PASSENGER ELEVATORS
MACHINE-ROOM-LESS SYSTEM

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

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.
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.
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.

Quality in Motion

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.

Efficiency

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.

Ecology

Mitsubishi Electric elevators, escalators and building management systems are always evolving, helping achieve our goal of being the No.1 brand in quality. In order to satisfy customers in all aspects of comfort, efficiency and safety while realizing a sustainable society, quality must be of the highest level in all products and business activities, while priority is place on consideration for the environment. As the times change, Mitsubishi Electric promises to utilize the collective strengths of its advanced and environmental technologies to offer its customers safe and reliable products while contributing to society.

Safety

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Application

<table>
<thead>
<tr>
<th>(m/sec)</th>
<th>1.5</th>
<th>1.6</th>
<th>1.8</th>
<th>2.0</th>
<th>2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>630</td>
<td></td>
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<tr>
<td>825</td>
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</tr>
<tr>
<td>1050</td>
<td></td>
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<tr>
<td>1275</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>825</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>630</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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.

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

Reusing Energy

Energy-saving effects: Approximately 35%.*

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

Milestones of Energy-saving Technologies in Elevator Development

- **1970**
  - Motor: Induction motor
  - Traction machine: Worm geared
  - Power consumption / CO₂ emissions: 100%

- **1980**
  - Motor: Permanent-magnet motor
  - Traction machine: Gearless
  - Power consumption / CO₂ emissions: 74%

- **1990**
  - Motor: Permanent-magnet motor
  - Traction machine: Gearless
  - Power consumption / CO₂ emissions: 93%

- **2000**
  - Motor: Permanent-magnet motor
  - Traction machine: Gearless
  - Power consumption / CO₂ emissions: 100%

- **2010**
  - Motor: Permanent-magnet motor
  - Traction machine: Gearless
  - Power consumption / CO₂ emissions: 30%

Notes:
*1: Alternating current, variable voltage
*2: Variable voltage, variable frequency
*3: CO₂ emissions in this table are from elevator operation and do not include emissions from manufacturing, transportation and other processes.

Advantages of LEDs

- **Ceiling: L210S**
  - LED downlights (yellow-orange)
  - Service life (hr): 25000
  - Power consumption (W): 32.5

Approximately 12.5 times longer
Approximately 75% reduction

Maximizing Operational Efficiency and Minimizing Energy Consumption

Energy-saving Operation – Allocation Control: ESO-W (EAI-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.
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

<table>
<thead>
<tr>
<th>Average Waiting Time</th>
<th>Long-Wait Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning up peak</td>
<td>No</td>
</tr>
<tr>
<td>Daytime</td>
<td></td>
</tr>
<tr>
<td>Lunchtime</td>
<td></td>
</tr>
<tr>
<td>Evening down peak</td>
<td></td>
</tr>
</tbody>
</table>

**Improved:** Max. 40%

**Improved:** Max. 80%

### 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.

### 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.

### 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.

<table>
<thead>
<tr>
<th>Hall call</th>
<th>Traveling direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>up peak</td>
</tr>
<tr>
<td>Lunchtime</td>
<td></td>
</tr>
<tr>
<td>Evening</td>
<td>down peak</td>
</tr>
</tbody>
</table>

**AI-2100N**
- A hall call is registered at 6th Fl.
- Allocates the closest car
- Another hall call is soon registered at 11th Fl.
- Allocates D, resulting in long wait of 26 sec.

**ΣAI-2200C (latest)**
- A hall call is registered at 6th Fl.
- Allocates D, which is moving upward.
- Another hall call is soon registered at 11th Fl.
- Allocates B, which immediately arrives at the floor.

### Efficiency

**Average Waiting Time**

- **AI-2200C (latest)**
  - Improved: Max. 40%

**Long-Wait Rate**

- **AI-2200C (latest)**
  - Improved: Max. 80%

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

Waiting time reduction

Traveling time reduction

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

<table>
<thead>
<tr>
<th>Car load (%)</th>
<th>0%</th>
<th>50%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated speed</td>
<td>1.0</td>
<td>1.25</td>
<td>1.6</td>
</tr>
<tr>
<td>1.0m/sec</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.25m/sec</td>
<td>5-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6m/sec</td>
<td>9-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.25m/sec</td>
<td>2-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

[Number of passengers in the car when the maximum number of passengers is 14.]

0 1 2 3 4 5 6 7 8 9 10
Traveling speed (m/sec)
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
Fiirefighters’ Emergency Operation: FE (Optional)
When the fire operation switch is activated, the car immediately returns to a predetermined floor. The car then responds 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.
Standard Design

Car

Ceiling: S00

Car Design Example

Walls: SUS-HL
Transom panel: SUS-HL
Doors: SUS-HL
Front return panels: SUS-HL
Kickplate: Al aluminum
Flooring: PRB03: 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: PIVI-A1010N

Car operating panel

For front return panel

CBV1-C760*1

Segment LED indicators*2

Tactile button with yellow-orange lighting

Hall position indicators and buttons

With plastic case

PIVI-A1010N*1

PIVI-A1020N

Segment LED indicators*2

Tactile button with yellow-orange lighting

Features (1/2)

<table>
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<tr>
<th>Feature</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Management System - Gateway</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 elevator system.</td>
</tr>
<tr>
<td>Earthquake Emergency Return</td>
<td>EER-P/EER-S</td>
<td>Upon activation of primary and/or secondary wave sensors, all cars stop at the nearest floor, and pass there with the doors open to facilitate the safe evacuation of passengers.</td>
</tr>
<tr>
<td>Emergency Car Lighting</td>
<td>ECL</td>
<td>Car lighting which turns on immediately when power fails, providing a minimum level of lighting within the car. (Choice of dry cell battery or trickle charge battery)</td>
</tr>
<tr>
<td>Fire Emergency Return</td>
<td>FER</td>
<td>Upon activation of an alarm switch or building alarm, all calls are canceled, all cars immediately return to a specified evacuation floor and the doors open to facilitate the safe evacuation of passengers.</td>
</tr>
<tr>
<td>Firefighters' Emergency Operation</td>
<td>FE</td>
<td>During a fire, when the fire switch is activated, the car calls of a specified car and all hall calls are canceled and the car immediately returns to a predetermined floor. The car then responds only to car calls which facilitate firefighting and rescue operation.</td>
</tr>
<tr>
<td>Mitsubishi Elevators &amp; Escalators Monitoring and Control System</td>
<td>WP-W</td>
<td>Each elevator's status and operation is monitored and controlled using an advanced Web-based technology which provides an interface through personal computers. Special optional features such as preparation of traffic statistics and analysis are also available.</td>
</tr>
<tr>
<td>Mitsubishi Elevator Landing Service</td>
<td>ML</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 17 meters)</td>
</tr>
<tr>
<td>Operation by Emergency Power Source</td>
<td>OEPS</td>
<td>Upon power failure, predetermined stops use 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, predetermined cars resume normal operation.</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>
</tr>
</tbody>
</table>

DOOR OPERATION FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Door-open Time Adjustment</td>
<td>DOT</td>
<td>The time doors are open will automatically be adjusted depending on whether the stop was caused from the hall or the car, to allow smooth boarding of passengers or loading of baggage.</td>
</tr>
<tr>
<td>Automatic Door Speed Control</td>
<td>DSAC</td>
<td>Door speed on each floor, which can depend on the type of hall doors, is monitored to adjust the door speed, thereby making the door speed consistent throughout all floors.</td>
</tr>
<tr>
<td>Door Load Detector</td>
<td>DLD</td>
<td>When excessive door load has been detected while opening or closing, the doors immediately reverse.</td>
</tr>
<tr>
<td>Door Nudging Feature - With Buzzer</td>
<td>NDG</td>
<td>A buzzer sounds and the doors slowly close when they have remained open for longer than the preset period. With the AAN-P or AAN-P feature, a beep and voice guidance sound instead of the buzzer.</td>
</tr>
<tr>
<td>Door Sensor Self-diagnosis</td>
<td>DDS</td>
<td>Failure of non-contact door sensors is checked automatically, and if a problem is diagnosed, the door close timing is delayed and the closing speed is reduced to maintain elevator service and ensure passenger safety.</td>
</tr>
<tr>
<td>Electronic Doorman</td>
<td>EDM</td>
<td>Elevator's status and operation can be monitored and controlled using an advanced Web-based technology which provides an interface through personal computers. Special optional features such as preparation of traffic statistics and analysis are also available.</td>
</tr>
<tr>
<td>Extended Door-open Button</td>
<td>DBO-TUV</td>
<td>When the button inside a car is pressed, the doors will remain open longer to allow boarding or unloading of baggage, a stretcher, etc.</td>
</tr>
<tr>
<td>Hall Motion Sensor</td>
<td>HMS</td>
<td>Infrared light is used to scan a 90-degree area near the open doors to detect passengers or objects.</td>
</tr>
<tr>
<td>Multi-beam Door Sensor</td>
<td>—</td>
<td>Multiple infrared light beams cover some height of the doors to detect passengers or objects as the doors close. (Cannot be combined with the SR or MBSS feature.)</td>
</tr>
<tr>
<td>Multi-beam Door Sensor - Signal Type</td>
<td>MBSS</td>
<td>Multiple infrared light beams cover some height of the doors to detect passengers or objects as the doors close. Additionally, LED lights on the door edge will indicate the door opening/closing and the presence of an obstacle between the doors. (Cannot be combined with any of the following features: SC, SR or Multi-beam Door Sensor)</td>
</tr>
<tr>
<td>Reopen with Hall Button</td>
<td>ROHB</td>
<td>Closing doors are reopened by pressing the hall button corresponding to the traveling direction of the car.</td>
</tr>
<tr>
<td>Repeated Door-close</td>
<td>RDC</td>
<td>Should an obstacle prevent the doors from closing, the doors will repeatedly open and close until the obstacle is cleared from the doorway.</td>
</tr>
<tr>
<td>Safety Door Edge</td>
<td>SDE</td>
<td>The sensitive edge detects passengers or objects during door closing. (Cannot be combined with the MBSS feature.)</td>
</tr>
<tr>
<td>Safety Ray</td>
<td>SR</td>
<td>One or two infrared light beams cover the full width of the doors as they close to detect passengers or objects. (Cannot be combined with the Multi-beam Door Sensor or MBSS feature)</td>
</tr>
</tbody>
</table>

NOTES:
- 1C to 2BC: Standard
- 2BC to 4C: Optional
- 4C to 8C: Standard
- 8C to 16C: Optional
- 16C to 32C: Standard
- 32C: Optional
- Notes:
- 1: For 1C-2BC, please consult your local agents.
- 2: Please consult your local agents for the production terms, etc.
**GROUP CONTROL FEATURES**

- **Closest-car Priority Service**  
  A feature that allows cars to operate in a manner that prevents congestion in the cars and minimizes waiting and traveling time. 

- **Destination Oriented**  
  A system where the doors of the next car are kept closed until the floor is reached, which prevents unnecessary stops.

- **Bank-separation Operation BSO**  
  A system where cars can be separated into banks, which reduces congestion and minimizes waiting time.

- **Speed Elevator System**  
  A system that adjusts the speed of the elevator based on the number of passengers, which reduces waiting time.

- **Secret Call Service**  
  A feature that allows passengers to call for secret service without being seen by others.

- **Safe Landing**  
  A system that automatically stops the car when a floor is not reached within a specified time.

- **Release for Car Call**  
  A feature that allows passengers to release the car call if they do not need the service.

- **False Call Canceling — Automatic**  
  A system that automatically cancels false calls after a certain period.

- **False Call Canceling — Manual**

- **Car Fan Shut Off**  
  A feature that automatically shuts off the car fan when the car is not in use.

- **Car Call Canceling**  
  A feature that allows passengers to cancel a car call if they do not need the service.

- **Attendant Service AS**  
  A feature that allows passengers to receive service from an attendant.

**Feature Abbreviation Description**

- $3C$ to $8C$: Standard  
- $= Optional$: Optional  
- $= Not applicable$: Not applicable  
- $= Standard$: Standard  
- $= Optional$: Optional  
- $= Not applicable$: Not applicable

**Notes**:
- $1C$: Number of service cars in the group control system.
- $2BC$: Number of service cars in the group control system.
Basic 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>Door type</th>
<th>Entrance width (mm)</th>
<th>Counterweight position (mm)</th>
<th>Car internal dimensions (mm)</th>
<th>Minimum hoistway dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P6</td>
<td>6</td>
<td>450</td>
<td>25</td>
<td>800</td>
<td>Side</td>
<td>1090 x 1800</td>
<td>1090 x 1800, 1510 x 1790</td>
</tr>
<tr>
<td>P7</td>
<td>7</td>
<td>550</td>
<td>1.0</td>
<td>1.6</td>
<td>1.75</td>
<td>1100 x 1840</td>
<td>1100 x 1840, 1510 x 1790</td>
</tr>
<tr>
<td>P8</td>
<td>8</td>
<td>630</td>
<td>25</td>
<td>800</td>
<td>900 Optional</td>
<td>1350 x 1400</td>
<td>1350 x 1400, 1550 x 1370</td>
</tr>
<tr>
<td>P11</td>
<td>11</td>
<td>825</td>
<td>1050</td>
<td>1000</td>
<td>1050</td>
<td>1600 x 1400</td>
<td>1600 x 1400, 1550 x 1370</td>
</tr>
<tr>
<td>P14</td>
<td>14</td>
<td>1050</td>
<td>1.0</td>
<td>1.6</td>
<td>1.75</td>
<td>1100 x 2100</td>
<td>1100 x 2100, 1670 x 2500</td>
</tr>
<tr>
<td>P17</td>
<td>17</td>
<td>1275</td>
<td>1.0</td>
<td>1.6</td>
<td>1.75</td>
<td>1200 x 2300</td>
<td>1200 x 2300, 1550 x 2050</td>
</tr>
<tr>
<td>P18</td>
<td>18</td>
<td>1350</td>
<td>1200</td>
<td>1400</td>
<td>2500</td>
<td>2250 x 2625</td>
<td>2250 x 2625, 2350 x 2720</td>
</tr>
<tr>
<td>P21</td>
<td>21</td>
<td>1600</td>
<td>1200</td>
<td>1400</td>
<td>2500</td>
<td>2250 x 2625</td>
<td>2250 x 2625, 2350 x 2720</td>
</tr>
</tbody>
</table>

Note: The table shows standard specifications without the fireproof landing door and counterweight safety. Please consult our local agents for other specifications. The applicable range of the rated capacity may differ depending on the manufacturing factory. Please consult our local agents for details.

Specifications for Variable Traveling Speed Elevator System (Optional) <1-Door 1-Gate & 1-Door 2-Gate>

<table>
<thead>
<tr>
<th>Rated speed (m/sec)</th>
<th>Speeds (m/sec)</th>
<th>Rated Capacity (kg)</th>
<th>Travel (m)</th>
<th>Minimum overhead (mm)</th>
<th>Minimum pit depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1.0/2, 1.5, 1.6</td>
<td>450</td>
<td>TR (5/25)</td>
<td>3400</td>
<td>1400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1050</td>
<td>TR (5/15)</td>
<td>4350</td>
<td>1650</td>
</tr>
</tbody>
</table>

Note: The Variable Traveling Speed Elevator System (VSE) is applicable for elevators with a rated speed of 1.0 m/sec. The table shows standard specifications without the fireproof landing door and counterweight safety. Please consult our local agents for other specifications. The minimum hoistway dimensions (OH and PD) shown in the table are after waterproofing of the pit and do not include plumb tolerance. The applicable range of the rated capacity may differ depending on the manufacturing factory. Please consult our local agents for details.

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>Rated speed (m/sec)</th>
<th>Travel (m)</th>
<th>Minimum overhead (mm)</th>
<th>Minimum pit depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>450</td>
<td>TR (5/25)</td>
<td>3400</td>
<td>1400</td>
<td>1100</td>
</tr>
<tr>
<td>1.6</td>
<td>1050</td>
<td>TR (5/15)</td>
<td>4350</td>
<td>1650</td>
<td>1100</td>
</tr>
</tbody>
</table>

Note: The table shows standard specifications without the fireproof landing door and counterweight safety. Please consult our local agents for other specifications. The minimum hoistway dimensions (OH and PD) shown in the table are after waterproofing of the pit and do not include plumb tolerance. The applicable range of the rated capacity may differ depending on the manufacturing factory. Please consult our local agents for details.

Elevation <1-Door 1-Gate>

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

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

<table>
<thead>
<tr>
<th>Code number</th>
<th>Number of portions</th>
<th>Rated speed (m/sec)</th>
<th>Rated capacity (kg)</th>
<th>Door type</th>
<th>Entrance width (mm)</th>
<th>Car internal dimensions (mm)</th>
<th>Minimum hoistway dimensions (mm)</th>
<th>Rated speed (m/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P17</td>
<td>17</td>
<td>1.6 2.5</td>
<td>1650</td>
<td>CO</td>
<td>1100</td>
<td>1400x2100</td>
<td>1800x2560</td>
<td>2.5</td>
</tr>
<tr>
<td>P14</td>
<td>14</td>
<td>1.2 2.5</td>
<td>1275</td>
<td>CO</td>
<td>1100</td>
<td>1400x2100</td>
<td>1800x2560</td>
<td>2.0</td>
</tr>
<tr>
<td>P11</td>
<td>11</td>
<td>1.2 2.5</td>
<td>1050</td>
<td>CO</td>
<td>1100</td>
<td>1400x1400</td>
<td>1800x2560</td>
<td>2.0</td>
</tr>
<tr>
<td>P8</td>
<td>8</td>
<td>1.0 1.6 1.75</td>
<td>825</td>
<td>2S</td>
<td>1100</td>
<td>1400x1400</td>
<td>1800x2560</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- The table shows standard specifications without the fireproof landing door and counterweight safety. Please consult our local agents for other specifications.
- CO: 2-panel center opening doors, 2S: 2-panel side sliding doors.
- Minimum hoistway dimensions (OH and BH) shown in the table are after waterproofing of the pit and do not include plumb tolerance.

#### Hoistway Plan

**<1-Door 2-Gate>**

![Hoistway Plan](image)

**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 details or conditions are to be confirmed to the statement of local laws or Mitsubishi Electric’s elevator requirements.

- 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.
- Separate beams, when the hoistway dimensions markedly exceed the specifications, 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 conduits 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 in 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 work 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.

Note: Work responsibilities in installation and construction shall be determined according to local laws.

#### Elevator Site Requirements

- 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 parts 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.

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Basic code compliance

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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.

Eco Changes is the Mitsubishi Electric Group’s environmental statement, and expresses the Group’s stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

MITSUBISHI ELECTRIC CORPORATION
HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-ku, TOKYO 100-8310, JAPAN


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