

Table of Features

Feature	Description	2BC	ΣAI-22	ΣAI-2200C
■ OPERATIONAL AND SERVICE FEATURES				
Safe Landing (SFL)	If a car has stopped between floors due to some equipment malfunction, the controller checks the cause, and if it is considered safe to move the car, the car will move to the nearest floor at a low speed and the doors will open.	Ⓢ	Ⓢ	Ⓢ
Next Landing (NXL)	If the elevator doors do not open fully at a destination floor, the doors close, the car automatically moves to the next or nearest floor where the doors will open.	Ⓢ	Ⓢ	Ⓢ
Continuity of Service (COS)	A car which is experiencing trouble is automatically withdrawn from group control operation to maintain overall group performance.	—	Ⓢ	Ⓢ
Automatic Bypass (ABP)	A fully-loaded car bypasses hall calls in order to maintain maximum operational efficiency. (Optional in case of 1-car 2BC system.)	⓪	Ⓢ	Ⓢ
Overload Holding Stop (OLH)	A beep, as well as voice guidance, sounds to alert the passengers that the car is overloaded: the doors remain open and the car does not leave that floor until enough passengers exit the car.	Ⓢ	Ⓢ	Ⓢ
Automatic Hall Call Registration (FSAT)	If one car cannot carry all waiting passengers because it is full, another car will automatically be assigned for the remaining passengers.	Ⓢ	Ⓢ	Ⓢ
Car Call Canceling (CCC)	When a car has responded to the final car call in one direction, the system regards remaining calls in the other direction as mistakes and clears them from the memory.	Ⓢ	Ⓢ	Ⓢ
False Call Canceling — Automatic (FCC-A)	If the number of registered car calls does not correspond to the car load, all calls are canceled to avoid unnecessary stops.	⓪	⓪	Ⓢ
Car Fan Shut Off — Automatic (CFO-A)	If there are no calls for a specified period, the car ventilation fan will automatically be turned off to conserve energy.	⓪	⓪	Ⓢ
Car Light Shut Off — Automatic (CLO-A)	If there are no calls for a specified period, the car lighting will automatically shut off to conserve energy.	⓪	⓪	Ⓢ
Backup Operation for Group Control Microprocessor (GCBK)	An operation by car controllers which automatically starts to maintain elevator operation, in the event that a microprocessor or transmission line in the group controller has failed.	—	Ⓢ	Ⓢ
Independent Service (IND)	Exclusive operation where a car is withdrawn from group control operation for independent use, such as maintenance or repair, and responds only to car calls.	Ⓢ	Ⓢ	Ⓢ
■ GROUP CONTROL FEATURES				
Expert System and Fuzzy Logic	Artificial expert knowledge, which has been programmed using “expert system” and “fuzzy logic”, is applied to select the ideal operational rule which maximizes the efficiency of group control operations.	—	Ⓢ	Ⓢ
Psychological Waiting Time Evaluation	Cars are allocated according to the predicted psychological waiting time for each hall call. The rules evaluating psychological waiting time are automatically changed in a timely manner in response to actual service conditions.	—	Ⓢ	Ⓢ
Cooperative Optimization Assignment	The system predicts a potential hall call, which could give longer waiting time. Car assignment is performed considering not only current and new calls but also near-future call.	—	—	Ⓢ
Car Travel Time Evaluation	Cars are allocated to hall calls by considering the number of car calls that will reduce passenger waiting time in each hall and the travel time of each car.	—	Ⓢ	Ⓢ
Distinction of Traffic Flow with Neural Networks (NN)	Traffic flows in a building are constantly monitored using neural network technology, and the optimum operational pattern, such as Lunchtime Service or Up Peak Service, is selected or cancelled accordingly at the appropriate time.	—	—	Ⓢ
Car Allocation Tuning (CAT)	The number of cars allocated or parked on crowded floors are controlled not just according to the conditions on those crowded floors but also the operational status of each car and the traffic on each floor.	—	—	Ⓢ
Dynamic Rule-Set Optimizer (DRO)	Traffic flows in a building are constantly predicted using neural network technology, and an optimum Rule-Set for group control operations is selected through real-time simulations based on prediction results.	—	—	Ⓢ

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Peak Traffic Control (PTC)	A floor which temporarily has the heaviest traffic will be served with higher priority over other floors, but not to the extent that it interferes with the service to other floors.	—	Ⓢ	Ⓢ
Strategic Overall Spotting (SOHS)	To reduce passenger waiting time, cars which have finished service are automatically directed to positions where they can respond to predicted hall calls as quickly as possible.	—	Ⓢ	Ⓢ
Energy-Saving Operation — Number of Cars (ESO-N)	To save energy, the number of service cars is automatically reduced to some extent but not so much that it adversely affects passenger waiting time.	—	⓪	Ⓢ
Energy-Saving Operation — Allocation Control (ESO-W)	When a call is registered, the system controls car assignment considering near-future traveling distance of all elevators to conserve energy.	—	—	Ⓢ
■ DOOR OPERATION FEATURES				
Door Sensor Self-Diagnosis (DODA)	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.	Ⓢ	Ⓢ	Ⓢ
Automatic Door Speed Control (DSAC)	The system monitors the actual door load conditions at each floor and automatically adjusts the door speed and torque accordingly.	Ⓢ	Ⓢ	Ⓢ
Automatic Door-Open Time Adjustment (DOT)	The time doors are open for will automatically be adjusted, depending on whether the stop was called from the hall or the car, to allow smooth boarding of passengers or loading of baggage.	Ⓢ	Ⓢ	Ⓢ
Reopen with Hall Button (ROHB)	Closing doors can be reopened by pressing the hall button corresponding to the traveling direction of the car.	Ⓢ	Ⓢ	Ⓢ
Repeated Door-Close (RDC)	Should an obstacle prevent the doors from closing, the doors will repeatedly open and close until the obstacle is removed.	Ⓢ	Ⓢ	Ⓢ
Door Nudging Feature -Without Buzzer (KNDG)	The doors slowly close when they have remained open for longer than the preset period.	Ⓢ	Ⓢ	—
Door Nudging Feature -With Buzzer (NDG)	A buzzer sounds and the doors slowly close when they have remained open for longer than the preset period. With AAN-B, AAN-G, a beep, as well as voice guidance, sounds instead of the buzzer.	⓪	⓪	Ⓢ
Door Load Detector (DLD)	When excessive door load has been detected while opening or closing, the doors immediately reverse.	Ⓢ	Ⓢ	Ⓢ
Safety Ray (SR)	1-Beam	Ⓢ	Ⓢ	Ⓢ#
	2-Beam			
■ SIGNAL AND DISPLAY FEATURES				
Car Arrival Chime — Car or Hall (AECC/AECH)	Electronic chimes sound to indicate that a car will soon arrive. (The chimes are mounted either on the top and bottom of the car, or in each hall.)	⓪	⓪	Ⓢ (each floor)
Flashing Hall Lantern (FHL)	A hall lantern, which corresponds to a car's service direction, flashes to indicate that the car will soon arrive.	⓪	⓪	Ⓢ
Basic Announcement (AAN-B)	A synthetic voice (and/or buzzer) alerts passengers inside a car that elevator operation has been temporarily interrupted by overloading or a similar cause. (Voice available only in English.)	⓪	⓪	Ⓢ

Notes: Ⓢ = Standard ⓪ = Optional — = Not applicable
= When DOAS is applied, SR or Multi-Beam Door Sensor should be applied.

Table of Features (optional)

Feature	Description	2BC	ΣAI-22	ΣAI-2200C
■ OPERATIONAL AND SERVICE FEATURES				
Car Call Erase (FCC-P)	If the wrong car button is pressed, it can be canceled by quickly pressing the same button again twice.	○	○	○
Out-of-Service-Remote (RCS)	With a key switch on the supervisory panel, etc., a car can be called to a specified floor after responding to all car calls, and then automatically be taken out of service.	○	○	○
Secret Call Service (SCS-B)	To enhance security, car calls for desired floors can be registered only by entering secret codes using the car buttons on the car operating panel. This function is automatically deactivated during emergency operations.	○	○	○
Non-Service to Specific Floors — Car Button Type (NS-CB)	To enhance security, service to desired floors can be set to disable using the car operating panel. This function is automatically deactivated during emergency operations.	○	○	○
Non-Service to Specific Floors — Switch/Timer Type (NS/NS-T)	To enhance security, service to desired floors can be set to disable using a manual or timer switch. This function is automatically deactivated during emergency operations.	○	○	○
Out-of-Service by Hall Key Switch (HOS/HOS-T)	For maintenance or energy-saving measures, a car can be taken out of service temporarily with a key switch (with or without a timer) mounted in a specified hall.	○	○	○
Return Operation (RET)	Using a key switch on the supervisory panel, a car can be withdrawn from group control operation and called to a specified floor. The car will park on that floor with the doors open, and not accept any calls until independent operations begin.	○	○	○
Attendant Service (AS)	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.	○	○	○
■ GROUP CONTROL FEATURES				
Destination Oriented Prediction System (DOAS-S)	When a passenger presses a destination floor button on the hall operating panel, the name of the car to serve that call appears immediately next to the destination floor button. Cars are allocated according to destination floors in order to improve transport efficiency and minimize congestion. (Cannot be combined with IUP.)	—	—	○#2
Intense Up Peak (IUP)	To maximize transport efficiency, an elevator bank will be divided into two groups of cars to serve upper and lower floors separately during up peak. In addition, the number of cars to be allocated, the timing of car allocation to the main floor, the timing of door closing, etc., will be controlled based on predicted traffic data.	—	—	○
Up Peak Service (UPS)	Controls the number of cars to be allocated to the main floors, as well as the car allocation timing, in order to meet increased demands for upward travel from the main floors during office starting time, hotel check-in time, etc., and minimize passenger waiting time.	—	○	○
Down Peak Service (DPS)	Controls the number of cars to be allocated and the timing of car allocation in order to meet increased demands for downward travel during office leaving time, hotel checkout time, etc., to minimize passenger waiting time.	—	○	○
Forced Floor Stop (FFS)	All cars in a bank automatically make a stop at a pre-determined floor on every trip without being called.	○	○	○
Main Floor Parking (MFP)	An available car always parks on the main floor with the doors open to reduce passenger waiting time.	○	○	○
Special Floor Priority Service (SFPS)	Special floors, such as floors with VIP rooms or executive rooms, are given higher priority for car allocation when a call is made on those floors. (Cannot be combined with hall position indicators.)	—	○#1	○
Closest-Car Priority Service (CNPS)	A function to give priority allocation to the car closest to the floor where a hall call button has been pressed, or to reverse the closing doors of the car closest to the pressed hall call button on that floor. (Cannot be combined with hall position indicators.)	—	○#1	○
Light-Load Car Priority Service (UCPS)	When traffic is light, empty or lightly-loaded cars are given higher priority to respond to hall calls in order to minimize passenger travel time. (Cannot be combined with hall position indicators.)	—	○#1	○
Special Car Priority Service (SCPS)	Special cars, such as observation elevators and elevators with basement service, are given higher priority to respond to hall calls. (Cannot be combined with hall position indicators.)	—	○#1	○
Congested-Floor Service (CFS)	The number of cars to be allocated to floors where meeting rooms or ballrooms exist & the traffic intensifies for short periods of time, as well as the timing of car allocation, will be controlled according to detected traffic density data for those floors.	—	○	○
Bank-Separation Operation (BSO)	Hall buttons and the cars called by each button can be divided into several groups for independent group control operation to serve special needs or different floors.	—	○	○
Vip Operation (VIP-S)	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 a specified floor and parks there with the doors open. The car will then respond only to car calls.	—	○	○
Lunchtime Service (LTS)	During the first half of lunchtime, calls for a restaurant floor will be served with higher priority, and during the latter half, the number of cars allocated to the restaurant floor, the allocation timing for each car and the door opening and closing timing are all controlled based on predicted data.	—	○	○
Main Floor Changeover Operation (TFS)	This feature is effective for buildings with two main floors. The floor designated as the "Main floor" in a group control operation can be changed as necessary using a manual switch.	○	○	○

Notes: #1 = Please consult us for the production term, etc. #2 = When DOAS is applied, SR or Multi-Beam Door Sensor should be applied.

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■ DOOR OPERATION FEATURES				
Extended Door-Open Button (DKO-TB)	A button located inside a car which keeps the doors open for a longer than usual period to allow loading and unloading of a stretcher, baggage, etc.	○	○	—
Safety Door Edge (SDE)	One side	○	○	○
	Both sides (CO Doors Only)	○	○	○
Ultrasonic Door Sensor (USDS)	Sound waves are used to scan a 3D area near the open doors to detect passengers or objects.	○	○	○
Electronic Doorman (EDM)	Door open time is minimized using safety ray(s) or multi-beam door sensors that detect passengers boarding or exiting.	○	○	○
Multi-Beam Door Sensor	Multiple infrared-light beams cover some 1800mm in height of the doors as they close to detect passengers or objects. (Cannot be combined with SR feature.)	○	○	○#2
3D Multi-Beam Door Sensor	Multiple infrared-light beams cover some 1800mm in height of the doors as they close to detect passengers or objects. The 3D sensor can also monitor the hall by expanding multiple infrared-light beams. (Cannot be combined with SR feature.)	○	○	○
■ SIGNAL AND DISPLAY FEATURES				
Sonic Car Button — Click Type (ACB)	A click-type car button which emits electronic beep sounds when pressed to indicate that the call has been registered.	○#1	○#1	○#1
Immediate Prediction Indication (AIL)	When a passenger has registered a hall call, the best car to respond to that call is immediately selected, the corresponding hall lantern lights up and a chime sounds once to indicate which doors will open.	—	○#1	○#1
Second Car Prediction (TCP)	When a hall is crowded to the extent that one car can not accommodate all waiting passengers, the hall lantern will light up to indicate the next car to serve the hall.	—	—	○
Voice Guidance System (AAN-G)	Information on elevator service such as the current floor or service direction will be heard by the passengers inside a car. (Voice guidance available only in English.)	○	○	○
Auxiliary Car Operating Panel (ACS)	An additional car control panel which can be installed for large capacity elevators, heavy traffic elevators, etc.	○	○	○
Inter Communication System (ITP)	A system which allows communication between passengers inside a car and the building personnel.	○	○	○
LCD Position Indicator (CID-S)	LCD position indicator mounted inside a car on the car operating panel that indicates the date and time, current car position and travel direction.	○#1	○#1	○#1
■ EMERGENCY OPERATIONS AND FEATURES				
Mitsubishi Emergency Landing Device (MELD)	Upon power failure, a car equipped with this function automatically moves and stops at the nearest floor using a rechargeable battery, and the doors open to ensure passenger safety. (Max. allowable floor-to-floor distance is 10 meters.)	○	○	○
Operation by Emergency Power Source — Automatic/Manual (OEPS)	Upon power failure, the building's emergency power moves and stops pre-determined car(s) to a specified floor, and the doors open to ensure passenger safety. After all pre-determined car(s) have arrived at the floor, normal operation will be available with only pre-determined car(s).	○	○	○
Fire Emergency Return (FER)	Upon activation of a key switch or a building's fire sensors, all calls are canceled, all cars immediately return to a specified evacuation floor and the doors open to ensure safe passenger evacuation.	○	○	○
Firefighter's Emergency Operation (FE)	During a fire, when the firefighter's switch is activated, the car calls of a specified car and all hall calls are canceled and the car immediately returns to a pre-determined floor. The car then responds only to car calls which facilitate fire fighting and rescue operations.	○	○	○
Earthquake Emergency Return (EER-P/EER-S)	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 safe evacuation of passengers.	○	○	○
Supervisory Panel (WP)	A panel installed in a building's supervisory room, etc., which monitors and controls each elevator's status and operations by remote, using indicators and switches which are provided on request.	○	○	○
Mitsubishi Elevators & Escalators Monitoring and Control System MeEye (WP-W)	Each elevator's status and operations can be monitored and controlled using an advanced Web-based technology which provides an interface with the building management through personal computers. Special optional features, such as preparation of traffic statistics and analysis, are also available.	○	○	○
Emergency Car Lighting (ECL)	Car lighting which turns on immediately when power fails to provide a minimum level of lighting within the car. (Choice of dry-cell battery or trickle-charger battery.)	○	○	○

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