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HOPE-II

Passenger Elevator



www.sme-cn.com



Specifications subject to change without notice

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Doubly Enjoying Swiftness Lift Future

Relying on the superior pioneering technology of Shanghai Mitsubishi Elevators Co., Ltd. (SMEC), HOPE-II Series Lifts is advancing with the time in respect of efficiency, energy-saving and comfort. A whole lift contains many advanced technologies, like dual 32-bit CPU, Surface Mount Technology (SMT), CANBUS Data Network Control, etc. HOPE-II is so designed to take into full consideration various practical demands from the customers, that it can be widely applied to hotels, office building, residential housings, etc.

In the spirit of keeping on improvement and forging ahead forever, HOPE-II Series Lifts extends the classical design of Shanghai Mitsubishi, reflecting SMEC essence in every part of it:

The Enjoyment of Going Up and Down

- General
- Design
- Functions
- Specifications
- Civil

Enhanced Performances Makes a Trip Happy at Top Speed



Accelerator Processing In An All Round Way

Take The Lead In Applying High-speed Digital-signal Processor

Ensure Stability And Reliability

Especially Adopt CANBUS Digital Network Control And Intelligent Power Module (IPM)

Humanization Precision Design

Harmonious And Comfortable Ride Every Time



E nhanced Performances M akes a Trip Happy at Top Speed

Accelerator Processing In An All Round Way

Take The Lead In Applying High-speed Digital-signal Processor.

HOPE-II Passenger Lift adopts dual-core 32-bit CPU, 32-bit high-speed digital-signal processor, high performance chips with over ten thousand circuits which are able to compile logic gate arrays on-site in large scale, thus taking a giant stride in strengthening its ability to process and respond to the system data, to the extent of qualitative improvement. Besides, it employs world leading SMT (Surface Mount Technology) technology, to realize full digital control in its true meaning, so that the system control performance and reliability reach the world advanced level.

Meanwhile, its sub-systems, such as lift car instruction controller, in-car floor indicator, door-operator controller, buttons and floor indicator on each landing, etc. use respectively independent micro-processors, resulting in more efficiency and accuracy of the controlling. More over, the connection between sub-systems needs only two lines, greatly raising the reliability and flexibility of the system, and reducing the cost of maintenance.

Ensure Stability And Reliability

Especially Adopt CANBUS Digital Network Control And Intelligent Power Module (IPM)

Through independent research and development, SMEC craftily employ world leading technology to the design of lift. HOPE-II Passenger Lift adopts the advanced CANBUS digital network control technology based on the field bus, to enhance its reliability and increase the transmit rate substantially, and at the same time to make digital transmission more flexible and prompt.

Due to the intelligent power module (IPM), the quick protection circuits will provide more effective protection for the power modules, further promoting the reliability of the driving system. In addition, direct-inserting connection is employed to link the driving control circuit E1 board and IPM module, so as to greatly strengthen the anti-interference ability of the system.

Humanization Precision Design

Harmonious And Comfortable Ride Every Time

HOPE-II Passenger Lift uses a 32-bit digital signal processor (DSP) to control the variable-frequency and variable-voltage driven door operator without link-arm, so that the closing moment can be automatically regulated according to the different door resistances of each landing, thus lift door opening/closing even more steady, sensitive and safe, and leaving a feeling of cordiality and security to passengers. Further more, the application of this new technique can not only save more energy, but also offer ever easier maintenance and more reliable performance.

Each set of our lift must pass through a real-time and accurate load test, and according to the feedback, provide adequate pre-control moment in the start-up, which realizes every light and steady start-up. Even during traveling, continuous adjustment of the moment control guarantees the lift in stead operation all the time.



Integrated and Harmonious Car Design

- Material Comparison Table
- Car and Car Ceiling
- Car Operating Panels And Hall Position Indicator
- Hall Door and Jamb
- Landing Indicator Light

Car and Car Ceiling

HOPE-II Series Lift brings about a fresh comfortable feeling to passengers, as it uses novelty decorating form, for example, variety of car decoration, simple and luxury. It can provide stainless steel or resin panels, operation panel and floor door calling with round or square buttons for your selection. Besides in order to meet the demands of different customers, various decorative films, mirror surfaces and patterns are available.












CL-3

Car Ceiling
Applicable for wide car

- Car Ceiling** Painted Steel Plate *
- Lighting** Indirect lighting of plate block type through acrylic transparent mirror faceplate, translucent mirror face plate, and half-slotted lighting is adopted on both sides.
- Ventilation Device** Painted steel plate grill ventilation and cross-flow fan.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Parquet marble pattern shall be provided by customer.

Note:
For wide car series, car inside height is standard, 20mm sink of car is standard configuration. When the car platform sinks 20mm, no decoration floor is provided; so customers can decorate with marble stone on their own.
* Color number is selected and determined according to SMEC decoration color boards.

Material Comparison Table

Item	Material	Notes																																		
Car Wall and Car Door	Film Paste Plate, Painted Steel Sheet, Stainless Steel Hairline, Stainless Steel Mirror, Stainless Steel Etched Hairline, Stainless Steel Etched Mirror, Steel Plate Painted with Metallic Lacquer, Titanium Coating Painted Plate, Stainless Steel Vibration Finish, Stainless Steel Sand Pattern, Stainless Steel Etched Vibration Finish, Stainless Steel Etched Sand Pattern, Stainless Steel Titanium Coating hairline, Stainless Steel Titanium Coating Mirror, Stainless Steel Titanium Coating Vibration Finish, Stainless Steel Titanium Coating Sand Pattern, Stainless Steel Etched Titanium Plating Hairline, Stainless Steel Etched Titanium Plating Mirror, Stainless Steel Etched Titanium Plating Coating Vibration Finish, Stainless Steel Etched Titanium Plating Coating Sand Pattern	For wide car.																																		
	Painted Plate, Hairline Stainless Steel Plate	For deep car.																																		
Mirror	Front Half Mirror	Optional																																		
Kick plate	Polyvinyl resin kick plate (Dark-grey)	Car wall is made of non-stainless-steel																																		
	Hairline Stainless Steel Kick Plate	Car wall is made of stainless steel																																		
Car floor	Polyvinyl Chloride Real Stone Floor	Standard																																		
	Nora Rubber Floor	Optional																																		
Handrail	<table border="1"> <thead> <tr> <th rowspan="2">Car Mode</th> <th colspan="3">Wide car series</th> <th colspan="3">Deep car series</th> </tr> <tr> <th>Front</th> <th>Side</th> <th>3 Sides</th> <th>Front</th> <th>Side</th> <th>3 Sides</th> </tr> </thead> <tbody> <tr> <td>Stainless Steel Round Handrail </td> <td colspan="3">Selected</td> <td colspan="3">Not provided</td> </tr> <tr> <td>Stainless Steel Flat Handrail </td> <td colspan="6">Selected</td> </tr> <tr> <td>Dupont Corian Flat Handrail </td> <td colspan="3">Selected</td> <td colspan="3">Not provided</td> </tr> </tbody> </table>	Car Mode	Wide car series			Deep car series			Front	Side	3 Sides	Front	Side	3 Sides	Stainless Steel Round Handrail 	Selected			Not provided			Stainless Steel Flat Handrail 	Selected						Dupont Corian Flat Handrail 	Selected			Not provided			Optional
	Car Mode		Wide car series			Deep car series																														
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Stainless Steel Flat Handrail 	Selected																																			
Dupont Corian Flat Handrail 	Selected			Not provided																																

Car and Car Ceiling

CL-1 Car Ceiling Applicable for wide car

- Car Ceiling** Painted Steel Plate *
- Lighting** Indirect lighting through milky translucent organic glass lamp shade.
- Ventilation Device** Plastic grill ventilation and cross flow type fan.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Nora rubber floor

* Color number is selected and determined according to SMEC decoration color boards.



CL-12 Car Ceiling Applicable for wide car

- Car Ceiling** Diamond Silver Metallic Paint Coating Stainless Steel Plate
- Lighting** Indirect illumination through two lines of fluorescent lamps.
- Ventilation Device** Side Air Vent and Cross-flow Fan.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Polyvinyl chloride real stone floor

CL-10 Car Ceiling Applicable for wide car

Without decoration ceiling, Customers can take the second decoration. Attention shall be paid that the fire-proof material must be adopted for the second decoration.



CL-2 Car Ceiling Applicable for wide car

- Car Ceiling** Mirror plate or titanium plating mirror plate *
- Lighting** Indirect lighting through acrylic transparent mirror face plate, translucent mirror face plate, incandescent direct lighting is fit in four corners.
- Ventilation Device** Painted steel plate grill ventilation and cross-flow fan.
- Car Floor** Parquet marble pattern shall be provided by customer.

* Color number is selected and determined according to SMEC decoration color boards.



CL-13 Car Ceiling Applicable for wide car

- Car Ceiling** Painted Steel Plate *
- Lighting** Indirect illumination through one to three lines of fluorescent lamps with milky semi transparent organic glass lamp shade.
- Ventilation Device** Painted steel plate grill ventilation and cross-flow fan.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Polyvinyl chloride real stone floor

* Color number is selected and determined according to SMEC decoration color boards.

Car and Car Ceiling

DD-JV-2 Car Ceiling

Applicable for wide car

- Car Ceiling** Painted Steel Plate *
- Lighting** Full lighting through milky translucent aciform organic glass plate and organic glass lamp columns are fit on two sides.
- Ventilation Device** Side Air Vent and Cross-flow Fan.
- Handrail** Stainless Steel Round Handrail.
- Car Floor** Parquet marble pattern shall be provided by customer.

* Color number is selected and determined according to SMEC decoration color boards.



ZCL-SP01 (CAP<1600kg)

Car Ceiling
Applicable for wide car

- Car Ceiling** Painted Steel Plate *
- Lighting** Full lighting through milky translucent organic glass plate, incandescent direct lighting is fit in four corners.
- Ventilation Device** Side Air Vent and Cross-flow Fan.
- Car Floor** Parquet marble pattern shall be provided by customer.

* Color number is selected and determined according to SMEC decoration color boards.



DD-JII-3 Car Ceiling

Applicable for wide car

- Car Ceiling** Mirror Stainless Steel Plate
- Lighting** Full lighting through milky translucent organic glass plate, incandescent direct lighting is fit in four corners.
- Ventilation Device** Side Air Vent and Cross-flow Fan.
- Handrail** Stainless Steel Round Handrail
- Car Floor** Parquet marble pattern shall be provided by customer.



ZCL-SP02 (CAP<1600kg)

Car Ceiling
Applicable for wide car

- Car Ceiling** Painted Steel Plate *
- Lighting** Full lighting through milky translucent organic glass plate, incandescent direct lighting is fit in four corners.
- Ventilation Device** Side Air Vent and Cross-flow Fan.
- Car Floor** Parquet marble pattern shall be provided by customer.

* Color number is selected and determined according to SMEC decoration color boards.

Car and Car Ceiling

ZCL-CP01 (CAP<1600kg)

Car Ceiling

- Car Ceiling** Painted Steel Plate (ZY-001)
- Lighting** Painted steel plate interspersed by five down lights equipped with energy-saving tube, which possesses obvious effect on energy saving and avoids high heat from traditional incandescent bulb.
- Ventilation Device** Deflection blade guides the air volume to center part of car and improves the ventilation effect in car in hot summer.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Nora rubber floor
- Characteristics** Plane design, which prevents the car being scratched during furniture moving, is particularly suitable for residential building.

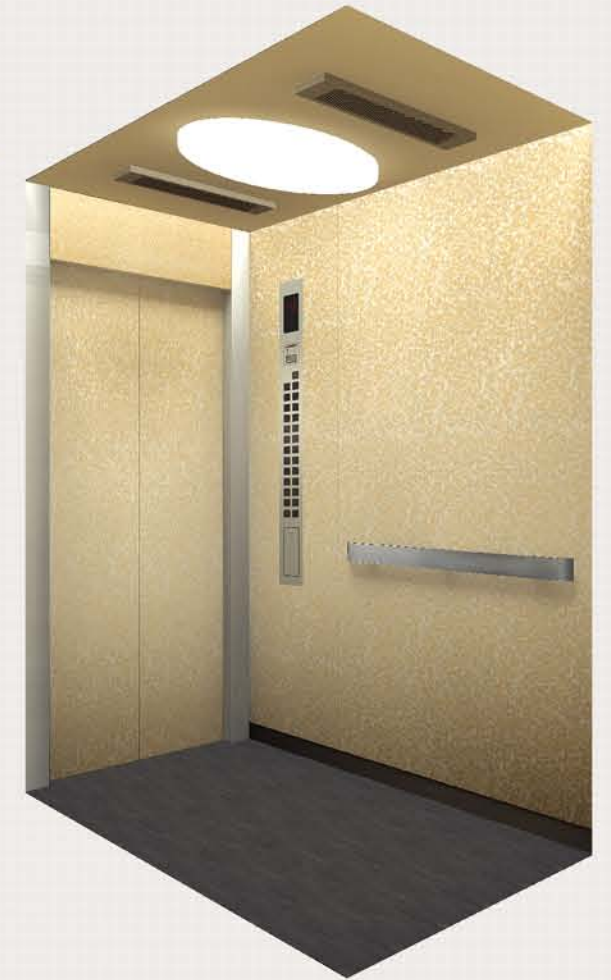


CL-4B Car Ceiling

Applicable for 800kg deep car

- Car Ceiling** Painted Steel Plate *
- Lighting** Indirect full lighting through milky translucent organic glass lamp shade.
- Ventilation Device** Plastic grill ventilation and cross-flow fan.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Polyvinyl chloride real stone floor

* Color number is selected and determined according to SMEC decoration color boards.



ZCL-CP02 (CAP<1600kg)

Car Ceiling

- Car Ceiling** Painted Steel Plate (ZY-001)
- Lighting** Painted steel plate interspersed by six down lights equipped with energy-saving tube, which possesses obvious effect on energy saving and avoids high heat from traditional incandescent bulb.
- Ventilation Device** Deflection blade guides the air volume to center part of car and improves the ventilation effect in car in hot summer.
- Handrail** Stainless Steel Flat Handrail
- Car Floor** Nora rubber floor
- Characteristics** Plane design, which prevents the car being scratched during furniture moving, is particularly suitable for residential building.



CL-4A Car Ceiling

Applicable for 630kg deep car



CL-4C Car Ceiling

Applicable for 1050kg deep car

Car Operating Panels And Hall Position Indicator

Car control panel is designed according to ergonomics and features delicate hand feeling, nimble reaction and convenient operation. Refined landing indicator can clearly and quickly display all kinds of figures and symbols.



CBC-C300(S) CBC-C301(S) CBC-A10(S) CBC-L300(S) CBC-C305(S) CBC-C370(S)



CBW-M10(S) CBW-H10(S)



CBC-C306

Decoration Type

Specification	Panel	Button
CBC-C300(S)	Stainless Steel Hairline	Resin Matted (Square) Button
CBC-C301(S)	Stainless Steel Hairline	Stainless Steel Matted (Round) Button
CBC-A10(S)	Resin	Resin Matted (Square) Button
CBC-L300(S)	Stainless Steel Hairline, LCD high resolution TFT liquid crystal display.	Resin Matted (Square) Button
CBC-C305(S)	Stainless Steel Hairline	4-arrayed Control Panel
CBC-C370(S)	Stainless Steel Hairline	Resin Matted (Square) Convex Button

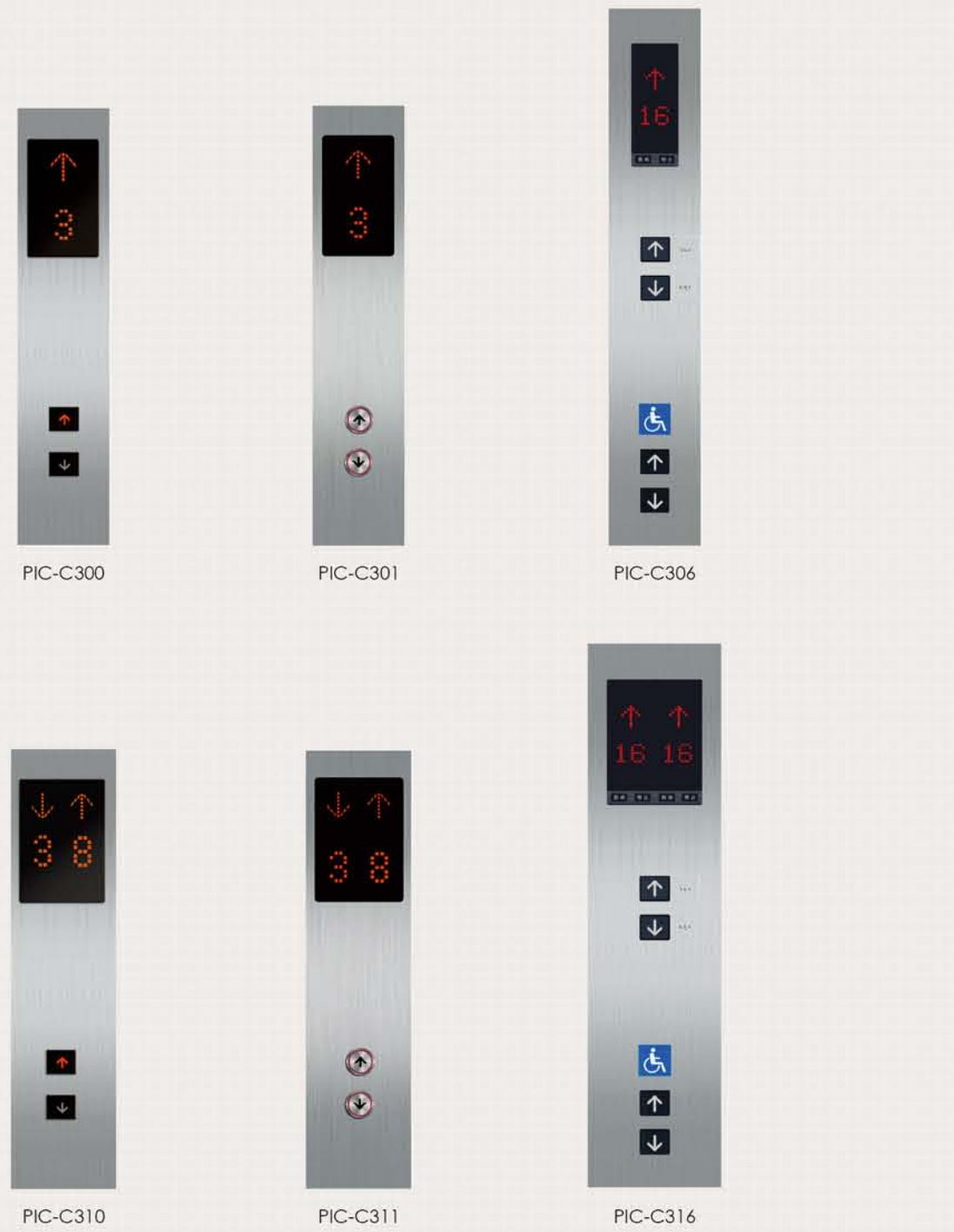
Note: (S) indicated has the sub operation, for wide car.

Decoration Type

Specification	Panel	Button
CBW-M10(S) *	Stainless Steel Mirror, Integrated Operating Panel	Resin Matted (Square) Button
CBW-H10(S) *	Stainless Steel Hairline, Integrated Operating Panel	Resin Matted (Square) Button
CBC-C306	Stainless Steel Hairline	Resin Matted (Square) Button

Note:
(S) indicated has the sub operation, for wide car.
* Only suitable for wide car.

Hall Position Indicator And Call Button



Decoration Type

Specification	Panel	Button	Note
PIC-C300	Stainless Steel Hairline	Resin Matted (Square) Button	
PIC-C310	Stainless Steel Hairline	Resin Matted (Square) Button	Applicable for all operation modes except for 1C~2BC.
PIC-C301	Stainless Steel Hairline	Stainless Steel Matted (Round) Button	
PIC-C311	Stainless Steel Hairline	Stainless Steel Matted (Round) Button	Applicable for all operation modes except for 1C~2BC.
PIC-C306	Stainless Steel Hairline,	Resin Matted (Square) Button	
PIC-C316	For handicapped, mix Braille.	Resin Matted (Square) Button	Applicable for all operation modes except for 1C~2BC.



Decoration Type

Specification	Panel	Button	Note
PIC-C370	Stainless Steel Hairline	Resin Matted (Square) Convex Button	
PIC-C380	Stainless Steel Hairline	Resin Matted (Square) Convex Button	Applicable for all operation modes except for 1C~2BC.
PIC-A10	Resin Plate	Resin Matted (Square) Button	
PIC-A20	Resin Plate	Resin Matted (Square) Button	Applicable for all operation modes except for 1C~2BC.
HBC-M10	Stainless Steel Mirror	Resin Matted (Square) Button	
HBC-M20	Stainless Steel Mirror	Resin Matted (Square) Button	Applicable for all operation modes except for 1C~2BC.
HBC-H10	Stainless Steel Hairline	Resin Matted (Square) Button	
HBC-H20	Stainless Steel Hairline	Resin Matted (Square) Button	Applicable for all operation modes except for 1C~2BC.
HBC-C370	Stainless Steel Hairline	Resin Matted (Square) Convex Button	
HBC-C380	Stainless Steel Hairline	Resin Matted (Square) Convex Button	Applicable for all operation modes except for 1C~2BC.

Hall Door and Jamb

E-102 Narrow Jamb
Suitable for wide car and deep car.



E-302 Oblique angle (10°)
Suitable for wide car and deep car.



E-312 Splayed Jamb (10°) with Transom Panel
Only suitable for wide car.



E-322 Splayed Jamb (10°) with Splayed Transom Panel
Only suitable for wide car.



Decoration Type of Hall Door and Jamb

Specification	Panel	Notes
Hall Door	Painted Steel Sheet, Stainless Steel Hairline, Stainless Steel Etched Hairline, Stainless Steel Etched Mirror, Stainless Steel Mirror, F-Design-II, Steel Plate Painted with Metallic Lacquer, Stainless Steel Titanium Coating hairline, Stainless Steel Titanium Coating	For wide car.
	Mirror, Stainless Steel Etched Titanium Plating Hairline, Stainless Steel Etched Titanium Plating Mirror	
	Stainless Steel Titanium Coating Vibration Finish, Stainless Steel Titanium Coating Sand Pattern, Stainless Steel Etched Titanium Plating Coating Vibration Finish, Stainless Steel Etched Titanium Plating Coating Sand Pattern, Titanium Coating Painted Plate, Stainless Steel Vibration Finish, Stainless Steel Sand Pattern, Stainless Steel Etched Vibration Finish, Stainless Steel Etched Sand Pattern	For wide car to non-standard
	Painted Plate, Hairline Stainless Steel Plate	For deep car.
Jamb	Painted Steel Sheet, Stainless Steel Hairline, Stainless Steel Mirror, Steel Plate Painted with Metallic Lacquer, Stainless Steel Titanium Coating hairline, Stainless Steel Titanium Coating Mirror	For wide car.
	Stainless Steel Etched Titanium Plating Hairline, Stainless Steel Etched Titanium Plating Mirror, Stainless Steel Etched Titanium Plating Coating Vibration Finish, Stainless Steel Etched Titanium Plating Coating Sand Pattern, Stainless Steel Etched Hairline, Stainless Steel Etched Mirror, Stainless Steel Etched Vibration Finish, Stainless Steel Etched Sand Pattern	
	Titanium Coating Painted Plate, Stainless Steel Vibration Finish, Stainless Steel Sand Pattern, Stainless Steel Titanium Coating Vibration Finish, Stainless Steel Titanium Coating Sand Pattern Painted Plate	
	Painted Steel Sheet, Hairline Stainless Steel Plate	For deep car.

Landing Indicator



ZPIH-L610D



HID-A20



HID-A10

Specification	Panel
ZPIH-L610D	LCD Landing Indicator
HID-A10	Large-scale landing indicator without panel.
HID-A20	Hairline Stainless Steel Plate, Large-scale Landing Indicator

Landing Indicator Light



ZHLV-B011



ZHLV-E021



ZHLV-H010



ZHLV-E011



ZHLV-R011



ZHLV-R021



ZHLV-E031

Specification	Panel	Light Sheet	Notes
ZHLV-B011	Mirror Stainless Steel Plate	Fog White Translucent	Warm White, white, red and green at option. (Running up is red, Running down is green.)
ZHLV-E021	Mirror Stainless Steel Plate	Fog White Translucent	
ZHLV-H010	Without Panel	Fog White Translucent	
ZHLV-E011	Mirror Stainless Steel Plate	Translucent	
ZHLV-R011	Mirror Stainless Steel Plate	Fog White Translucent	
ZHLV-R021	Mirror Stainless Steel Plate	Frosted Translucent	
ZHLV-E031	Mirror Stainless Steel Plate	Fog White Translucent	

Feature List

Func. Code	Func. Name	Func. Description	1C-28C	2C-SM21	3-4C ITS-21	3-8C ITS-21
Control Safety Protection Feature						
ARL *1	Automatic Landing with Rheostatic Leveling	When the elevator is within door area but outside the releveling area, it will perform automatic landing.	○	○	○	○
ARL *2	Automatic Landing with Rheostatic Leveling	When the elevator is within door area but outside the releveling area, it will perform automatic landing.	○	○	○	○
AST	Anti-Stall Timer	After taking off a brake, when the predetermined time has passed since a car ran at very slow speed, the car stops for safety of passenger.	○	○	○	○
BTUP	Battery Trouble Operation	When the elevator double-brake goes wrong, the one-sided braking feature can also carry out the braking function.	○	○	○	○
ESC	Electrical Safety Circuit Protection	Once the serial-connected electrical safety device activates, the elevator running stops.	○	○	○	○
HAND	Hand Operation	The overhaul operation mode used by maintenance personnel.	○	○	○	○
LWS	Load Weighing Start	The car may safely and smoothly start up by adjusting starting torque according to the load in the car.	○	○	○	○
OCP	Over-current Protection	When the converter or inverter current is detected beyond its allowed value, stop the elevator.	○	○	○	○
OSP	Over-speed Protection	When the running speed is detected beyond its allowed value, stop the elevator.	○	○	○	○
OVP	Over-voltage Protection	When the converter or inverter voltage is detected beyond its allowed value, stop the elevator.	○	○	○	○
PPF	Power Failure Protection	When it occurs the errors like phase open or undervoltage of the power supply, stop the elevator.	○	○	○	○
PORL	Power-On Releveling	If a car stops at a door zone due to the failure of normal power, the car will relevel to secure the floor level with the doors open after the normal power has recovered.	○	○	○	○
RSP	Reverse Run Protection	When detecting the elevator moving in the reverse direction, stop the elevator.	○	○	○	○
SC	Level Correction	Make correction to the selector while the elevator is running.	○	○	○	○
SFL	Safe Landing	When the car stops between floors due to power failure or malfunction, the controller will perform a safety check and the car will be dispatched to the nearest or designated floor.	○	○	○	○
SO	Stop Open	When a car lands at a hall, the car will start opening after the car stops fully.	○	○	○	○
THMF	Abnormal condition for temperature	To detect the temperature of the inverter radiator.	○	○	○	○
TSD	Terminal Slowdown Device	If the speed of the car fails to decrease lower than the given value as it reaches the terminal, the system will slowdown the car coercively to secure normal landing.	○	○	○	○
USP	Under Speed Protection	When detecting the operation speed lower than the allowed value, stop the elevator.	○	○	○	○
Operation And Service						
ABP	Automatic Bypass	When the car load exceeds 80% of rated load, it ignores other hall calls automatically to avoid useless stop and increases the efficiency of car traveling.	○	○	○	○
AS	Attendant Service	The elevator will be operated by an attendant.	○	○	○	○
CCBK	Car Computer Back Up Operation	When the car station has been troubled, the car will stop at the nearest floor and is unable to restart.	○	○	○	○
CCC	Reversal Car Call Canceling	Under full-automatic mode, when a car finally responds to the last car call, all other registered car calls behind the car service direction will be cancelled simultaneously.	○	○	○	○
CFO-A	Car Fan Off - Automatic	Car fan will be cut off automatically if no more calls are registered during the predetermined time to effect energy saving and to lengthen the life-span of car fan.	○	○	○	○
CLO-A	Car Light Shut Off - Automatic	Car light will be cut off automatically if no more calls are registered during the predetermined time to effect energy saving and to lengthen the life-span of car light.	—	○	○	○
COS	Continuity of Service	In order to assure the continuity, when a car cannot respond to the registered hall calls, it will be excluded from the assignment of hall calls and the other car in the group control will be assigned to those calls.	—	○	○	○
EPD	Elevator Fault Self Diagnosis	Implement self diagnosis for faults during the elevator operation.	○	○	○	○
EXIT SW	EXIT Switch for Hoist way	The switch for emergency exit status-detecting.	○	○	○	○
FCC-A *3	False Call Canceling - Automatic	When the load (number of passengers) in the car is inconsistent with the number of registered car calls, all car calls will be cancelled automatically in order to avoid traffic inefficiency.	○	○	○	○
FCC-P *4	False Call Canceling - Car Button type	Cancellation of false car call can be done by simply pressing the same car button two more times to cancel the call registration.	○	○	○	○
FHC-P	False Hall Call Canceling - Hall Button Type	Cancellation of false hall call can be done by simply pressing the same hall button two more times to cancel the call registration.	○	○	○	○
FMR	Floor Height Auto Measurement	Automatically measure and save the floor height.	○	○	○	○
FSAT	Automatic Hall Call Registration	If the group operation detects a fully loaded car that is not able to service all the waiting passengers, then it automatically registers a hall call for that floor.	○	○	○	○
GCBK	Group Control Back up Operation	When the transmission between the group control and car control is failed, the elevator service can be maintained. (The BKUP function of GPS-II and previous elevator type is the same as the GCBK function.)	—	—	○	○
HCBK	Group Control Back up Operation	When the transmission between the group control and car control is failed, the elevator service can be maintained.	○	○	○	○
HOS	Hall Out-of-Service Switch	RUN/STOP operation of an elevator can be controlled by using a key switch installed in the specified elevator hall.	○	○	○	○
IND	Independent Operation	Using the "IND" switch in the operation panel, the elevator will be excluded from group control without stop service, and only respond to car calls while cancel hall calls.	—	○	○	○
KNDG	Door Nudging Feature without Buzzer	In case doors are being held open for an excessive time, the feature will be activated to neglect the non-contact type door sensor function and doors are forced to close.	○	○	○	○
NS *5	Non-Service to Specific Floor - Switch Type	Elevator service for a specified floor is temporarily suspended by operating this switch.	○	○	○	○
NS-CB *6	Non-Service to Specific Floor - Car Button Type	By operating the button and setting switch on the operation panel, elevator service for a specified floor can be cancelled.	○	○	○	○
NST *7	Not Start Operation	When the car cannot start to respond the registered hall or car calls for a predetermined period, the car will be excluded from the group control and the assigned hall call will be cancelled, but the car calls can be registered, the abnormal lamp will be illuminated and the abnormal bell will ring on the supervisory board.	○	○	○	○
NXL	Next Landing	If the elevator arrives at a floor and are prevented from fully opening, the doors will close. The elevator will then move to another floor.	○	○	○	○
OLH	Overload Holding Stop	The elevator will hold its operation with door opened at the floor and an audible signal will sound when the load in the car reaches the designed figure.	○	○	○	○
RCS *8	Remote-Control Car Stop	An elevator in the group control system will be remotely controlled by operating RCS switch.	○	○	○	○
RET *8	Return Operation	This feature will return a car to the specified floor immediately. A switch will be provided for each elevator in the supervisory board.	○	○	○	○
SCS-B *9	Secret Call Service - Car Button Type	Registration of car calls of the specified floor are restricted and these floors can be accessed only by entering a secret code using the car call buttons in the car operating panel.	○	○	○	○
SCS-IC *5	Secret Call Service - IC Type	Some specified floors can only be accessed by entering a IC Card in the operating panel.	○	○	○	○

Func. Code	Func. Name	Func. Description	1C-28C	2C-SM21	3-4C ITS-21	3-8C ITS-21
Emergency Operation Feature						
ECL	Emergency Car Lighting	When normal lighting power supply fails, emergency car lighting is provided.	○	○	○	○
EER-S *10	Earthquake Emergency Return Operation - S wave	When an earthquake is detected by the earthquake sensor, the running elevator will stop at the nearest landing with door open securing the passenger's safety and prohibiting further operation of the elevator.	○	○	○	○
ELD *11	Emergency Landing	When normal power supply fails, the elevator will be powered by its rechargeable battery to allow the car to land at the nearest floor, then open the car door to let passenger leave safely.	○	○	○	○
EMB	Emergency Bell	When emergency happens, by pressing the bell button, the alarm bell and interphone will ring.	○	○	○	○
FE *12	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.	○	○	○	○
FER *12	Fire Emergency Return	When a fire breaks out, the running elevator will stop at the predetermined evaluation floor with door open canceling all calls from landings or cars so as to secure the passenger's safety and prohibit further operation of the elevator.	○	○	○	○
OEPS-SA *13	Operation by Emergency Power Source - Sole Auto	When power failure occurs, emergency power should be supplied to keep the car operation and secure passengers in accordance with the automatic command.	○	○	○	○
SMOS-II *14	Elevator Monitoring and Control System	The system monitors the elevator operation and position via personal computer and provides operation instruction when necessary.	○	○	○	○
Door Operation Feature						
CLTS	Door Close Limit Switch on Start	When the closing car door is obstructed from closing by objects, the doors will reopen.	○	○	○	○
DAH	Direction Arrows on Hall	These arrows display the service direction of the elevator at the elevat or hall.	○	○	○	—
DCR	Door-Close Button Response Light	Door Close Response Light will be illuminated if door-close button is pressed. When the car stops with its doors opening and has no call for running direction and the hall call of opposite direction at the same floor has been registered, the elevator doors will reopen after its closing.	○	○	○	○
DDOP	Double Door Operation	Press the extended door open button to keep the doors open for a predetermined time.	○	○	○	○
DKO-TB	Extended Door Open Button	When there is an excessive load on the doors or other interference with door operation, door direction will be reversed for preventing damage or injury.	○	○	○	○
DLD	Door Load Detector	When there is an excessive load on the doors or other interference with door operation, door direction will be reversed for preventing damage or injury.	○	○	○	○
DONG	Not Door Open Feature	If the malfunction is detected while doors opening, the doors will start its closing immediately.	○	○	○	○
DOT	Automatic Door-Open Time Adjustment	The feature automatically adjusts the non-interference time in accordance with call conditions on each floor whether the car stops by car or hall call.	○	○	○	○
DTC	Door Close Torque Control	When the closing car door meets with extra obstruction force, the door system will automatically increase the torque.	○	○	○	○
EDC	Expediting of Door-Close	By pressing the Door Close button, the Door Closing Operation is immediately activated, and thus the traffic efficiency is improved.	○	○	○	○
MBS *15	Multi-Beam Door Sensor	Safety edge with light beam screen. By double protection via light beam screen and safety edge, this sensor immediately reopens the closing doors when a beam of infrared light passing across the door opening of the cars is interrupted by passengers or objects.	○	○	○	○
NDG *16	Door Nudging Feature	In case doors are being held open for an excessive time, the elevator generates alarm sound to remind passenger and tried closing doors.	○	○	○	○
RDC	Repeated Door-Close	In case the elevator doors can not be closed completely, the doors will repeat its door-closing action in order to take off the obstruction.	○	○	○	○
ROHB	Reopen by Hall Button	While the elevator doors are closing, it is possible to re-open by pressing the hall call button of the same direction.	○	○	○	○
SDE *15	Safety Door Edge	When a passenger touches the device mounted on the edge of the door(s), the doors will reopen.	○	○	○	○
SR *17	Safety Ray	During door-closing, when a beam of infrared light beam passing across the door opening of the cars is interrupted by passengers or objects, doors will reopen immediately.	○	○	○	○
Information And Indication Feature						
AAN-S01*18	Voice Announcer	The voice announcer informs passengers of the elevator-related information (in Chinese)	○	○	○	○
AAN-S02*18	Voice Announcer	The voice announcer informs passengers of the elevator-related information (in Chinese or English)	○	○	○	○
AAN-S03*18	Voice Announcer	The voice announcer informs passengers of the elevator-related information (in English)	○	○	○	○
AECC *19	Car Arrival Chime on Car	An electric chime sounds to inform waiting passengers of the elevator arrival.(the electric chime is mounted on top and bottom of the car)	○	○	○	—
AIL	Immediate Prediction Function	When a passenger registers a hall call, the optimum car to respond is immediately selected and announced to the passengers via hall lantern illumination and a single tone chime.	—	—	—	○
AUTL *20	Automatic Operation Signal Light	Automatic Operation Signal Light indicates the car is operating under fully automatic operation.	○	○	○	○
BA *21	BA Signal Interface Device	The basic operation state signals can be output through the device.	○	○	○	○
BPL *20	Bypass Signal Light	Bypass Signal Light is illuminated to indicate the car is in automatic-bypass operation.	○	○	○	○
DAC	Direction Arrows in Car	These arrows display the service direction of the elevator in the car.	○	○	○	○
DOL	Door-Open Button Response Light	In order to show location of the door-open-button, this door-open-response-light will be illuminated while the car interior light turned off.	○	○	○	○
EMIDS-C *5	Elevator Multimedia Information Display System- Car	Offer the passengers audio and video information. (Installed in car)	○	○	○	○
EMIDS-H *5	Elevator Multimedia Information Display System- Hall	Offer the passengers audio and video information. (Installed in hall)	○	○	○	○
FE-CP *22	Fireman's Emergency Operation	CP 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.	○	○	○	○
FELC *23	FE Operation Signal Lamp in Car	When the elevator gets into FE operation status, the signal lamp in the car will indicate the status.	○	○	○	○
FER-CP*24	Fire Emergency Return	After the operation of fire emergency return is over, a completion signal is output.	○	○	○	○
FHL*25	Flickering Hall Lantern	A hall lantern on each floor flickers to indicate the car arrival and service direction to passengers waiting at the elevator hall.	○	○	○	○
GC *19	Approaching Gong or Chime (car)	The Approaching Gong or Chime prompts passengers in the car of the arrival floor (The Chime is mounted at top and bottom of the car)	○	○	○	—
ITP *26	Interphone	The interphone system allows intercommunication between the passenger in the car and the people in the machine room or supervisory room.	○	○	○	○
ITV *27	ITV Cable	The cable used for video camera installed in the car for user to monitor the real image in the supervisory room.	○	○	○	○
ITV-S *28	With video camera supervision	When only video camera supervision is configured or the selected SMOS configures camera supervision feature, Shanghai Mitsubishi provides cables in the corresponding machine room, hoist way and car.	○	○	○	○
OEPS-CP *29	Operation by Emergency Power Source	After the operation by emergency power source is over, a completion signal is output.	○	○	○	○

Feature List

Func. Code	Func. Name	Func. Description	1C-2BC	2C-SM21	3-4C ITS-21	3-8C ITS-21
Information And Indication Feature						
OLHL	Overload Holding Stop	The elevator will hold its operation with door opened at the floor and an audible signal will sound when the load in the car reaches the designed figure.	⊙	⊙	⊙	⊙
RESL *20	Rest Signal Light (Hall)	Rest Signal Light indicates the elevator can't be used.	⊙	⊙	⊙	⊙
TCP *30	Second Car Prediction	If a single elevator is not able to service all passengers on a crowded floor, another hall lantern will flicker to indicate the second car that will service that floor.	⊙	⊙	⊙	⊙
Group Control Feature						
BSO *5	Back Separation Operation	A single group of elevator can be divided into more than one group of elevators, each with its own separate hall call button riser.	—	—	⊙	⊙
CAT	Car Allocation Tuning	Under the group control mode, during peak periods, it controls the number of cars allocated or parked to the crowded floors according to the traffic in the building.	—	—	—	Ⓢ
CFS	Congested-Floor Service	In order to resolve temporary congestion of floors where conferences or meetings are held, cars will be intensely assigned to handle the high demand.(This feature is referred to as conference floor service by GPS-II and other older elevator types)	—	—	⊙	⊙
CNPS	Closest Car Priority Service	In respond to a hall call, priority is given to the car closet to the hall button pressed.	—	—	—	⊙
DPS	Down Peak Service	The feature improves group operation efficiency by dispatching cars to upper floor during the predetermined down peak period (such as departure rush hour in office buildings)	—	—	⊙	⊙
ESO-N	Energy-Saving Operation - Number of Car	With consideration of the traffic data and keeping elevator service at a predetermined level, when the level of elevator service becomes greater than the predetermined level, energy savings are attained through reducing the number of running cars.	—	—	—	⊙
FFS	Forced Floor Stop	The feature forces a car to stop at the specified floor regardless of a registered car or hall call.	⊙	⊙	⊙	⊙
LTS	Lunch Time Service	In order to resolve traffic congestion during the lunch time, to and from the cafeteria floor in the office building, LTS provides better service.	—	—	⊙	⊙
MFP	Main Floor Parking	When not in use, the car is automatically dispatched to the main floor and park there.	⊙	⊙	⊙	⊙
OHS	Off-Hour Spotting	Group controlled elevators are automatically dispersed to park during off-hours to the main floor and intermediate floors.	—	⊙	⊙	⊙
PRS	Prevention of Simultaneous Running	When two cars neighbored each other run simultaneously in the express zone, noise sound in cars is increased. To avoid this, it prevents such kind of running of cars.	—	—	⊙	⊙
PTC	Peak Traffic Control	When upward traffic from the main floor is relatively crowded, cars will be dispatched with priority to the main floor. When downward traffic towards the main floor is relatively crowded, cars will be dispatched with priority to the top floor.	—	Ⓢ	Ⓢ	Ⓢ
SCPS	Special Car Priority Service	When a hall call is registered, a previously specified car (e.g. observation car, alternative terminal floor car) is assigned as higher priority, provided efficiency of overall group control is not disturbed seriously.	—	—	—	⊙
SFPS	Car Call Button with Service Floor Indicator	A particular car is given higher priority for service to a specified floor compared to the other floors without priority service.	—	—	—	⊙
TFS *5	Main Floor Change over Operation	The main dispatching floor can be changed by the TFS switch.	⊙	⊙	⊙	⊙
UCPS	Light Load Car Priority Service	When the traffic is not crowded, allocation priority is given to vacant and lightly loaded cars (car with loads of less than 10%).	—	—	—	⊙
UPS	Up Peak Service	This feature provides high priority service to the main floor during a specific time range in order to service the high demand of up-direction traffic from the main floor, for example, incoming traffic of office building in the morning.	—	—	⊙	⊙
VIP-S *31	VIP Operation	A predetermined car is operated separately from group operation for VIP service.	—	—	⊙	⊙

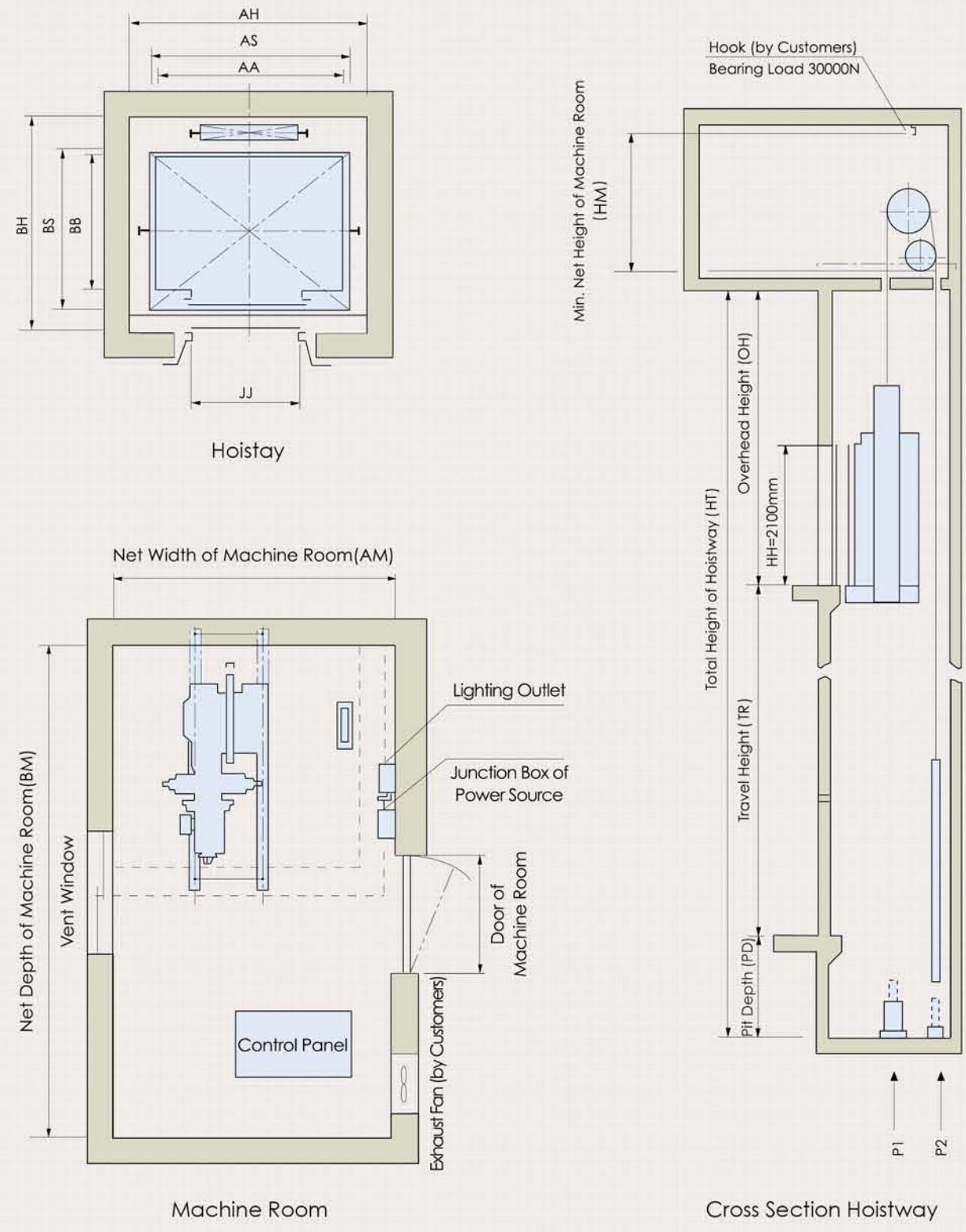
Notes:

- *1 Be optional when the lifting height is < 60m.
 - *2 Be standard when the lifting height is ≥ 60m.
 - *3 When landing stops ≥ 6 and SCS-IC is not configured to be applied.
 - *4 SCS-IC is not configured to be applied.
 - *5 Non-standard
 - *6 When two or more units are in parallel connection or group control, identical service landings for each unit are necessary.
 - *7 The abnormal signal output the SMOS-II.
 - *8 Either RCS or RET can be selected, customer or SMOS-II shall provide a dry contact signal to control panel.
 - *9 Not applicable to 2D2G.
 - *10 Non-standard, Subject to manufacture department.
 - *11 The adjacent landing interval: when the speed is 1m/s, the interval is less than 16m, others should be less than 20m.
 - *12 Either FE or FER can be selected. It should be considered that the elevator can return from the top floor to the evacuation floor within 60 seconds.
 - *13 Customer shall provide normal opened dry contact signal of power supply to control panel in machine room.
 - *14 Can be monitored and controlled by SMOS-II.
 - *15 Either MBS or SDE must be selected.
 - *16 Voice announcer must be configured.
 - *17 Be optional for wide car with safety edge.
 - *18 Either AAN-S01, AAN-S02 or AAN-S03 can be selected.
 - *19 Either AECC or GC can be selected.
 - *20 2 or less than 2 of the functions of AULT, BPL and RESL can be selected.
 - *21 BA output, collector open output; the output signals are up stroke, down stroke, comprehensive trouble, landing encoding signal; the output terminals are seated in the control cabinet of the machine room. No RS232/RS458 output.
 - *22 Standard feature when FER is configured, output from control panel.
 - *23 Selectable when FE is configured.
 - *24 Standard feature when FER is configured, output from control panel.
 - *25 Standard configuration when landing indicator is ZHLV-R110, other than ITS-2100.
 - *26 The cable from machine room to monitoring room and its installation should be handled by customer.
 - *27 Either ITV or ITV-S can be selected but cannot be selected together.
 - *28 SMOS-II and configured with monitor supervision feature, either ITV or ITV-S can be selected.
 - *29 Optional when OEPS-SA.
 - *30 Applicable for ITS-2100 and selected UPS, DPS or LTS.
 - *31 Non-standard, can be connected to SMOS-II. Not applicable to 2D2G.
- Ⓢ Standard
⊙ Option

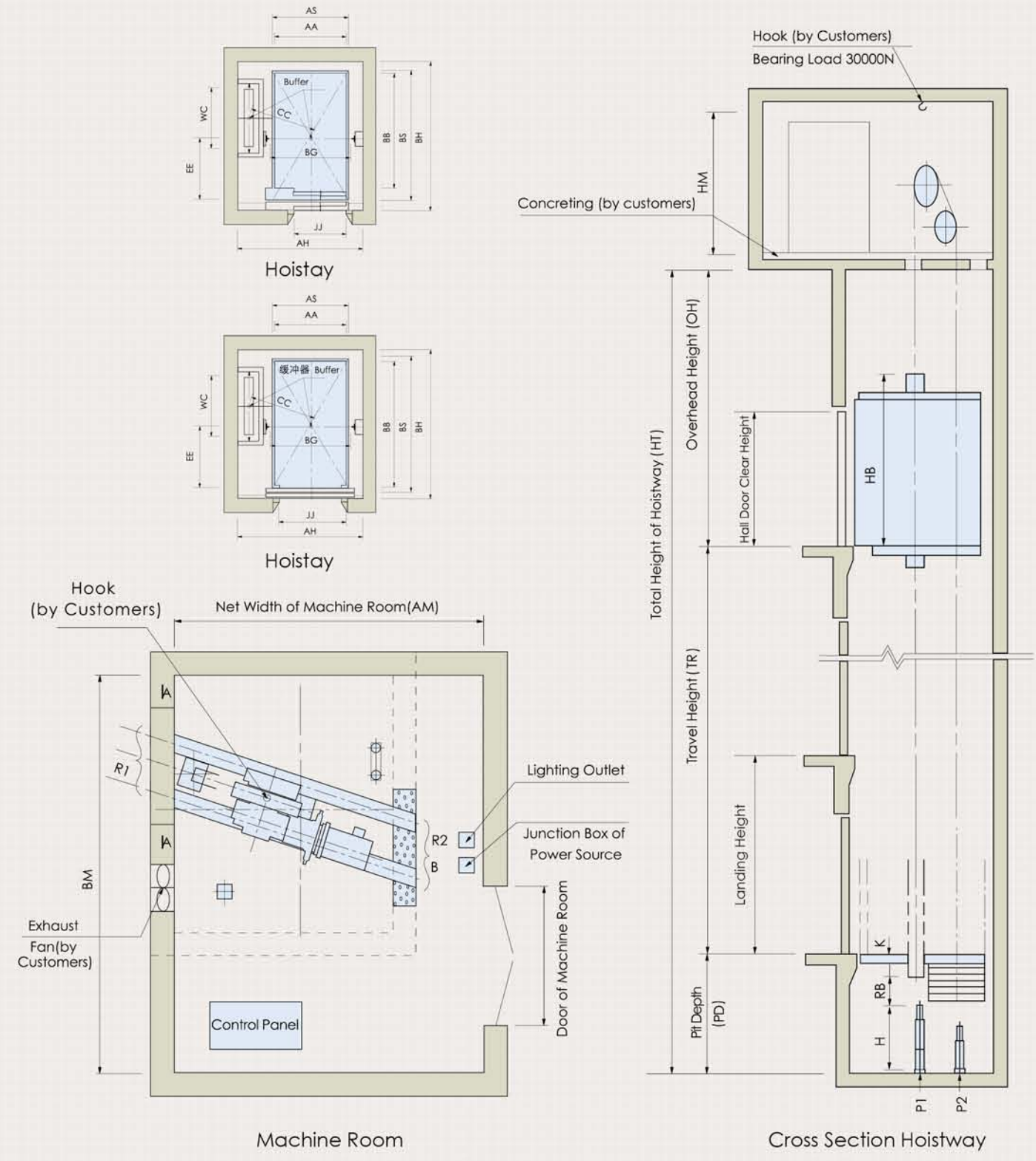
Basic Specifications

Item	Specifications					Notes
Speed(m/s)	1	1.5	1.75	2	2.5	
Capacity(kg)	550	550	550			For wide car.
	630	630	630			For wide car.
	800	800	800	800	800	For wide car.
	900	900	900	900	900	For wide car.
	1050	1050	1050	1050	1050	For wide car.
	1200	1200	1200	1200	1200	For wide car.
	1350	1350	1350	1350	1350	For wide car.
	1600	1600	1600	1600		For wide car.
	630	630	630			For wide car.
	800	800	800	800	800	For wide car.
Enhance the height of TR (m)	2.6-60	2.6-80	2.6-80			For wide car. When rated load ≤ 630kg and neither FE or FER is selected.
	2.6-55	2.6-80	2.6-80			For wide car. When rated load ≤ 630kg and FE or FER is selected.
	2.6-60	2.6-105	2.6-105	2.6-120	2.6-120	For wide car. When rated load is 630kg~1350kg and neither FE or FER is selected.
	2.6-55	2.6-80	2.6-90	2.6-105	2.6-120	For wide car. When rated load is 630kg~1350kg and FE or FER is selected.
	2.6-60	2.6-105	2.6-105	2.6-120		For wide car. When rated load is 1600kg and neither FE or FER is selected.
	2.6-55	2.6-80	2.6-90	2.6-105		For wide car. When rated load is 1600kg and FE or FER is selected.
	2.6-60	2.6-80	2.6-80			For deep car. When rated load ≤ 630kg and neither FE or FER is selected.
	2.6-55	2.6-80	2.6-80			For deep car. When rated load ≤ 630kg and FE or FER is selected.
	2.6-60	2.6-105	2.6-105	2.6-105	2.6-105	For deep car. When rated load is 630kg~1350kg and neither FE or FER is selected.
	2.6-55	2.6-80	2.6-90	2.6-105	2.6-105	For deep car. When rated load is 630kg~1350kg and FE or FER is selected.
The number of stop (stations)	2-20	2-32	2-32	2-32	2-32	When neither FE or FER is selected.
	2-20	2-28	2-32	2-32	2-32	When FE or FER is selected.
Operation Mode	1C~2BC, 2C~SM21, 3C~ITS-21, 4C~ITS-21 3C~ITS-2100, 4C~ITS-2100, 5C~ITS-2100, 6C~ITS-2100, 7C~ITS-2100, 8C~ITS-2100					3-8 units in group control(ITS-2100).
Control Mode	VFEA					
Door Open Type	1D1G					
Car Type	Wide Car, Deep Car					
Door Open Mode	Center Open Mode					For wide car.
	Two Panel Folding Mode, Center Open Mode					For deep car.
Door Open Bearing	Left Opening, Right Opening.					For two panel type.
Dynamic Power Supply	380V50Hz 3-Phase-5-Line System					
Lighting Power Supply	220V50Hz Single Phase					
Minimum Landing Height (mm)	2600					Seller will supply the steel nosing if it is selected.
	2800					Buyer should supply the concrete nosing if it is selected.
Nosing	Seller will supply the steel nosing if it is selected. Buyer should supply the concrete nosing if it is selected.					
Display Range Of Landing	B1, B2, B3, B, G, M, -1, -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					
CWT Position	Back Mounted					For wide car.
	Back Mounted					For deep car. When rated load is 630kg.
CWT Safety Gear	Side Mounted					For deep car. When rated load > 630kg.
	Not Configured					

Dimensions of Hoistway and Machine Room of Wide Car



Dimensions of Hoistway and Machine Room of Deep Car



Note: The rear countweight is used when the capacity is 630kg.

Dimensions of hoist way and machine room of wide car.

Item	Specifications								Notes
Load (kg)	550	630	800	900	1050	1200	1350	1600	
AA(mm)	1400	1400	1400	1600	1600	2000	2000	2000	
BB(mm)	1030	1100	1350	1350	1500	1350	1500	1750	
JJ(mm)	800	800	800	900	900	1100	1100	1100	
HH(mm)	2100	2100	2100	2100	2100	2100	2100	2100	
PD(mm)	≥ 1400	≥ 1400	≥ 1400	≥ 1400	≥ 1400	≥ 1450	≥ 1450	≥ 1450	When speed 1m/s is selected.
	≥ 1550	≥ 1550	≥ 1550	≥ 1580	≥ 1580	≥ 1620	≥ 1570	≥ 1570	When speed 1.5m/s or 1.75m/s is selected.
			≥ 1640	≥ 1690	≥ 1740	≥ 1740	≥ 1740	≥ 1750	When speed 2m/s is selected.
			≥ 1910	≥ 1940	≥ 1990	≥ 2040	≥ 2070		When speed 2.5m/s is selected.
OH(mm)	≥ 4250	≥ 4250	≥ 4250	≥ 4250	≥ 4250	≥ 4350	≥ 4350	≥ 4550	When speed 1m/s is selected.
	≥ 4450	≥ 4450	≥ 4450	≥ 4450	≥ 4450	≥ 4550	≥ 4550	≥ 4750	When speed 1.5m/s or 1.75m/s is selected.
			≥ 4530	≥ 4530	≥ 4530	≥ 4630	≥ 4630	≥ 4850	When speed 2m/s is selected.
			≥ 4800	≥ 4800	≥ 4800	≥ 4900	≥ 4900		When speed 2.5m/s is selected.
AH(mm)	≥ 1850	≥ 1850	≥ 1900	≥ 2200	≥ 2200	≥ 2600	≥ 2600	≥ 2640	
BH(mm)	≥ 1630	≥ 1700	≥ 1950	≥ 1970	≥ 2120	≥ 2100	≥ 2480	≥ 2480	
AM(mm)	≥ 2300	≥ 2300	≥ 2300	≥ 2500	≥ 2500	≥ 2800	≥ 3500	≥ 3500	When speed 1m/s is selected.
BM(mm)	≥ 3000	≥ 3000	≥ 3000	≥ 3000	≥ 3000	≥ 3500	≥ 3500	≥ 3500	When speed >1m/s is selected.
	≥ 3400	≥ 4000	≥ 4000	≥ 4100	≥ 4300	≥ 4100	≥ 4200	≥ 4500	

Dimensions of hoist way and machine room of deep car.

Item	Specifications			Notes
Load (kg)	630	800	1050	
AA(mm)	1100	1100	1100	
BB(mm)	1400	1700	2100	
JJ(mm)	800	800	900	
HH(mm)	2100	2100	2100	
PD(mm)	≥ 1400	≥ 1400	≥ 1400	When speed 1m/s is selected.
	≥ 1550	≥ 1550	≥ 1580	When speed 1.5m/s or 1.75m/s is selected.
		≥ 1600	≥ 1650	When speed 2m/s is selected.
		≥ 1950	≥ 1950	When speed 2.5m/s is selected.
OH(mm)	≥ 4250	≥ 4250	≥ 4250	When speed 1m/s is selected.
	≥ 4450	≥ 4450	≥ 4450	When speed 1.5m/s or 1.75m/s is selected.
		≥ 4550		When speed 2m/s is selected.
		≥ 4800		When speed 2.5m/s is selected.
AH(mm)	≥ 1800	≥ 2000	≥ 2150	Be applicable with center opening type.
	≥ 1620	≥ 1910	≥ 1960	Be applicable with two panel type.
BH(mm)	≥ 2000	≥ 2120	≥ 2520	Be applicable with center opening type.
	≥ 2080	≥ 2200	≥ 2600	Be applicable with two panel type.
AM(mm)	≥ 2420	≥ 3200	≥ 3300	Be applicable with center opening type.
	≥ 2420	≥ 3100	≥ 3100	Be applicable with two panel type.
BM(mm)	≥ 4000	≥ 4000	≥ 4300	Be applicable with center opening type.
	≥ 4000	≥ 4000	≥ 4400	Be applicable with two panel type.