighting
Material: Coated steel sheets for ceilings at four sides; mirror-finish titanium stainless steel for frames
Thickness: 200mm

ZCL-GS06 (Optional)

Lighting: central direct lighting; two-side auxiliary lighting
Material: central milk white printed acrylic lighting board, ambient metallic painting steel sheet, PC hanging pieces at two sides
Thickness: 200mm

ZCL-GS22 (Optional)

Lighting: central direct lighting; two-side down lamp lighting
Material: Central milky white arched lighting panel; two-side mirror stainless steel
Thickness: 200mm

ZCL-CN01 (S200) (Bare Ceiling)

When the ceiling decoration is provided by others, the thickness should be ≥100mm, otherwise the internal structure will be exposed and affect the appearance.

ZCL-CN08 (S300) (Bare Ceiling)

When the ceiling decoration is provided by others, the thickness should be ≥200mm, otherwise the internal structure will be exposed and affect the appearance.

Note:

1. All car roofs adopt LED lighting.
2. The ventilation outlet of car roof is arranged at the back of the two sides. Safety windows are optional at the car top, but shall comply with GB 7588 and GB/T 7588.1. For details, please contact your local sales agent.
3. ZY015 is the default color number for ZCL-SS10, ZCL-GN07 and ZCL-GS21, and Y033 for ZCL-SS08, ZCL-SS07 and ZCL-GS18. If other colors are required for coated steel sheets, please refer to the color samples provided by SMEC.

Intelligent LED Lighting System (Optional)

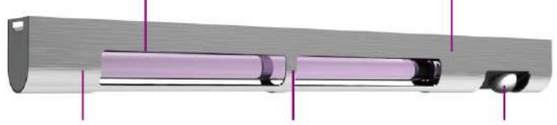
Intelligent lighting system is installed at the car top, in which customers can set and adjust the light source in the car from a mobile app to offer passengers with a more comfortable ride experience.

Select a mode | **Adjust the color temperature** | **Adjust the luminance** | **Set the time-control switch**

Intelligent UV light Sterilization Lamp (Optional)

Effective and Powerful Sterilization
Operating on the surface of control box and handrail for 12min can kill over 99% of Escherichia Coli.[data calculated by 1050 kg car]

Easy Installation and Modification
Screws are installed in holes drilled on the car ceiling and the power control lines on the lighting wiring terminal.



Appearance Design
The protective housing, mounted in side front of the ceiling in not abrupt way, can not only transmit light, but also protect the tube.

Functional Design
Users can switch between 'Normal' mode and 'Boost' mode, control the mode and power switch with a remote control. The indicator give indications of information like mode, fault, replacement of a tube, etc.

Dual Safety Protection
It start only the elevator entering sleep-mode and lighting is off and lighting lamp go out; it will shut down as soon as the infrared sensor detects any person.

The picture is a schematic; if actual dimensions and appearance vary, the actual specifications shall prevail.

LEHY-MRL-II

Human-machine Component

1. Full-height car operating panel

The car operating panel is of the same height as and integrated with the front return panel, looking splendid.

2. LCD touch screen operating panel

Industrial touch screen panel is used, offering stability and reliability. With a size up to 28 inches, it is visually stunning, and has a well-designed interface, bringing exceptional operating experience to users.

3. EMIDS

The new-generation EMIDS is longitudinally arranged, thus a larger display can be installed on a smaller front return panel. With a newly-designed black gold interface and brand new PI, it looks low key yet luxurious and dynamic.

4. Brand new PI

A brand new arrow shape is used in combination with the logo elements of SMEC and a free-flowing animation, contributing to the unique characteristics of SMEC's products.

SMEC logo + Common arrow → SMEC arrow

Full-height Operation Panel

Resin display window

Orange Segment Display

The buttons are exchangeable. The figure shown is A12 button.

ZCB■-ND10 (Primary)
ZCB■ -ND60 (Auxiliary)
Front Wall/Side Wall

Resin display window

Yellow Segment Display

The buttons are exchangeable. The figure shown is A12 button.

ZCB■-ND11 (Primary)
ZCB■-ND61 (Auxiliary)
Front Wall/Side Wall

Resin display window

8.4" Color segmented LCD Black text on a colored background

The buttons are exchangeable. The figure shown is A12 button.

ZCB■-N612 (Primary)
ZCB■-N662 (Auxiliary)
Front Wall/Side Wall

Physically toughened glass

10.4" TFT LCD, black gold interface

The buttons are exchangeable. The figure shown is C14 button.

ZCB■-N310 (Primary)
ZCB■-N360 (Auxiliary)
Front Wall/Side Wall

Physically toughened glass

10.4" EMIDS black gold interface (EMIDS)

The buttons are exchangeable. The figure shown is C14 button.

ZCB■-N710 (Primary)
ZCB■-N760 (Auxiliary)
Front Wall/Side Wall

Resin display window

Orange Segment Display

The optional buttons are A04, A05

ZCB■-ND30 (Primary)
ZCB■-ND80 (Auxiliary)
Side Wall

Comply with GB/ T24477 Standard

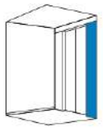
Note:

1. For front return panel ≥ 250 mm, install the operating panel on the front return panel; for front return panel < 250 mm, install the operating panel on the side wall.
2. The symbol ■ refers to the button model. Please select it from the "Diversified button" page.
3. Hairline-finish, mirror-finish, random pattern and sand pattern stainless steel can be used for the faceplate of the operating panel. Non-standard confirmation is required for titanium plated stainless steel.
4. EMIDS can play multimedia information. Non-standard confirmation is required if customers wants to customize the interface.

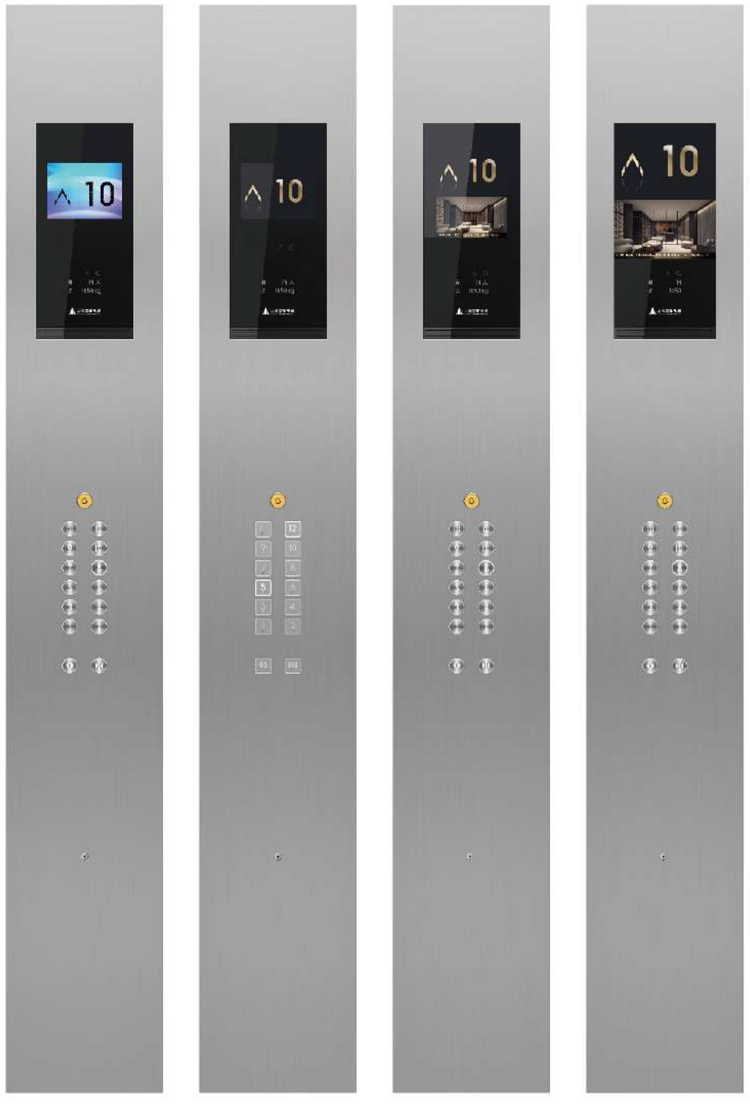
The picture is a schematic; if actual dimensions and appearance vary, the actual specifications shall prevail.

Human-machine Component

Integrated Operation Panel and Wheel Chair Operation Panel



Front-wall



ZCB■-T611(Primary) **ZCB■-T661**(Auxiliary) (Configurable when front wall≥250)

ZCB■-T311(Primary) **ZCB■-T361**(Auxiliary) (Configurable when front wall≥250)

ZCB■-T711 (Primary) **ZCB■-T761**(Auxiliary) (Configurable when front wall≥250)

ZCB■-T811(Primary) **ZCB■-T861** (Auxiliary) (Configurable when front wall≥350)

Side-wall

ZCB■-F011(Primary)
ZCB■-F061 (Auxiliary)

ZCB■-F131 (Primary)
ZCB■-F181 (Auxiliary)

Note:

1. The symbol ■ represents the button model, Please select it from the "Diversified button" page.
2. Hairline-finish, mirror-finish, random pattern and sand pattern stainless steel can be used for the faceplate of the operating panel. Non-standard confirmation is required for titanium plated stainless steel.
3. If an integrated operating panel is equipped, the decoration of the side wall shall be less than 15 mm thick when customers redesign the car on its own. If the decoration exceeds 15 mm, non-standard confirmation is required.
4. EMIDS can play multimedia information. Non-standard confirmation is required if customers wants to customize the interface.
5. Three color schemes are available for the interface of a touch screen operating panel: Scheme A is applicable to a maximum number of 64 floors, and Scheme B and Scheme C are applicable to a maximum number of 30 floors.
6. Wheelchair operating panel buttons can only use A14/A15/C14/C15.
7. ZCB■-F131/181 complies with GB/T24477. Technical confirmation is required to determine whether the complete elevator meets the standard.

Handrail Type

ZYH-FH10 Stainless Steel Flat Handrail

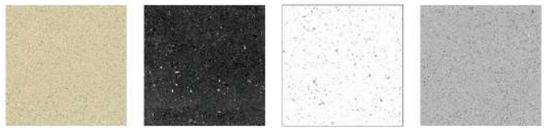
ZYH-RH05/RH05B Stainless Steel Round Handrail

ZYH-RH06/RH06B Stainless Steel Round Handrail

Floor Material

Single-color real stone flooring is also available. See Decoration Color Code of Shanghai Mitsubishi Elevator for color codes.

Artificial Stone Flooring



ZRZ-A01 ZRZ-A02 ZRZ-A03 ZRZ-A04

Marble Flooring Standard marble flooring is marble composite aluminum honeycomb panel.

ZSC-001 ZSC-002 ZSC-011 ZSC-012 ZSC-013 ZSC-014 ZSC-016 ZSC-029

Parquet PVC Flooring

ZPH-032 ZPH-030 ZPH-028 ZPH-033 ZPH-026 ZPH-029 ZPH-034 ZPH-031

Material Correspondence Table

Item	Material	Remark
Car Wall and Car Door	Painted steel	Standard
	Film pressed steel, Metallic painted steel, Hairline stainless steel, Etched hairline stainless steel, Titanium-coated hairline stainless steel, Titanium-coated etched hairline stainless steel, Mirror stainless steel, Etched mirror stainless steel, Titanium-coated mirror stainless steel, Titanium-coated etched mirror stainless steel, Irregular-line stainless steel, Titanium-coated irregular-line stainless steel, Sand pattern stainless steel, Titanium-coated sand pattern stainless steel,	Optional
Mirror	Half-length glass mirror, full-length mirror-finish stainless steel mirror, full-length mirror	Optional
Handrail	1D/1G: None, rear wall, two-side walls, three-side walls 1D2G/2D2G: None, two side walls	Optional
Floor	Artificial Stone Flooring, Parquet Marble Floor, Parquet PVC Floor, PVC real stone, pattern-printed stainless steel, non-slip stainless steel	Optional
Car sill	Hard aluminum	Standard
Kickplate	If car walls are of common painted materials, coated steel sheets should be used; if not, hairline-finish stainless steels should be used.	Standard
Titanium plating color	ZDT-001 (rose gold), ZDT-002 (gold), ZDT-003 (black), ZDT-004 (champagne gold), ZDT-005 (light black), ZDT-006 (bronze)	Optional
Fingerprint-resistant titanium plating color	ZDT-500 (natural color), ZDT-501 (rose gold), ZDT-502 (gold), ZDT-503 (black), ZDT-504 (champagne gold), ZDT-505 (light black), ZDT-506 (bronze)	Optional

Notes:

1. Single-color real stone flooring is also available. See Decoration Color Code of Shanghai Mitsubishi Elevator for color codes.
2. Standard marble flooring is marble composite aluminum honeycomb panel.

Diversified Button

A04,A05 buttons are only compatible with opening panel with GB/T 24477 configuration.

Basic Buttons

A11(White Light) **A12**(Orange Light) Diameter 55mm Machinery Fine Motion Flat Words Standby Micro-light Stainless Steel Surface

A14(White Light) **A15**(Orange Light) Diameter 55mm Machinery Fine Motion Protruded Words with Braille Standby Micro-light Stainless Steel Surface

C14(White Light) **C15**(Orange Light) Square 55mm Machinery Fine Motion Protruded Words with Braille Standby Micro-light Stainless Steel Surface

Optional Button Styles

A71 Diameter 35mm Floating Inductive Flat Text Standby White Light Light up the White Light Flat Words Mirror stainless steel Surface

A23 Diameter 35mm Touch Sensitive Standby White Light Light up the Blue Light Flat Words CD Line Stainless Steel Surface

A27 Diameter 50mm Machinery Fine Motion Flat Words Stainless Steel Surface

A81(White Ligh)† **A82**(Orange Light) Diameter 38.5mm Machinery Fine Motion Flat Words Standby Micro-light Stainless Steel Surface

A84(White Light) **A85**(Orange Light) Diameter 38.5mm Machinery Fine Motion Protruded Words with Braille Standby Micro-light Stainless Steel Surface

The picture is a schematic; if actual dimensions and appearance vary, the actual specifications shall prevail.

LEHY-MRL-II

Hall Design

Hall Door Design

Matching well with mainstream interior design styles

Better blended with your building environment

Original hall door/car door panel

No need for second design on site to avoid potential safety hazards

Saving cost, time and effort

New Intelligent Direction Lamp

Adjust the luminance and volume automatically according to the environment

Equipped with car arrival chime (AECC) and AECH

Foot-activated Call

Foot-activated call to create a hand-free experience

Registering car calls with a foot movement

Remark:

1. For more information of hall door design, please refer to Selected Sophisticated Design of SMEC Elevators.
2. Applicable size: 900 mm ≤ JJ ≤ 1200 mm, 2000 mm ≤ HH ≤ 2400 mm, and (overall door jamb height) MH + HH ≤ 4000 mm.

Hall Door and Jamb

E-102 Narrow Door Jamb

Landing Display Call: ZPIA12-CD12

Landing Door Material: Hairline Stainless Steel

Jamb Material: Hairline Stainless Steel

E-302 Bevel (10°) Wide Door Jamb

Landing Display Call: ZPIA12-GB13

Landing Door Material: Hairline Stainless Steel

Jamb Material: Hairline Stainless Steel

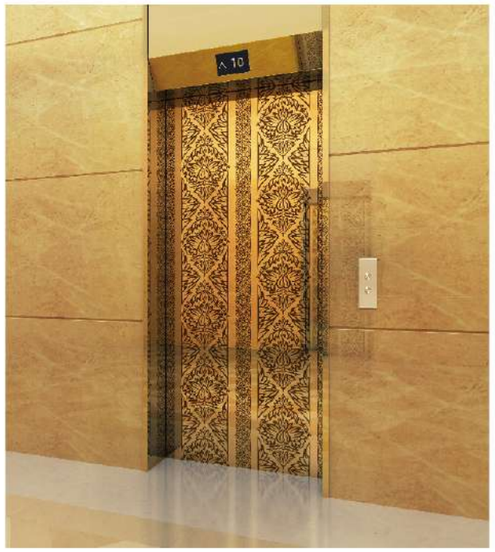
E-312 Bevel (10°) Wide Door Jamb with Transompanel

Landing Display Call: ZPIA11-GB13

Landing Door Material: Hairline Stainless Steel

Jamb Material: Hairline Stainless Steel

E-322 Bevel (10°) Wide Door Jamb with Slant Transompanel



Landing LCD：ZPIH-N301

Landing Call: ZHBA11-G010

Landing Door *1 ： ZPN-010

Jamb Material: Mirror Titanium-coated Stainless Steel

The picture is a schematic; if actual dimensions and appearance vary, the actual specifications shall prevail.

Hall Design

Landing Display

Orange Segment Code

ZPI■-GD10
Wall-mounted
Without Bottom Box
Orange Segment Code
The buttons are exchangeable.
The figure shownis A12 button.

Gold Segment Code

ZPI■-CD12
Embedded
With a bottom box
Gold Segment Code
The buttons are exchangeable.
The figure shownis A11 button.

Segmented LCD

ZPI■-GB13
4.3" Color segmented LCD
Black text on a colored background
The buttons are exchangeable.
The figure shownis A11 button.

TFT LCD

ZPI■-GA13
4.3" TFT LCD
black gold interface
The buttons are exchangeable.
The figure shownis A11 button.

ZPI■-GD20
Wall-mounted
Without Bottom Box

ZPI■-CD22
Embedded
With a bottom box

ZPI■-GB23

ZPI■-GA23

Note:

1. The symbol ■ refers to the button model. Please select it from the "Diversified button" page.
2. Hairline-finish and mirror-finish stainless steel are available for the faceplate of the call buttons of the hall position indicator. Non-standard confirmation is required for titanium plated stainless steel.
3. ZHB■-H030/040/041 complies with GB/T24477, and A14/A15/C14/C15 buttons are available. Technical confirmation is required to determine whether the complete elevator meets the standard.

Landing Call

Foot-activated Call

ZHBE08-G012

Comply with GB/ T24477 Standard

ZHB■-G010
(Single Elevator)
ZHB■-G020
(Parallel Connection)

ZHB■-H030
(Single Elevator)

ZHB■-H041
(Parallel Connection)

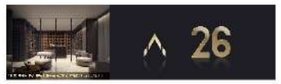
Landing Display

ZPIH-C804
15" EMIDS, embedded,
installed above the hall call buttons

ZPIH-CE01
28.6" TFT LCD, black gold interface (EMIDS)
Resolution: 1920×540, Embedded, nstalled on the wall

ZPIH-C301
8.4" TFT EMIDS with black gold interface
Embedded, nstalled on the wall

HID-A20
Embedded Large-scale Landing Displayer
Applicable when the Jamb model is non-E-312 and non-E322.



ZPIH-NE01
28.6" TFT LCD, black gold interface (EMIDS)
Resolution: 1920×540, Embedded
Applicable when the Jamb model is E-312

ZPIH-N301
8.4" TFT EMIDS with black gold interface
Embedded
Applicable when the Jamb model is E-312

HID-A10
Embedded Large-scale Landing Displayer without Panel
Applicable when the Jamb model is E-312.

Landing Direction Light

Should be used together with the landing call button components referred to Page 31.

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

ZHLV-H040
Installation without bottom box
Mist white acrylic light part
55×430mm

ZHLV-H050
Without Bottom Box
Transparent acrylic,
misty acrylic for inside carving;
adjust the luminance and
volume automatically according
to the environment,
and equipped with AECC and AECH

ZHLV-R050
Without Panel
Mist white acrylic of
the lighting part
Precise openings for wall
decoration are in need.

ZHLV-B040
Wall-Mounted Type
without Bottom Box
Transparent acrylic of
the lighting part
(embeddded with mist white
indicating blocks)

ZHLH-R080
Transparent acrylic
Embedded matte triangle
Mirror-finish substrate dotted
with stars

Features

Control and Security Features

●:Standard, ○:Optional

Feature	Description	Code	1C-2BC	2C-SM21	2C~4C-ITS-21
Automatic Landing with Rheostatic Leveling	When the car parks at a station, if the vertical difference between the upper plane of the car sill and that of the landing door sill exceeds predetermined value, the elevator will level automatically.	ARL	●	●	●
Anti-stall Timer	When the traction rope slips or motor stall reaches predetermined time, the elevator will stop.	AST	●	●	●
Balance Coefficient Automatic Detect	In Auto mode, after a certain period of time, when the elevator enters the standby mode, the brake is released and the elevator does not move. Measure the motor current to calculate the balance coefficient. If the coefficient deviates too much, then stop the elevator.	BCST	●	●	●
Brake Noise Reduction Control	Accurately control the action speed of the brake when braking to greatly reduce the noise produced and improve the ride comfort.	BNRC	●	●	●
Brake Redundancy Protection	When a group of brakes fails, the remaining brakes still can realize effective braking of the elevator.	BTUP	●	●	●
Car Slide Safety Protection	When the car slides due to insufficient braking force, short the three-phase winding of PM traction machine in normal power supply state to reduce the speed the car slides.	CSSP	●	●	●
Door Interlock Bypass Operation	Bypass the hall door or car door circuit via the door interlock bypass device to facilitate the maintenance of hall door contact, car door contact and door interlock contact.	DBO	●	●	●
Double-Side Static Torque Detect (Manual)	Enter the Double-Side Static Torque Detect (Manual) mode manually. The elevator keeps all brakes in holding state and applies a torsional torque onto PM traction machine to check the static torque.	DBSD-M	●	●	●
Double-Side Static Torque Detect (Power-on)	In auto mode, when the elevator is powered on in case of power outage or after the PCB is reset, the elevator keeps all brakes in holding state and applies a torsional torque onto PM traction machine to check whether the double-side static torque meets the requirement.	DBSD-O	●	●	●
Double-Side Static Torque Detect (Periodic)	In auto mode, after a certain period of time, when the elevator enters the standby mode, the elevator keeps all brakes in holding state and applies a torsional torque onto PM traction machine to check whether the double-side static torque meets the requirement.	DBSD-P	●	●	●
Door Interlock Short Safety Protection	In auto mode, if the door interlock switch is detected shorted, stop the elevator to protect passengers.	DSSP	●	●	●
Energy Feedback	Feed energy generated during operation back to the grid to save energy.	EFDBK	○	○	○
Electrical Safe Loop Protection	Prevent the elevator from operating once the electrical safety devices connected together in series act.	ESC	●	●	●
Automatic story height measuring	Automatically measure and record story height	FMR	●	●	●
Inspection Operation	Inspection operation mode for maintenance staff.	INSP	●	●	●
Load Weighing Start	The elevator adjusts startup torque according to the car load so as to allow smooth start.	LWS	●	●	●
Over-current Protection	Stop elevator when the current through the rectifier or inverter is detected too high.	OCP	●	●	●
Over-speed Protection	Stop elevator when the running speed is detected over allowable value.	OSP	●	●	●
Over-Temperature Protection	Stop elevator when over temperature of motor is detected.	OTP	●	●	●
Over-voltage Protection	Stop elevator when the voltage across the rectifier or inverter is detected too high.	OVP	●	●	●
Power Failure Protection	Stop elevator when open-phase, undervoltage or other faults of power occurs.	PFP	●	●	●
Power-on Releveling	If the car stops in the range of door area due to power failure, it will relevel to the leveling position after the power is recovered.	PORL	●	●	●
Reversal protection	Stop elevator when it is detected running in reversed direction.	RSP	●	●	●
Selector Correcting	The elevator corrects the selector during operation.	SC	●	●	●
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.	SFL	●	●	●
Stop Open	The car doors open automatically after the car stops at a floor.	SO	●	●	●
Inverter High-temperature Detect	Stop elevator when inverter high-temperature is detected.	THMF	●	●	●
Terminal Forced Decelerate	If the car runs to the terminal but the speed has not been reduced to specified value, the system will force it to decelerate and thus enable it to level normally.	TSD	●	●	●
Unintended Car Movement Protection	Elevator safety component to stop unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position, as a result of any single failure of the lift machine or drive control system.	UCMP	●	●	●
Under speed Protection	Stop elevator when the running speed is detected under allowable value.	USP	●	●	●

Emergency Operation Features

●:Standard, ○:Optional

Feature	Description	Code	1C-2BC	2C-SM21	2C~4C-ITS-21
Emergency Car Lighting	When normal lighting power supply fails, emergency car lighting is provided.	ECL	●	●	●
Earthquake Emergency Return (S-wave)	When S-wave earthquake detector acts, the car immediately parks at the nearest floor with door opened.	EER-S	○	○	○
Power Failure Emergency Landing Device	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.	ELD *1	○	○	○
Alarm Bell	Press this alarm bell in emergency. The bell and interphone will sound.	EMB	●	●	●
Fireman's Emergency Operation	When a fire happens, fireman switch actions, a car returns to the predetermined evacuation floor, then door opens canceling all calls from landings or car, the car is available for fireman's use.	FE *2	○	○	○
Fire Emergency Return	When the Fire Emergency Return switch acts, all landing calls and car calls are cancelled, and the car immediately returns to predetermined floor and parks with door opened.	FER *2	○	○	○
Operation by Emergency Power Source – Sole Automatic	When normal power supply breaks, the pre-assigned cars will be powered by the emergency power source of the building and automatically travel to the predetermined floors in order. Once all cars have arrived at the predetermined floors, the specified car can operate normally.	OEPS-SA *3	○	○	○
Remote Service System	Monitor elevator operation in real time, send faults or abnormities to the Service Center of the company via wireless network in a timely manner, and process them quickly. Provide customers with value-added services by establishing customized maintenance program.	REMES-I *4	○	○	○
Monitoring System	This system uses computer to monitor the elevator's operation and position state, and provide operation commands as necessary.	SMOS-II *5	○	○	○

Note:

*1 Optional when the interval of the adjacent floor is no more than 10m.

*2 It should be considered that the elevator can return from the top floor to the evacuation floor within 60 seconds.

*3 The consumer provides dry contact signals of normal and emergency power sources respectively as well as dry contact signals for automatic control. These signals must be provided to the control cabinet in the machine room.

*4 A maintenance contract needs to be signed with Shanghai Mitsubishi Elevator Co., Ltd. Currently not available for overseas market.

*5 Sign SMOS-II contract with Shanghai Mitsubishi.

Operational and Service Features

●:Standard, ○:Optional, —:Not applicable

Feature	Description	Code	1C-2BC	2C-SM21	2C~4C-ITS-21
Automatic Bypass	When the car load exceeds 80% (adjustable) rated capacity, the elevator does not response hall calls from other floors along its travel.	ABP	○	○	○
Attendant Service	Normal operation of the elevator is conducted by an attendant	AS	○	○	○
Bypass	Bypass all hall calls when the attedant serves and activates the 'Bypass' button.	BP *1	○	○	○
Car Computer Back Up Operation	When an abnormity occurs on the car computer, the car stops at nearest floor and the elevator cannot restart.	CCBK	●	●	●
Car Call Canceling	In automatic operation, when a car has responded to the final car call or landing call in one direction, the system automatically checks and clears remaining car calls from the memory.	CCC	●	●	●
Car Fan Shut Off - Automatic	If there are no calls for a specified period, the car ventilation fan will automatically be turned off to conserve energy.	CFO-A	○	○	○
Car Fan Shut Off – Manual (button type)	The car ventilation fan is turned off by combination buttons on the operation panel.	CFO-B	●	●	●
Car Light Shut Off - Automatic	If there are no calls for a specified period, the car light will automatically be turned off to conserve energy.	CLO-A	○	○	○
Car Light Shut Off – Manual (button type)	The car light is turned off by combination buttons on the operation panel.	CLO-B	●	●	●
Continuity of Service	To ensure normal operation of elevators in a whole group, when a certain elevator cannot respond registered landing calls, it will be excluded from landing call service, and service is provided by other elevators.	COS	—	●	●
Elevator Dedicated Air Conditioning	Air conditioning for elevator car.	EAC	○	○	○
Self-diagnosis	Diagnose abnormities and faults occurred during elevator operation.	EFD	●	●	●
Exit Switch	Switch for detecting state of exit	EXIT SW *2	○	○	○
False Call Cancelling - Automatic	If the number of registered calls is not agree with the number of passengers, it will cancel all calls to avoid unnecessary stops.	FCC-A *3	○	○	○
False Call Cancelling - Manual (car button type)	If the wrong car button is pressed, it can be canceled by quickly pressing the same button again twice.	FCC-P *4	○	○	○
Hall Call Erase - Manual (hall button type)	If the wrong hall calling button is pressed, it can be canceled by quickly pressing the same button again twice.	FHC-P *5	○	—	○
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.	FSAT	●	●	●
Group Control Backup Service	Maintain service of individual elevators when group control becomes invalid due to failure of the group control controller or failure of communication between the group control and individual stations.	GCBK	—	—	●
Hall Computer Back UP Operation	When an abnormity occurs on the hall computer, the car stops at nearest floor and the elevator cannot restart.	HCBK	●	●	●
Hospital Emergency – Block Sign	By pressing the Door Open button and the DKO-TB button simultaneously, the elevator will respond only to the car call.	HE-B	○	○	○
Hall Out-of-service Operation	Turn on or shut off the elevator by operating the "RUN/STOP" switch installed on specified floor.	HOS	●	●	●
Hall Out-of-Service Switch(Timer)	RUN/STOP operation of an elevator can be controlled by using a timer installed in the specified elevator hall.	HOS-T	○	○	○
Intelligent Call System	Achieve intelligent elevator calling through mobile devices or biological recognition technology.	ICS	○	○	○
Independent Service	Using the independent switch in the operation panel, the car can respond only to car calls without interrupting service.	IND	●	●	●
Non-service to Specific Floor (switch type)	Operating this switch can cancel service to specified floors.	NS *6	○	○	○
Non-service to Specific Floor (car button type)	Cancel service to specific floor by operating buttons on the operation panel and the setting switch.	NS-CB	○	○	○
Not Start Operation	When landing call or car call is registered but the car cannot start within predetermined time, it will clear the assigned landing call, reserve the car call, light up the Abnormal lamp, and sound the Abnormal bell.	NST	●	●	●
Next Landing	After the car has arrived at the destination floor, if the car doors cannot open fully, it will close the doors and continue to run to the next floor until the doors can open fully and then restore normal operation.	NXL	●	●	●
Overload Holding Stop	When the car is overloaded, the doors remain open and a buzzer sounds.	OLH	●	●	●
Remote Control Stop	Start or stop the car through the remote control switch.	RCS *7	○	○	○
Return Operation	Operating Return switch to immediate call the car back to specified floor and park there.	RET *7	○	○	○
Secret Call Service (car button type)	Lock certain floors 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.	SCS-B *4	○	○	○
Secret Call Service (IC card type)	The buttons of certain specified floors can only be registered via IC card.	SCS-IC	○	○	○

Note:

*1 Standard when AS is provided.

*2 When there is a hoistway safety door.

*3 When the number of stop is ≥6 and the SCS-IC is not configured to be applied.

*4 SCS-IC is not configured to be applied.

*5 AIL is not configured to be applied.

*6 NS changeover switch is installed in the operating panel of the main car by default and the name of NS floors must be specified on the non-standard confirmation form.

*7 The consumer or SMOS-II shall provide a dry contact signal to the control cabinet.

Features

Information and Display Features

●:Standard, ○:Optional

Feature	Description	Code	1C-2BC	2C-SM21	2C~4C-ITS-21
Voice Announce Device	Voice announce device (Chinese) informs the passengers of related elevator information.	AAN-S01 *1	○	○	○
Voice Announce Device	Voice announce device (Chinese and English in turn) informs the passengers of related elevator information.	AAN-S02 *1	○	○	○
Voice Announce Device	Voice announce device (English) informs the passengers of related elevator information.	AAN-S03 *1	○	○	○
Car Arrival Chime (Car)	The chime prompts the passengers the car has arrived at the destination floor. (The chime is installed on the car roof and floor)	AECC *2	○	○	○
Car Arrival Chime (Hall)	The chime prompts the passengers the car has arrived at the destination floor. (The chime is installed on the hall)	AECH *2	○	○	○
Immediate Prediction Broadcast	Once a passenger registers a floor call, the most appropriate elevator will be selected for this call, and inform the passenger via visual/acoustic signal.	ASL	○	○	○
Automatic Operation Signal Light (Hall)	The landing indicator displays the elevator is in automatic operation state.	AUTL *3	○	○	○
Signal Interface Device	Outputs basic operation state signal of the elevator via this device	BA *6	○	○	○
Bypass Signal Light (Hall)	The landing indicator displays the elevator is in "Bypass operation" state.	BPL *3 *4	○	○	○
Direction Arrows in Car	Indicates running direction with arrows in the car.	DAC	●	●	●
Direction Arrows on Hall	Indicates running direction with arrows on the hall.	DAH	●	●	●
Door-Close Button Response Light	The Door-Close button light illuminates at the same time when this button is pressed.	DCR	●	●	●
Extended Door-Open Button Light	When the Extended Door-Open button is pressed, the indicator light illuminates for certain period.	DKOL *7	○	○	○
Door-Open Button Response Light	The Door-Open button light illuminates at the same time when this button is pressed.	DOL	●	●	●
Elevator Counter/Timer	Record number of runs and running time of the elevator.	ECT	●	●	●
Multimedia Display in Car	Can provide audio/video or other information for the passengers (installed in the car).	EMIDS-C *8	○	○	○
Multimedia Display on Hall	Can provide audio/video or other information for the passengers (installed on the hall).	EMIDS-H *9	○	○	○
Exclusive Service Indication	Display that the elevator is in exclusive service state.	EXCL *17 *5	○	○	○
Fireman's Emergency Operation - Complete	The fireman's emergency operation is activated,the elevator runs to specified return floor, then the elevator outputs an in-place indicating signal.	FE-CP *10	○	○	○
FE Operation Signal Lamp in Car	When the elevator gets into FE operation status, the signal lamp in the car will indicate the status.	FELC *11	○	○	○
Fire Emergency Return - Completed	A CP signal is outputted after the FER running is completed.	FER-CP *12	○	○	○
Flashing Hall Button Light	When the elevator stops at a landing and starts to open the doors, the Hall Call Button light of the same direction flashes to remind passengers that the car has arrived; when the doors are closed fully, the button light goes off.	FHBL	●	●	●
Flashing Hall Lantern	Flashing lantern indicates arrival of car and its running direction.	FHL	○	○	○
Inspection Operation Indication	Hall indicator will display the elevator is in inspection mode.	INSPL	○	○	○
Hall Indicator Energy Saving	The dot-matrix display of the hall will display information with low brightness when there is no call, and with normal brightness when the call button of the floor is pressed, thus saving energy and extending the service life.	HIES	○	○	○
Interphone	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.	ITP *13	●	●	●
ITV cable(analog)	The cable used for video camera(analog) installed in the car for user to monitor the real image in the supervisory room.	ITV-A *14	○	○	○
ITV cable(digital)	The cable used for video camera(digital) installed in the car for user to monitor the real image in the supervisory room.	ITV-D *14	○	○	○
ITV cable(for SMOS)	The cable used for video camera equipped with SMOS system.	ITV-S *14	○	○	○
Operation by Emergency Power Source – Completed	A CP signal is outputted after the operation by emergency power source is completed.	OEPS-CP *15	○	○	○
Overload Indication in Car	When the elevator is overloaded, the overload indicator lamp illuminates.	OLHL	○	○	○
Out-of-Service Indication	Indicate the elevator is out of service on the hall.	RESL *3	○	○	○

Note:

*1 Only one of AAN-S01/S02/S03 can be selected at most.

*2 Only one of AECC and AECH can be selected.

*3 Hall function lights including AUTL, BPL, EXCL and RESL cannot be more than 2; EXCL is optional when VIP-S is available.

*4 Standard when ABP or BP is provided.

*5 Standard when HE-B is provided.

*6 Output signals are UP, DOWN, integrated fault, landing station code signals. The output signal terminals are in the control cabinet in the machine room. Output modes are dry contact and RS485 series communication.

*7 Standard when DKO-TB is provided.

*8 See EMIDS Product Specifications LEHY-PS1; specify the size, installation position and method (external, embedded or wall-mounted) of LCD; if there are two LCDs, specify whether they display the same content at the same time or display different content. Default configuration: the display interface is "Full screen", and the material of external LCD is hairline-finish stainless steel and that of wall-mounted LCD black acrylic.

*9 See EMIDS Product Specifications LEHY-PS1; specify the size, installation position and method (external or wall-mounted) of LCD. Default configuration: The display interface is "Full screen", and the material of external LCD is hairline-finish stainless steel and that of wall-mounted LCD black acrylic. The floor where the LCD is installed is the main service floor.

*10 Standard when FE is provided.

*11 Optional when FE is provided.

*12 Standard when FER is provided.

*13 The customer is responsible for the cables from the machine room to the monitoring room and their installation.

*14 Select ITV-A, ITV-D or ITV-S. When ITV is configured, confirm with the customer about who is responsible for cabling.
ITV-A: The customer is responsible for coaxial cables at the control panel side of the machine room from the monitoring room. The car and the machine room have interfaces of coaxial cables to connect analog video devices.
ITV-D: The customer is responsible for the Ethernet at the control panel side of the machine room from the monitoring room. The car and the machine room reserve Ethernet ports to connect digital video devices.
IVTS: Confirm the camera is analog or digital in SMOS contract.
If not included in the above specifications, specify it on the non-standard confirmation form.

*15 Optional when OEPS-SA is provided.

Door Operating Features

●:Standard, ○:Optional

Feature	Description	Code	1C-2BC	2C-SM21	2C~4C-ITS-21
Light Curtain Protection	Light curtain protection with multiple light beam.	AMS *1	○	○	○
Door Close Limit Switch on Start	When the car doors can not close completely, they will reverse and open.	CLTS	●	●	●
Double Door Operation	When car doors are in open state, if there is no car call and landing call in forward direction and the landing call in reverse direction of this floor has been registered, the car doors will close and then immediately open again.	DDOP	●	●	●
Extended Door-open Button	Press and hold this button can extend door-open time.	DKO-TB *2	○	○	○
Door Load Detect	If the car doors cannot fully open or close due to overload, the doors will act in reverse direction.	DLD	●	●	●
Not Door Open Feature	If car doors are blocked while opening, they will close immediately.	DONG	●	●	●
Automatic Door-open Time Adjustment	Automatically adjust door-open time according to landing calls or car calls.	DOT	●	●	●
Door Close Torque Up Control	When car doors encounter extra resistance while closing, the door system will automatically increase the torque. After the car has stopped at a station and the doors has opened, pressing Close button can make the doors to close immediately.	DTC	●	●	●
Expediting of Door Close	By pressing the Door Close button, the Door Closing Operation is immediately activated, and thus the traffic efficiency is improved.	EDC	●	●	●
Multi-beam Safety Edge	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.	MBS *1	○	○	○
Door Nudging Feature – with buzzer	If the door-open time exceeds the predetermined value, it will give alarm sound to alert the passenger and try to close the doors.	NDG *3	○	○	○
Repeated Door-Close	If car doors are blocked while closing, the elevator will repeat the closing action until the debris is removed.	RDC	●	●	●
Reopen with Hall Button	During door closing, when hall calling button in the same direction is pressed, the doors will reopen.	ROHB	●	●	●

Note:

*1 AMS, MBS must choose one.

*2 Standard when HE-B is provided.

*3 Optional when AAN is provided.

Group Control Features

●:Standard, ○:Optional, —:Not applicable

Feature	Description	Code	1C-2BC	2C-SM21	2C~4C-ITS-21
Bank Separation Operation	Separate landing buttons into several groups and provide independent group control, and each group has its own hall calling button.	BSO *1	—	—	○
Congested-Floor Service	When temporary congestion occurs due to meeting or other events, the system will try its best to arrange cars to the congested floor.	CFS *2	—	—	○
Down Peak Service	During the predetermined off-hour, elevators are continuously sent o the top floor to meet the needs of off-hour peak traffic congestion.	DPS	—	—	○
Special Floor Forced Stop	Cars passing a certain floor are forced to stop at this floor.	FFS *3	○	○	○
Lunch Time Service	Car assignment can be adjusted to favor canteen or restaurant floor to accommodate the high demand during lunch time.	LTS *4	—	—	○
Main Floor Parking	When there is no landing call or car call, the car returns to main floor and parks there.	MFP	○	—	—
Strategic Overall Assignment	For group control elevators, the cars park dispersedly at the main station and middle floor.	OHS	—	●	●
Prevention of Simultaneous Running	This feature prevents simultaneous running within rapid running region of elevators installed in the same well to boost noise in the car.	PRS	—	—	○
Peak Traffic Control	To alleviate temporary peak traffic, heavy traffic floors (top floor or main floor) will be given priority service.	PTC	—	—	●
Main Floor Changeover Operation	Main floor can be changed by pressing the Changeover switch.	TFS *5	○	—	○
Up Peak Service	During the predetermined work hours when the up traffic from the main floor is specially heavy, elevators are continuously sent to the main floor meet the needs of up peak traffic.	UPS	—	—	○
VIP Service	A specified car can be withdrawn from group service for special VIP service.	VIP-S *6	—	—	○

Note:

*1 Bank Operation Service switch is provided by the customer. SMEC provides the port for the switch in the control panel. Specify the group on the non-standard confirmation form.

*2 Specify the name of congested floor.

*3 Specify the name of Forced Stop Floor.

*4 Specify the name of lunchtime service floor.

*5 The changeover switch is provided by the customer. SMEC provides the port for the switch in the control panel. Specify the name of the second main floor on the non-standard confirmation form.

*6 Specify VIP Car No and VIP standby floor on the non-standard confirmation form. The floor to install VIP switch is VIP standby floor by default.

Basic Specifications

Item	Specifications					Notes
Speed(m/s)	0.63	1.0	1.75	2.0	2.5	
Capacity(kg)	320	320				
	450	450				
	550	550				
		630	630			
		825	825			
		1050	1050	1050	1050	
		1200	1200	1200	1200	
		1350	1350	1350	1350	
		1600	1600	1600	1600	
		1800	1800			
		2000	2000			
		2250	2250			
		2500	2500			
Max Num. Stops	11	18	28	32	32	
Lifting Height TR (m)	3.4~30	3.4~55	7.3~80	9.1~120	13.3~120	
Operation Mode	1C-2BC					
	2C-SM21					1D1G
	2C, 3C 4C~ITS-21					Optional when the group control method is 2C~4C~ ITS-21.
Control Mode	VFH-LA VVVF, micro-computer data network control system					
Roping	2 : 1					
Traction Machine	PM synchronous traction machine					
Support mode of the traction machine	supported by guiderails					
Machine room	top of hoistway (machine-room-less)					
Door Opening Mode	Center opening					
	Two panel sliding					
Door drive mode	VVVF (PM door operator)					
Door Opening Type	1D1G					Standard
	1D2G/2D2G					Nonstandard
Dynamic Power	380V 50Hz 3 phases, 5 lines					
Lighting Power	220V 50Hz Single-phase					
CWT Position	Side					
CWT Safety Gear	Not provided, Provided					
Min. Landing Height (mm)	2800					Concrete nosing will be provided by the customer; HH=2100, HL=2200
	2600					Steel nosing will be provided by the Seller. HH=2100, HL=2200
Landing Display Range (Standard)	-5~48, 1B, 2B, 3B, 4B, 5B, A, B, B1, B2, B3, B4, B5, B6, C, D, E, G, G1, G2, G3, GF, H, K, L, L1, L2, L3、LB, LG, M, M1, M2, M3, M4, M5, M6, MB, P, P0, P1, P2, P3, P4, P5, PB, PH, PL, PP, R, R1, R2, R3, S, S1, S2, S3, S4, S5, T, UB, UG					1. When wall-mounted hall position indicator (ZPIx-GB10 /ZPIx-GB20) is used, D, K and T floors cannot be displayed. 2. When segment LCD is used, three-digit floor name cannot be displayed (e.g. 12.1, 12.2, 22.1, 22.2, 13F). 3. The display range of hall position indicator of one car can only be included in Table A or Table B; if it is in both Table A and Table B at the same time (some in Table A and some in Table B), technical-confirmation is required.
Landing Display Range (Non-standard: out of the above scope)	-5~48, 1B, 2B, 3B, 4B, 5B, A, B, B1, B2, B3, B4, B5, B6, C, D, E, G, G1, G2, G3, GF, H, K, L, L1, L2, L3, LB, LG, M, M1, M2, M3, M4, M5, M6, MB, P, P0, P1, P2, 15A, 12.1, 12.2, 22.1, 22.2, 2A, 19A, 1A, 13F, 3F, F1, F2, 22A, RC, 4A, 15B, 13B, F, D1, D2, 1M, 2M, 3M, 3A, 5A, 12A, 12B, 13A, 23A, 16A, 16B, 17A					

SMEC Layout

SMEC Layout

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