PASSENGER ELEVATORS 
MACHINE-ROOM-LESS SYSTEM

NEXIEZ-MRL

2nd Edition

Mitsubishi Electric elevators and escalators are currently operating in approximately 90 countries around the globe. Built placing priority on safety, our elevators, escalators and building system products are renowned for their excellent efficiency, energy savings and comfort. The technologies and skills cultivated at the Inazawa Works in Japan and 12 global manufacturing factories are utilized in a worldwide network that provides sales, installation and maintenance in support of maintaining and improving product quality.

As a means of contributing to the realization of a sustainable society, we consciously consider the environment in business operations, proactively work to realize a low-carbon, recycling-based society, and promote the preservation of biodiversity.

www.MitsubishiElectric.com/elevator
Utilizing its technological prowess and extensive experience, Mitsubishi Electric has remained a leader in the vertical transportation market since entering the business in 1931. The Company’s creative, innovative spirit, represented by production of the world’s first spiral escalator and elevator group-control systems that use artificial-intelligence technologies, continues to receive high evaluations industry-wide. Our products and systems are renowned for their high levels of quality, reliability and safety; and it is this sense of security and trust fostered with building owners and end-users alike that has led to the global expansion of our elevator/escalator business and the after-sales network to service it.

We understand responsibilities as a good corporate citizen, and continue to implement measures for protecting the environment and ensuring a sustainable society for future generations. A number of original technologies are being introduced to ensure more efficient products, systems and manufacturing operations, thereby enhancing productivity, reducing energy consumption and providing smoother, faster and more comfortable vertical transportation systems.
Principle
Based on our policy, “Quality in Motion”, we provide elevators and escalators that will satisfy our customers with high levels of comfort, efficiency, ecology and safety.

We strive to be green in all of our business activities. We take every action to reduce environmental burden during each process of our elevators’ and escalators’ lifecycle.

Quality in Motion™

Efficiency

Comfort

Ecology

Safety

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Application

<table>
<thead>
<tr>
<th>(m/sec)</th>
<th>NEXIEZ-MRL</th>
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<tbody>
<tr>
<td>1.75</td>
<td></td>
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<tr>
<td>2.0</td>
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<tr>
<td>2.5</td>
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<td>2.75</td>
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<td>3.0</td>
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<td>3.5</td>
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Note: The applicable range of the rated capacity may differ depending on the manufacturing factory, please consult our local agents for details.
Welcome to a New Era in Vertical Transportation
Introducing the NEXIEZ...

...technologically advanced elevators that consume less power, have minimal impact on the global environment and harmoniously serve people and buildings with smooth, seamless operation. The refined design produces a high-quality atmosphere that reassures passengers of the superior safety and comfort synonymous with Mitsubishi Electric products. Regardless of the use or purpose, the NEXIEZ is a best match solution for virtually any elevator installation.
**Devices that Use Less Energy**

**LED Lighting (Optional)**

Used for ceiling lights and hall lanterns, LEDs boost the overall energy performance of the building. Furthermore, a long service life eliminates the need for frequent lamp replacement.

**Regenerative Converter: PCNV (Optional)**

Elevators usually travel using power from a power supply (powered operation); however, when they travel down with a heavy car load or up with a light car load (regenerative operation), the traction machine functions as a power generator.

Although the power generated during traction machine operation is usually dissipated as heat, the regenerative converter transmits the power back to the distribution transformer and feeds it into the electrical network in the building along with electricity from the power supply. Compared to the same type of elevator without a regenerative converter, this system provides an energy-saving effect of approximately 35%.*

In addition, the regenerative converter has the effect of decreasing harmonic currents.

*The value is a reference datum and may increase or decrease in accordance with actual conditions of use and elevator specifications.

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**Using Energy Wisely**

Our long-term commitment to developing energy-efficient elevators has created systems and functions that make intelligent use of power.

**Advantages of LEDs**

<table>
<thead>
<tr>
<th>Ceiling: L210S LED downlights (yellow-orange)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages of LEDs</strong></td>
</tr>
<tr>
<td><strong>Service life (hr)</strong></td>
</tr>
<tr>
<td>LED</td>
</tr>
<tr>
<td>Incandescent lamp</td>
</tr>
</tbody>
</table>

Approximately 12.5 times longer

Approximately 75% reduction

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**Maximizing Operational Efficiency and Minimizing Energy Consumption**

Energy-saving Operation – Allocation Control: ESO-W (ZAI-2200C only)

This system selects the elevator in a group that best balances operational efficiency and energy consumption. Priority is given to operational efficiency during peak hours and energy efficiency during non-peak hours.

Through a maximum 10% reduction in energy consumption compared to our conventional system, this system allows building owners to cut energy costs without sacrificing passenger convenience.
**Group Control Systems: ΣAI-22 and ΣAI-2200C**

When a building is expected to have heavy traffic, optimum car allocation suited for every condition makes a big difference in preventing congestion at a lobby floor and reducing long waits.

### ΣAI-2200C Performance

**Average Waiting Time**

- Morning peak: Improved: Max. 40%
- Daytime: Improved: Max. 80%
- Evening: Improved: Max. 40%

**Long-Wait Rate**

- Morning peak: Improved: Max. 40%
- Daytime: Improved: Max. 80%
- Evening: Improved: Max. 40%

Note: Simulated with 6 cars, 20 persons each at 2.5 m/sec for 15 stops.

### Forecasting a Near-future Hall Call to Reduce Long Waits

**Cooperative Optimization Assignment (ΣAI-2200C)**

When a hall call is registered, the algorithm assumes a near-future calls that could require long waits. Through evaluation of the registered hall call and the forecasted call, the best car is assigned. All cars work cooperatively for optimum operation.

<table>
<thead>
<tr>
<th>Ele. No.</th>
<th>Hall call (sec)</th>
<th>Traveling direction</th>
<th>Car call</th>
<th>Car</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morning up peak</td>
<td></td>
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<tr>
<td></td>
<td>Morning down peak</td>
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<tr>
<td></td>
<td>Daytime up peak</td>
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<tr>
<td></td>
<td>Daytime down peak</td>
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<tr>
<td></td>
<td>Evening up peak</td>
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</tr>
<tr>
<td></td>
<td>Evening down peak</td>
<td></td>
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</tr>
</tbody>
</table>

### Allocating Passengers to Cars Depending on Destination Floors

**Destination Oriented Allocation System: DOAS (Optional for ΣAI-2200C)**

When a passenger enters a destination floor at a hall, the hall operating panel immediately indicates which car will serve the floor. Because the destination floor is already registered, the passenger does not need to press a button in the car. Furthermore, dispersing passengers by destination prevents congestion in cars and minimizes their waiting and traveling time.

**Standard arrangement of hall fixtures (No hall lantern* is provided.)**

- Cars receive destination information from all floors to provide the best service for more complex traffic conditions throughout the day.

### Example of hall arrangement

*Note: Hall lanterns are available as optional.*
Variable Traveling Speed Elevator System: VSE (Optional)

With Mitsubishi Electric's industry-first variable traveling speed elevator system, an elevator can travel faster than its rated speed according to the number of passengers, ultimately reducing waiting and traveling time.

Waiting Time Reduction

According to Mitsubishi Electric’s simulation, waiting time can be reduced up to approximately 15% when VSE is applied.

Traveling Time Reduction

Traveling time can be reduced by approximately 32% when the elevator travels from the bottom to the top floor directly under rapid mode in VSE.

(Conditions)

Travel: 36m, Floor height: 4.0m, 10 floors, Car load: 50%

Efficiency

Space-saving

Machine-room-less Elevators

As all equipment is installed within the hoistway, there are fewer restrictions on building design except for the actual space required for the hoistway. Architects and interior designers have more design freedom.

Maximum Speed and Car Load

Note: The Variable Traveling Speed Elevator System is applicable to elevators with a rated speed of 1.0m/sec.
**Emergency Situations**

**Emergency Operations**
To ensure passenger safety, our elevators are equipped with functions for emergencies like a power failure, fire, or earthquake.

### Power Failure

**Mitsubishi Emergency Landing Device: MELD (Optional)**
Upon power failure, a car automatically moves to the nearest floor using a rechargeable battery to facilitate the safe evacuation of passengers.

**Operation by Emergency Power Source—Automatic/Manual: OEPS (Optional)**
Upon power failure, predetermined car(s) use a building’s emergency power supply to move to a specified floor and open the doors for passengers to evacuate. After all cars have arrived, predetermined car(s) resume normal operation.

### Fire

**Firefighters’ Emergency Operation: FE (Optional)**
When the fire operation switch is activated, the car immediately returns to a predetermined floor. The car then responses only to car calls which facilitate firefighting and rescue operations.

**Fire Emergency Return: FER (Optional)**
When a key switch or a building’s fire alarm is activated, all cars immediately return to a specified floor and open the doors to facilitate the safe evacuation of passengers.

### Earthquake

**Earthquake Emergency Return: EER-P/EER-S (Optional)**
When a primary and/or secondary wave seismic sensor is activated, all cars stop at the nearest floor and park there with the doors open to facilitate the safe evacuation of passengers.
Car

Ceiling: S00

- Boxless
- Standard Design

Car operating panel

For front return panel

Yellow-orange lighting

Car Design Example

- Walls: SUS-HL
- Transom panel: SUS-HL
- Doors: SUS-HL
- Front return panels: SUS-HL
- Kickplate: Aluminum
- Flooring: PR803: Gray
- Car operating panel: CBV1-C760

Hall

Narrow Jamb: E-102

Hall Design Example

- Jamb: SUS-HL
- Doors: SUS-HL
- Hall position indicator and button: PV1-A1010N

Hall position indicators and buttons

With plastic case

Notes:
- Maximum number of floors: 22 floors
- Some letters of the alphabets are not available. Please consult our local agents for details.

Features (1/2)

<table>
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<th>Feature</th>
<th>Variations</th>
<th>Description</th>
<th>Notes</th>
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<tr>
<td>Building Management System - Escalator Control System</td>
<td>BMS-GW</td>
<td>Each elevator’s status and operation can be monitored and controlled using a building management system which manages various facilities in the building via the interface for the elevator system.</td>
<td></td>
</tr>
<tr>
<td>Earthquake Emergency Return</td>
<td>EER-P/EER-S</td>
<td>Upon activation of primary and/or secondary wave seismic sensors, all cars stop at the nearest floor and park there with the doors open to facilitate the safe evacuation of passengers.</td>
<td></td>
</tr>
<tr>
<td>Emergency Car Lighting</td>
<td>ECL</td>
<td>Car lights which turn on immediately when power fails, providing a minimum level of lighting within the car. (Choice of dry-cell battery or trickle-charge battery)</td>
<td></td>
</tr>
<tr>
<td>Fire Emergency Return</td>
<td>FER</td>
<td>Upon activation of a key switch or an alarm, all cars are canceled, and the car immediately returns to the underneath floor. The car then responds only to car calls which facilitate fire-fighting and rescue operation.</td>
<td></td>
</tr>
<tr>
<td>Firefighters’ Emergency Operation</td>
<td>FE</td>
<td>During a fire, when the fire operation switch is activated, the car of a specified car and all hall calls are canceled and the car immediately returns to the underneath floor.</td>
<td></td>
</tr>
<tr>
<td>MEL-Eleve Mitsubishi Elevators &amp; Escalators Monitoring and Control System</td>
<td>WP-W</td>
<td>Each elevator’s status and operation can be monitored and controlled using an advanced Webbased technology which provides an interface through personal computers. Special optional features such as generation of traffic statistics and analysis are also available.</td>
<td></td>
</tr>
<tr>
<td>Mitsubishi Emergency Landing Device</td>
<td>MELDO</td>
<td>Upon power failure, a car equipped with this function automatically stops and stays at the nearest floor using a rechargeable battery, and the doors open to facilitate the safe evacuation of passengers. (Maximum allowable floor-to-floor distance is 11 meters.)</td>
<td></td>
</tr>
<tr>
<td>Operation by Emergency Power Source</td>
<td>OEPS</td>
<td>Upon power failure, predefined car(s) uses the building’s emergency power supply to move to a specified floor, where the doors then open to facilitate the safe evacuation of passengers. After all cars have arrived, the predefined car(s) resume normal operation.</td>
<td></td>
</tr>
<tr>
<td>Supervisory Panel</td>
<td>WP</td>
<td>Each elevator’s status and operation can be remotely monitored and controlled through a panel installed in a building’s supervisory room, etc.</td>
<td></td>
</tr>
</tbody>
</table>

EMERGENCY OPERATIONS AND FEATURES

- Automatic Door-opener Time Adjustment
  - DOT
- Automatic Door Speed Control
  - DSAC
- Door Load Detector
  - DLD
- Door Nudging Feature — With Buzzer
  - NDG
- Door Sensor Self-diagnosis
  - DDD
- Electronic Doorman
  - EDM
- Extended Door-open Button
  - DEO-UV
- Hall Motion Sensor
  - HMS
- Multi-beam Door Sensor
  - —
- Reopen with Hall Button
  - ROHBR
- Repeated Door-close
  - RDC
- Safety Door Edge
  - SDE
- Safety Ray
  - SR

DOOR OPERATION FEATURES

- Automatic Door-opener Time Adjustment
  - DOT
- Automatic Door Speed Control
  - DSAC
- Door Load Detector
  - DLD
- Door Nudging Feature — With Buzzer
  - NDG
- Door Sensor Self-diagnosis
  - DDD
- Electronic Doorman
  - EDM
- Extended Door-open Button
  - DEO-UV
- Hall Motion Sensor
  - HMS
- Multi-beam Door Sensor
  - —
- Reopen with Hall Button
  - ROHBR
- Repeated Door-close
  - RDC
- Safety Door Edge
  - SDE
- Safety Ray
  - SR

Notes:
- 1C-2BC (1 can collect selected) — Standard, 2BC-22C (2-22 can group control system) — Optional
- ZA-22 (2 to 4 can group control system) — Optional, ZA1-22DC (2 to 8 can group control system) — Optional
- # Standard, # Optional, — Not applicable to 1C-2BC, — Not applicable
- *1: Please consult our local agents for the production terms, etc.
## OPERATIONAL AND SERVICE FEATURES

### GROUP CONTROL FEATURES

- **Bank-separation Operation (BSO)**
- **Speed Elevator System**
- **Secret Call Service**
- **Safe Landing**
- **Return Operation**
- **Overload Holding Stop**
- **Out-of-service**
  - Out-of-service by Hall Key
  - Card Reader Type
- **Car Call Canceling**
- **Light-up Lift Control — Automatic**
- **Continuity of Service**
- **Forced Floor Stop**
- **Light-load Car Priority Service**
- **Lunchtime Service**
- **Main Floor Changeover Operation**
- **Main Floor Parking**
- **Special Car Priority Service**
- **Special Floor Priority Service**
- **Up Peak Service**

### SIGNAL AND DISPLAY FEATURES

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<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>Attendant Service</td>
<td>3C to 4C</td>
<td>Exclusive operation where an elevator can be operated using the buttons and switches located in the car operating panel, allowing smooth boarding of passengers or loading of baggage.</td>
</tr>
<tr>
<td>Automatic Bypass</td>
<td>ABP</td>
<td>A fully-loaded car bypasses call(s) in order to maintain maximum operational efficiency.</td>
</tr>
<tr>
<td>Automatic Hall Call System</td>
<td>FST</td>
<td>One car serves all existing passengers because it is full, another car will automatically be assigned for the remaining passengers allowing smooth boarding of passengers or loading of baggage.</td>
</tr>
<tr>
<td>Backup Operation for Group Control Microprocessor</td>
<td>3C-C</td>
<td>An operation by car controllers which automatically maintains elevator operation in the event that an microprocessor or transmission line in the group controller has failed.</td>
</tr>
<tr>
<td>Car Fan Shut Off — Automatic</td>
<td>CFS</td>
<td>If there are no calls for a specified period, the car ventilation fan will automatically turn off to conserve energy.</td>
</tr>
<tr>
<td>Car Fan Shut Off — Automatic</td>
<td>CFS</td>
<td>If there are no calls for a specified period, the car lighting will automatically turn off to conserve energy.</td>
</tr>
<tr>
<td>Continuity of Service</td>
<td>CS</td>
<td>A feature which is inactivates automatically from group control to maintain overall group performance.</td>
</tr>
<tr>
<td>Elevator and Security System Interface</td>
<td>ELS</td>
<td>Personal authentication by building’s security devices can trigger preprogrammed elevator operations such as permission to access to private floors, automatic deactivation of a hall call and an administration floor and priority service.</td>
</tr>
<tr>
<td>False Call Canceling</td>
<td>FCC-A</td>
<td>If the number of registered car calls do not correspond to the car load, all calls are cancelled to avoid unnecessary stops.</td>
</tr>
<tr>
<td>False Call Canceling</td>
<td>FCC-A</td>
<td>If a car experiences trouble is automatically withdrawn from group control operation for VIP operation.</td>
</tr>
<tr>
<td>False Call Canceling</td>
<td>FCC-P</td>
<td>A buzzer sounds to alert the passengers that the car is overloaded. The doors remain open and the car will not leave that floor until enough passengers exit the car.</td>
</tr>
<tr>
<td>Next Landing</td>
<td>INL</td>
<td>If the elevator doors do not open fully at a destination floor, the doors close, and the car automatically moves in the next direction.</td>
</tr>
<tr>
<td>Non-service to Specific Floor</td>
<td>NS-CB</td>
<td>To enhance security, service to specific floors can be disabled using the car operating panel. This function is automatically deactivated during emergency operation.</td>
</tr>
<tr>
<td>Non-service to Specific Floor</td>
<td>NS-T</td>
<td>To enhance security, service to specific floors can be disabled using a manual or timer switch. This function is automatically deactivated during emergency operation.</td>
</tr>
<tr>
<td>Non-service Temporary Release for Car — Card Reader Type</td>
<td>NSR-K</td>
<td>For maintenance or emergency using purposes, a car can be taken out of service temporarily with a key switch (without a card reader).</td>
</tr>
<tr>
<td>Out-of-service by Hall Key</td>
<td>HOS</td>
<td>For maintenance or emergency using purposes, a car can be taken out of service temporarily with a key switch (without a card reader).</td>
</tr>
<tr>
<td>Out-of-service</td>
<td>RCS</td>
<td>With a switch on the supervisory panel, etc., the car can be called to a specified floor after all car calls, and then taken out of service by a switch.</td>
</tr>
<tr>
<td>Overload Holding Stop</td>
<td>OLH</td>
<td>A buzzer sounds to alert the passengers that the car is overloaded. The doors remain open and the car will not leave that floor until enough passengers exit the car.</td>
</tr>
<tr>
<td>Return Operation</td>
<td>RVT</td>
<td>For energy conservation, power regeneration is automatically turned off. The car cannot be used by elevator situation in the building.</td>
</tr>
<tr>
<td>Safe Landing</td>
<td>SPL</td>
<td>A car which is experiencing trouble is automatically withdrawn from group control operation for VIP operation.</td>
</tr>
<tr>
<td>Secret Call Service</td>
<td>SCS-B</td>
<td>In case of any emergency, the car can be called to a specified floor by pressing the emergency switch on the key panel. This function is automatically deactivated during emergency operation.</td>
</tr>
<tr>
<td>Variable Traveling Allocation Elevator System</td>
<td>VSE</td>
<td>According to the number of passengers in the car, the car travel faster than the rated speed.</td>
</tr>
</tbody>
</table>

### BANK SEPARATION OPERATION

- **Full buttons and the calls on each button are divided into several groups for independent group control operation to serve special needs or floors.**
- **Partial buttons and the calls on each button are divided into several groups for independent group control operation to serve special needs or floors.**
- **Closest-car Priority Service**
  - **Function to go to priority allocation to the car closest to the floor where a hall call button has been pressed, or toreverse the direction of the cars to the closest car to the floor where a hall call button has been pressed.**
  - **Cannot be combined with other functions.**
- **Congested-floor Service**
  - **Function to go to priority allocation to the floors where waiting rooms or hallways exist and the traffic intensities for short periods of time are controlled according to the detected traffic density for those floors.**
  - **Cannot be combined with other functions.**

### FEATURE ABBREVIATION DESCRIPTION

- **3C to 8C**
- **3C to 4C**
- **3C to 8C**
- **3C to 8C**
- **3C to 8C**
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- **3C to 8C**

### NOTES

- **1C to 2C**
- **1C to 2C**
- **1C to 2C**
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- **1C to 2C**
- **1C to 2C**

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**Feature (2/2)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination Oriented Allocation System</td>
<td>DOAS</td>
<td>When a passenger enters a destination floor at the hall, the open panel indicates which car will serve the floor. The passenger does not need to press a button in the car. Dispatching passengers by destination eliminates congestion at the car and minimizes waiting and traveling time.</td>
</tr>
<tr>
<td>Down Peak Service</td>
<td>DPS</td>
<td>Controls the number of cars to be allocated and the timing of car allocation to reduce the maximum demands for downward travel during office leaving time, hotel check-out time, etc. to minimize passenger waiting time.</td>
</tr>
<tr>
<td>Elevator Call System with Smartphone</td>
<td>ELC-S-P</td>
<td>Using a smartphone equipped with the application, users can change the call setting for their elevator and check the status of the elevator assigned to them. Once inside the elevator, users can call an elevator remotely from anywhere.</td>
</tr>
<tr>
<td>Energy-saving Operation — Number of Cars</td>
<td>ESN</td>
<td>If the number of cars is exceeded, the passenger is notified to change the elevator according to some extent, but not so much that it adversely affects passenger waiting time.</td>
</tr>
<tr>
<td>Forced Floor Stop</td>
<td>FFS</td>
<td>A car which in a bank automatically make stop at a predetermined floor in every trip without being called.</td>
</tr>
<tr>
<td>Light-load Car Priority Service</td>
<td>UCS</td>
<td>When a car is light, empty or lightly loaded cars are given higher priority to respond to bank car call in order to minimize passenger travel time. (Cannot be combined with hall position indication.)</td>
</tr>
<tr>
<td>Lunchtime Service</td>
<td>LTS</td>
<td>During the near half of lunchtime, a car which is in superior priority and during the latter half of the number of calls allocated to the restaurant floor, the allocation priority of the same car, and the door opening and closing timing are all controlled based on predicted data.</td>
</tr>
<tr>
<td>Main Floor Changeover Operation</td>
<td>TFS</td>
<td>This feature is effective for buildings with two main (lobby) floors. The floors designated as the ‘main floor’ in a group control operation can be changed in manual switching.</td>
</tr>
<tr>
<td>Main Floor Parking</td>
<td>MFP</td>
<td>An available car always parks on the main (lobby) floor with the doors open (or closed only if necessary).</td>
</tr>
<tr>
<td>Special Car Priority Service</td>
<td>SCPS</td>
<td>Special cars, such as observation elevators and elevators with basement service, are given higher priority than called cars. (Cannot be combined with hall position indications.)</td>
</tr>
<tr>
<td>Special Floor Priority Service</td>
<td>SFPS</td>
<td>Special cars, such as service with VIP or executive rooms, are given higher priority for car calls when a main floor is reached. (Cannot be combined with hall position indications.)</td>
</tr>
<tr>
<td>Up Peak Service</td>
<td>UPS</td>
<td>Controls the number of cars to be allocated to the lobby floor, as well as the car allocation timing, in order to meet increased demands for upward travel from the lobby floor during office starting time, hotel check-in time, etc. to minimize passenger waiting time.</td>
</tr>
</tbody>
</table>

### VIP OPERATION

- **VIP**

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**Auxiliary Car Operating Panel (ACS)**

- An additional car control panel which can be installed in large-capacity elevators, especially those with many floors.

**Basic Announcement (AAN-A)**

- A synthetic voice and/or button type module inside a car or an elevator area that has been temporarily interrupted by rejecting or inactivity due to a similar cause. (Available in limited languages.)

**Basic Car Alarm (BEL) — (Optional)**

- Electronically sounds a chime to indicate that a car will soon arrive. (The chimes are mounted either on the top and bottom of the car, or on each hall.)

**Car Information Display (CID)**

- This 5.7-inch LCD for car return panels shows the date and time, car position, travel direction and Beam-type data messages. In addition, customized images can be displayed in full-screen or partial-screen formats.

**Car LCD Position Indicator (CID)**

- A specified car is withdrawn from group control operation for VIP service operation. When activated, the car responds only to existing car calls, moves to its special floor and parks there with the doors open. The car then responds to no other car calls.

**Flashing Hall Lantern (FHL)**

- A hall lantern, which corresponds to a car’s service direction, flashes to indicate that the car will call only those floors.

**Hall Information Display (HID)**

- This 15-inch LCD for car return panels shows the date and time, car position, travel direction and elevator status messages. In addition, customized video images can be displayed in full-screen or partial-screen formats.

**Hall LCD Position Indicator (HID)**

- This 5.7-inch LCD for car return panels shows the date and time, car position, travel direction and elevator status messages.

**Immediate Prediction Indication (IPI)**

- A system which allows communication between passengers inside a car and the building manager.

**Second Car Prediction (SCP)**

- A system which allows communication between passengers inside a car and the building manager.

**Voice Guidance System (VGS)**

- Information on elevator service such as the current floor or service direction is given to the passengers in a voice.

### NOTES

- **IC-2RC (1 car selective collection) — Standard**
- **IC-2RC (2-car group control system) — Optional**
- **2A-2Z (3 to 4-car group control system) — Optional, 3A-2Z00C (3 to 8-car group control system) — Optional**
- **Standard — **
- **Standard — **
- **Not applicable to IC-2RC**
- **Not applicable to IC-2RC**
- **Please consult our local agents for the production terms, etc.**
- **When the DOAS is applied, AED is A and the Safety Rad (SR) or Multi-beam Door Sensor feature should be installed.**
- **The DOAS cannot be combined with some features. Please refer to the ZA-2Z00C brochure for those features.**
Basic Specifications

Specifications for Variable Traveling Speed Elevator System (Optional)

<table>
<thead>
<tr>
<th>Code number</th>
<th>Number of persons</th>
<th>Rated capacity (kg)</th>
<th>Rated speed (m/sec)</th>
<th>Travel (m/min)</th>
<th>Minimum overhead (mm)</th>
<th>Minimum pit depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P6</td>
<td>6</td>
<td>450</td>
<td>1.0</td>
<td>1050</td>
<td>3700</td>
<td>1850</td>
</tr>
<tr>
<td>P7</td>
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<td>550</td>
<td>1.0</td>
<td>1000</td>
<td>2450</td>
<td>1850</td>
</tr>
<tr>
<td>P8</td>
<td>8</td>
<td>630</td>
<td>1.0</td>
<td>1350</td>
<td>3050</td>
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<td>P11</td>
<td>11</td>
<td>825</td>
<td>1.0</td>
<td>1600</td>
<td>3700</td>
<td>1850</td>
</tr>
<tr>
<td>P14</td>
<td>14</td>
<td>1050</td>
<td>1.0</td>
<td>2000</td>
<td>3700</td>
<td>1850</td>
</tr>
<tr>
<td>P17</td>
<td>17</td>
<td>1275</td>
<td>1.0</td>
<td>2400</td>
<td>3700</td>
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<td>P18</td>
<td>18</td>
<td>1350</td>
<td>1.0</td>
<td>2800</td>
<td>3700</td>
<td>1850</td>
</tr>
<tr>
<td>P21</td>
<td>21</td>
<td>1600</td>
<td>1.0</td>
<td>3200</td>
<td>3700</td>
<td>1850</td>
</tr>
</tbody>
</table>

[Terms of the table]
- The Variable Traveling Speed Elevator System (VSE) is applicable for elevators with a rated speed of 1.0m/sec.
- The applicable range of the rated capacity may differ depending on the manufacturing factory. Please consult our local agents for details.

[Notes]
- Please consult our local agents for other specifications.

Vertical Dimensions - <1-Door 1-Gate & 1-Door 2-Gate>

<table>
<thead>
<tr>
<th>Rated speed (m/sec)</th>
<th>Rated Capacity (kg)</th>
<th>Travel (m/min)</th>
<th>Minimum overhead (mm)</th>
<th>Minimum pit depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>450/500/1050</td>
<td>1850</td>
<td>4350</td>
<td>1850</td>
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<tr>
<td>1.0/1.25/1.5/1.6</td>
<td>550/750/1275</td>
<td>1800</td>
<td>4350</td>
<td>1850</td>
</tr>
<tr>
<td>2.0</td>
<td>825/1050/1500</td>
<td>2200</td>
<td>4350</td>
<td>1850</td>
</tr>
</tbody>
</table>

[Terms of the table]
- The Variable Traveling Speed Elevator System (VSE) is applicable for elevators with a rated speed of 1.0m/sec.
- The applicable range of the rated capacity may differ depending on the manufacturing factory. Please consult our local agents for details.

[Notes]
- Please consult our local agents for other specifications.

Horizontal Dimensions - <1-Door 1-Gate>

<table>
<thead>
<tr>
<th>Code number</th>
<th>Number of persons</th>
<th>Rated capacity (kg)</th>
<th>Rated speed (m/sec)</th>
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<th>Minimum pit depth (mm)</th>
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<td>550</td>
<td>1.0</td>
<td>1000</td>
<td>2450</td>
<td>1850</td>
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<tr>
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<td>18</td>
<td>1350</td>
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<td>3700</td>
<td>1850</td>
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<td>P21</td>
<td>21</td>
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<td>3200</td>
<td>3700</td>
<td>1850</td>
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- The applicable range of the rated capacity may differ depending on the manufacturing factory. Please consult our local agents for details.

[Notes]
- Please consult our local agents for other specifications.

Basic code compliance
The dimensional information shown here in this page is based on the requirements of EN81-1. For other components, please consult our local agent.
### Basic Specifications

#### Horizontal Dimensions <1-Door 2-Gate> <Counterweight position: side>

<table>
<thead>
<tr>
<th>Code number</th>
<th>Number of persons</th>
<th>Rated speed (m/sec)</th>
<th>Rated capacity (kg)</th>
<th>Car internal dimensions (mm)</th>
<th>Minimum hoistway dimensions (mm)</th>
<th>Minimum hoistway dimensions (mm)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AAxBB</td>
<td>AAxBB (car)</td>
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<tr>
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<td>8</td>
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<td>1010x1600 20 2.3</td>
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<td></td>
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<td>2090x1800 2110x1800</td>
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<tr>
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<td>2100x1800 2100x1900</td>
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<td>P17</td>
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<td>P21</td>
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<td>1.6 1.6 1.75</td>
<td></td>
<td></td>
<td>1300x1400</td>
<td>2100x1800 2100x1900</td>
</tr>
</tbody>
</table>

**Note:** The layout (position of traction machine, etc.) differs depending on capacity.

#### Important Information on Elevator Planning

**Work Not Included in Elevator Contract**

The following items are excluded from Mitsubishi Electric's elevator installation work. Their conditions and other details are to be conform to the statement of local laws or Mitsubishi Electric elevator's requirements on the responsibility of the building owner or general contractor.

- Architectural finishing of walls and floors in the vicinity of the entrance hall after installation has been completed.
- Construction of an illuminated, ventilated and waterproofed hoistway.
- The provision of a ladder to the elevator pit.
- The provision of openings and supporting members as required for equipment installation.
- The provision of separate beams; when the hoistway dimensions markedly exceed the specifications, and intermediate beams and separator partitions when two or more elevators are installed.
- The provision of an emergency exit door, inspection door and pit access door, when required, and access to the doors.
- All other work related to building construction.
- The provision of the main power and power for illumination in the hoistway by laying of the feeder wiring from the electrical switch boxes in electrical room into the hoistway.
- The provision of outlets and laying of the wiring in the hoistway, plus the power from the electrical switch box.
- The laying of conductors and wiring between the elevator pit and the terminating point for the devices installed outside the hoistway, such as the emergency bell, intercom, monitoring and security devices.
- The power consumed in installation work and test operations.
- All the necessary building materials for grouting of brackets, bolts, etc.
- The test provision and subsequent alteration as required, and eventual removal of the scaffolding as required by the elevator contractor, and any other protection of the works as may be required during the process.
- The provision of a suitable, locked space for the storage of elevator equipment and tools during elevator installation.
- The security system, such as a card reader, connected to Mitsubishi Electric's elevator controller, when supplied by the building owner or general contractor.

**Important Information on Elevator Planning**

- The temperature of the elevator hoistway shall be below 40°C.
- The following conditions are required for maintaining elevator performance.
  a. The relative humidity shall be below 90% on a monthly average and below 95% on a daily average.
  b. Prevention shall be provided against icing and condensation occurring due to a rapid drop in the temperature in the elevator hoistway.
  c. The elevator hoistway shall be finished with mortar or other materials so as to prevent concrete dust.
- Voltage fluctuation shall be within a range of +5% to -10%.

**Ordering Information**

Please include the following information when ordering or requesting estimates:

- The desired number of units, speed and loading capacity.
- The number of stops or number of floors to be served.
- The total elevator travel and each floor-to-floor height.
- Operation system.
- Selected design and size of car.
- Entrance design.
- Signal equipment.
- A sketch of the part of the building where the elevators are to be installed.
- The voltage, number of phases, and frequency of the power source for the motor and lighting.

**Basic code compliance**

The dimensional information shown here in this page is based on the requirements of EN81-1.

For other components, please consult our local agent.
State-of-the-Art Factories…
For the Environment. For Product Quality.

Mitsubishi Electric elevators and escalators are currently operating in approximately 90 countries around the globe. Built placing priority on safety, our elevators, escalators and building system products are renowned for their excellent efficiency, energy savings and comfort. The technologies and skills cultivated at the Inazawa Works in Japan and 12 global manufacturing factories are utilized in a worldwide network that provides sales, installation and maintenance in support of maintaining and improving product quality. As a means of contributing to the realization of a sustainable society, we consciously consider the environment in business operations, proactively work to realize a low-carbon, recycling-based society, and promote the preservation of biodiversity.

ISO9001/14001 certification

Mitsubishi Electric Corporation Inazawa Works has acquired ISO 9001 certification from the International Organization for Standardization based on a review of quality management. The plant has also acquired environmental management system standard ISO 14001 certification.

Mitsubishi Elevator Asia Co., Ltd. has acquired ISO 9001 certification from the International Organization for Standardization based on a review of quality management. The plant has also acquired environmental management system standard ISO 14001 certification.

Safety Tips: Be sure to read the instruction manual fully before using this product.