3rd Edition

For EN standard

Safety Cautions

- Observance of relevant laws / regulations are required.
- Read the entire "Instruction Manual" carefully before use, for important information about safety, handling and operation.

TOSHIBA

Toshiba Elevator and Building Systems Corporation

72-34, Horikawa-cho, Saiwai-ku, Kawasaki 212-8585, Japan

Please enter the contents from the "Inquiry Input Form" in website. https://www.toshiba-elevator.co.jp/elv/infoeng/

- The data given in this catalog are subject to change without notice.
- * Revised publication effective Mar. 2022

GK-F216(2)-2203-2000-2203(TD)

TOSHIBA

TOSHIBA HIGH SPEED ELEVATORS

New ELBRIGHT

For EN standard

TOSHIBA ELEVATOR AND BUILDING SYSTEMS CORPORATION

THE SOLUTIONS

COMPANY SOLUTIONS

Toshiba Elevator and Building Systems Corporation has built a framework which encompasses all aspects from system development to production, sales to marketing, installation, adjustment, maintenance and services in order to provide clients with the highest quality products and services.

Utilizing the comprehensive technological infrastructure developed by Toshiba Group in more than 145 years since its foundation, we aim to enhance the leading edge technology and quality that we used to develop the ultra high speed elevator, harnessing Toshiba's technological innovations to their fullest extent. To meet clients' expectations and requirements for safe and pleasant elevators as well as constantly pursuing further innovation and improvement. Furthermore, we are aiming to strengthen system development, production, enhancing sales channel and sales partnership to expand in the global market.



New ELBRIGHT TOSHIBA HIGH SPEED ELEVATORS

A new concept in high-speed elevators.

Toshiba never stops introducing the latest technologies and refining its high-speed elevator expertise.

Toshiba proves this again with the New ELBRIGHT: a new elevator for a new age. Toshiba engineering has combined to produce the world's first inverter drive controlled high-speed elevator, with the high-efficiency control, energy efficiency, and quiet operation today's society demands.

■ Product Line-up

Scope of specification	Range of application
Passenger	$8\sim 27$ persons
Rated load	600 ∼ 2025 kg
Rated speed	1.0 ~ 5.0 m/s
Rated speed	1.0 ∼ 5.0 m/s

Note: The above table complies with EN81-20/50 standards.







Technology

Toshiba's leading technology has developed a high-speed elevator with a slimline control panel and a compact and lightweight traction machine. We will provide rapid, high performance, high-quality elevator products saving labor, space and power.

Safety Function

We will offer safety, security, and comfort with customer's needs by providing optional functions for safety control devices such as door open running prevention and door sensors, and optional control operation in the event of a power outage and emergency at earthquakes and fires.

Energy Saving & Environment

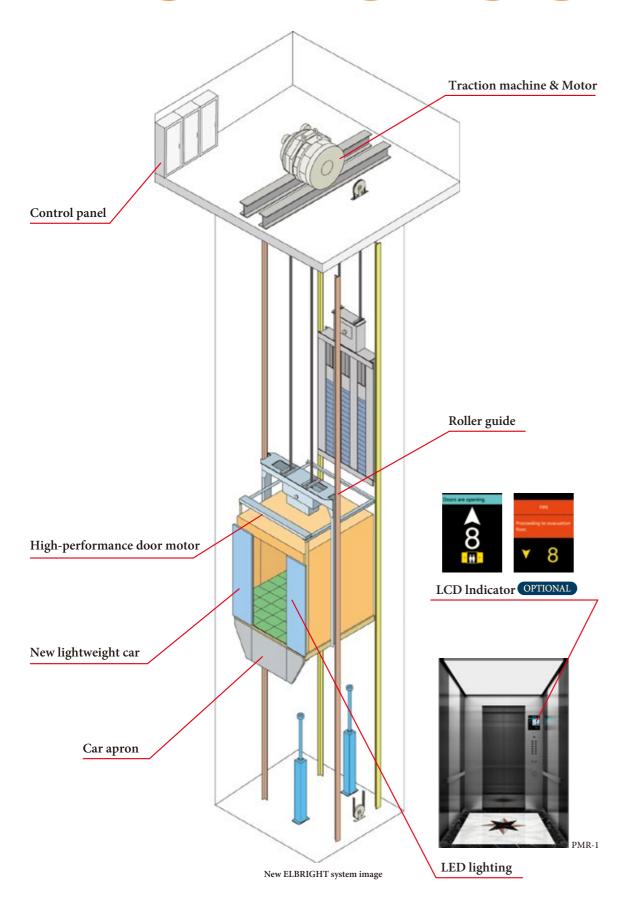
Reducing standby power by a new control device, commercializing the regenerative power function, and suppressing the power consumption by the adopting of LED lighting.

We are promoting environmentally friendly products such as eliminating lead and mercury and other hazardous substances from the product and equipment.

Index

he Solutions	
Company Solutions	P.1
new concept in high-speed elevators	
Technology Technology	
echnology	P.7
afety Function	
nergy Saving & Environment	
expansion of variations in car ceiling desi	gn P.17
Car Design	
PFFICE	P.19
ESIDENCE	P.21
IOTEL	
HOP	
fall Design	
all Decoration Item Variation	P.27
Operation Systems	P.35
unctions	P.53
łoistway Layout	
pecifications	
Vorks by Others	
Global Network	P.59

TECHNOLOGY



Technology

A high-efficiency traction machine and advanced inverter drive controlled are expanding the potential of

New ELBRIGHT

The New ELBRIGHT was developed to be the best an possible elevator, both for the buildings in which it is installed and for those who ride it. Every part of the elevator uses Toshiba's leading technologies; from the traction machine and control system to the cars, doors, and drive system. The New ELBRIGHT will boost the value of the high-speed elevator immensely.

Compact and energy-efficiency via the Permanent Magnet Synchronous Motor

The New ELBRIGHT employs a gearless traction machine using a permanent magnet synchronous motor (PMSM), in place of the conventional induction motor. The PMSM uses a permanent magnet with a high magnetic flux density. This allows a more compact and lightweight traction machine. Furthermore, establishing a permanent magnetic flux eliminates the need to release magnetizing current. This and other advantages pave the way for highly efficient control, which helps to save energy.

A compact slimline control panel realizes space-saving in machine room

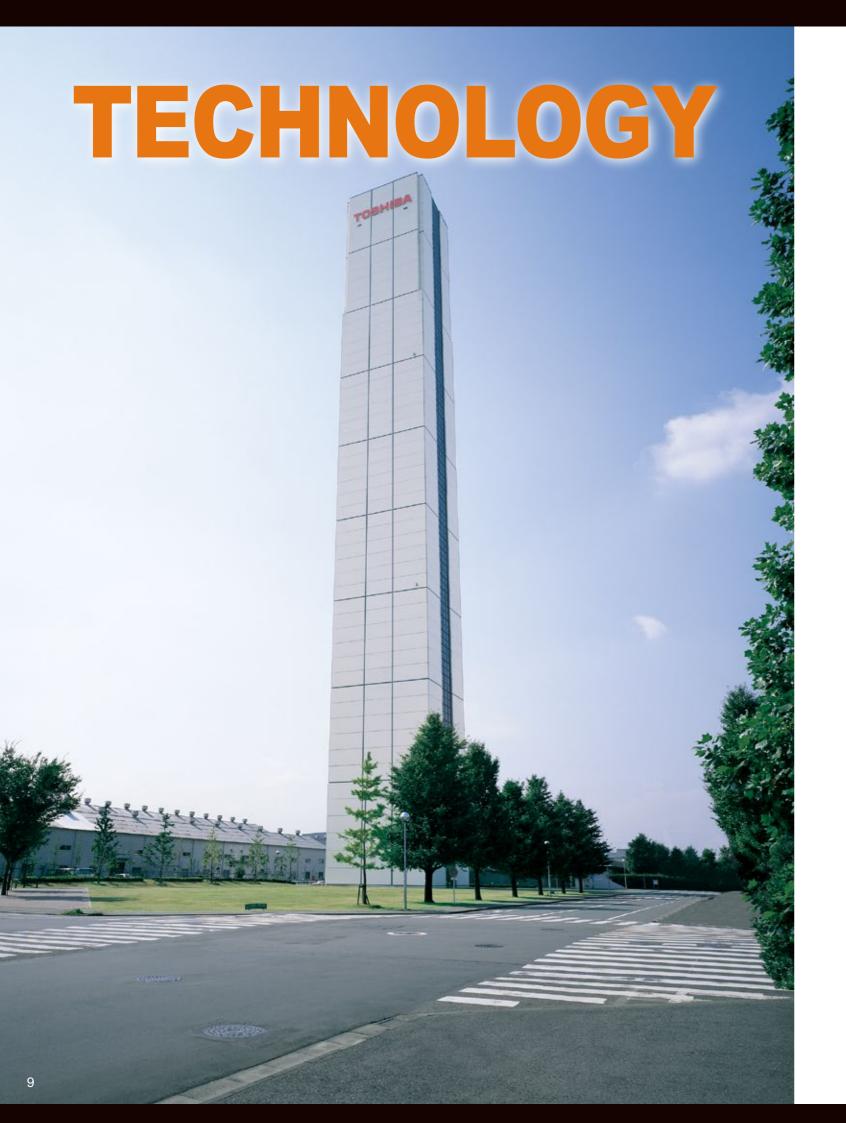
The New ELBRIGHT's control system use small inverter unit. It also incorporates peripheral equipment, integrated multifunctional digital line, a compact control panel device and efficiently implemented layout for a slimline control panel. The well thought-out control panel design also reduces working space for maintenance, which frees up space for the machine room.

New control systems

A high performance CPU is employed for the advanced and newly developed control system. This control system cuts the level of standby electricity required and promotes an automatic shutoff system for lighting and ventilation to further boost power savings.

Roller Guide

- ◆Comfort: Using the successful vibration damping solution from the high-end elevator type, riding comfort is further improved after roller guide is mounted on the car.
- ♦ High efficiency: Visible improvement of the mechanical efficiency with lower friction and energy consumption.
- ◆Environmental conservation: Lubrication oil and lubrication unit are eliminated and replaced by a long-life rubber roller to reduce environmental pollution.



Safety Function

Unintended Car Movement Protection

A traction drive elevator shall include means to prevent uncontrolled movement of the elevator away from the landing with neither the landing nor the car doors in the locked position. The Elevator shall detect uncontrolled movement of the car away from the landing and stop no more than 1200mm after as measured from the landing floor sill. Before operation, the uncontrolled car movement protection system means for an ascending elevator, the clearance between the landing door floor sill and the apron of the stopped elevator shall not exceed 200mm. In additional, uncontrolled movement protection means the horizontal distance between the sill or entrance frame of the stopped elevator and the wall of the well, from the landing floor sill to 1200mm downward for a descending elevator.

Car Door Lock OPTIONAL

Every car door shall be mechanically locked by at least 7mm such that it can only be opened in the unlocking zone of a landing. The lift operation shall automechanically depend on the locking of the car door. This locking shall be proved by an electrical safety device to confirm the horizontal distance between the well wall and the sill or entrance frame of the car is within 150 mm.

Ascending Car Overspeed Protection

A device to prevent an elevator ascending to the elevator shaft top beyond the rated speed due to a device like an electromagnetic brake or control unit. It monitors the speed of the upper direction mechanically by a governor, then cut off the power supply and safety circuit by an overspeed detecting switch when the speed exceeds the rated speed more than 1.3 times. The elevator shall be stopped by triggering the double brake when overspeed occurred.

2-in-1 door safety

(multi-beam door safety + mechanical door safety) A combination of multi-beam door safety and mechanical door safety.

* Image of Multi-beam Door Safety Full open Full open (Getting off) (Getting on)



Safety Function

Automatic Landing in Power Failure

OPTIONAL

In case of a power failure, backup lamps are automatically lighted up in the cars, while the system's operation is switched to the elevator system's own battery powered inverter. Cars stranded between floors are taken to the nearest floor; otherwise, doors are opened and passengers are let out. The doors automatically open in case the car stops at any point that is not between floors but where the doors can be opened. (Note: Overridden by any similar backup or safety systems installed in compliance with safety codes.)

Earthquake Emergency Operation

OPTIONAL

When the system's seismic sensor installed in the elevator shaft detects an S-wave (the secondary seismic wave and the main shock of an earthquake) that exceeds the pre-set threshold, the system takes control with emergency procedures. "Earthquake" emergency signs lighted up in all cars, all cars are taken immediately to the nearest floor, doors are opened and passengers are instructed to alight.

Fire Emergency Operation

OPTIONAL

This emergency operation is automatically triggered in case of a fire, when a fire alarm button is actuated, or when a Fire/Smoke Detector detects an abnormality. All hall calls and floor selections are cancelled, passengers are informed of the emergency procedure with a "Fire" sign and a voice announcement and all cars are sent directly to the emergency exit floor. Doors open at the emergency floor and passengers are guided to safety.

Power failure detected.

0

The elevators stop

0

In each car, the "Power Failure" sign lights up and the in-car PA system instructs passengers with the following message:

"Please get off this elevator as soon as the doors open."

The car goes to the nearest floor, and the doors open.

0

After a pre-set period, the doors are closed.

 \mathbf{O}

Normal operation resumes when power supply is back.

X Above flowchart is representable example

Earthquake detected.

A seismic sensor triggers emergency operation

0

In each car, the "Earthquake" emergency sign lights up and the in-car PA system instructs passengers with the following message:

"Please get off this elevator as soon as the doors open."

0

The car goes to the nearest floor and the doors open.

0

After a pre-set period, the doors are closed.

 $\ensuremath{\ensuremath{\%}}\xspace Above flow$ chart is representable example

Fire

0

Fire Alarm is actuated.

In each car, the "Fire" emergency sign lights up and the in-car PA system instructs passengers with the following message: "Please get off this elevator as soon as the

doors open."

0

The car goes to the emergency exit floor, the doors open.

0

After a pre-set period, the doors are closed.

X Above flowchart is representable example

TECHNOLOGY



Energy Saving & Environment

Toshiba Group and the SDGs

The main plank of the "Toshiba Group Basic Commitment" is "Committed to people, Committed to the Future.". This expresses Toshiba Elevator and Building Systems is unwavering determination to contribute to the development of society through its business, and is consistent with the direction of the SDGs, which aim to realize a sustainable society. Acting in good faith in our daily activities, and with a passion to make the world a better place, looking to the future beyond the next generation, and to create that future with our stakeholders-inspired by these ideas, Toshiba Elevator and Building Systems has and will continue to bring together the creativity and technological capabilities it has cultivated to confront social issues that are becoming more complicated and serious, and to turn on the promise of a new day.

Note: Toshiba Elevator and Building Systems is working on business activities by extracting 11 items that can be promoted from all 17 types of SDGs goals.

SUSTAINABLE GALS DEVELOPMENT

























Products and functions adopted to reduce power consumption

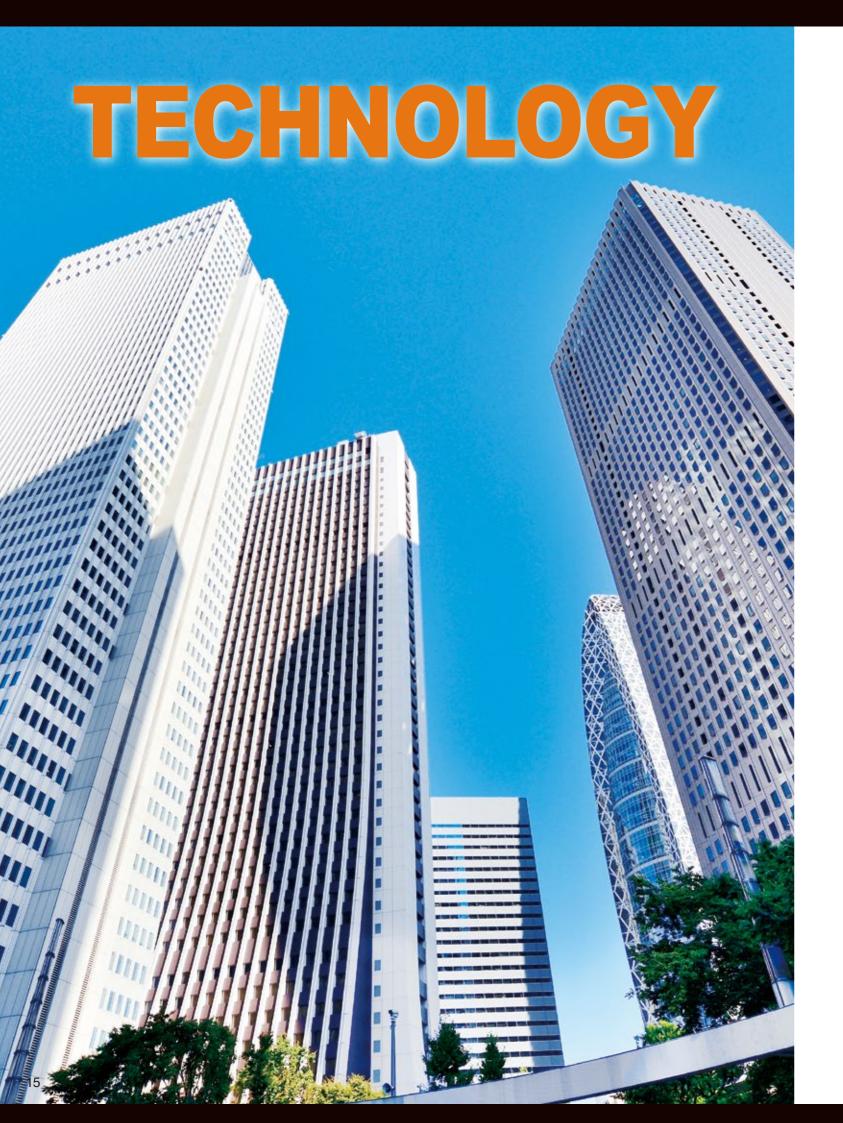
Suppress power consumption by reducing standby power, commercialization of the regenerative power function, adoption of LED lighting.

LED Lightings

Under equal brightness, an LED lighting system only consumes 10% of electrical with comparison of an incandescent lamp and 50% of an fluorescent lamp. (part of the ceiling)



PRM-1



Energy Saving & Environment

Providing environmentally conscious products

Toshiba elevator group is promoting the development of environmentally conscious products, which involves environmentally conscious product design, assessing the environmental impact of products and disclosing the environmental performance of products. Products are developed in compliance with the updated voluntary environmental performance standards.

Product assessment and voluntary environmental standards for products

In developing products, we assess them across their life cycles from manufacturing, logistics and use to disposal and recycling to conduct product development and reduce the environmental impacts on the global environment

Whereas product assessment is used to confirm the minimum necessary environmentally conscious requirements for product development, Voluntary Environmental Standards for Products have been established in the Toshiba elevator group to create highly environmentally friendly products and products complying with the same are released as environmentally conscious products.

Reducing hazardous materials

[Reduction of lead use]

By changing the method of tying rope, the use of lead can be eliminated or reduced.

[Employing LED lightings]

By employing LED light, various materials used for light became mercury free.

Lead-free Design of Base Plate, RoHS Compliance and Elimination of Specific Chemical Substances (15 Classifications)

Continuous concern over RoHS compliance, eliminating 15 classifications of specific chemical substances and using the lead-free technique for main circuit boards.



Expansion of variations in car ceiling design

Suitable for harmonization of a wide variety for building applications and concepts.

Expanding the lineup of ceiling designs utilizing LED lighting

All ceiling lighting uses LED lighting to take environmental measures such as long life and energy saving.





OPTIONAL

PRM-1

Front side view



Back side view



Ceiling design	PRM-1
Car side panel (Return panel)	Vibration finish stainless steel
Car side panel (Side panel)	Black color hairline finish stainless steel and Vibration finish stainless steel
Car side panel (Rear panel)	Black color hairline finish stainless steel and Mirror finish stainless steel
Kick plate	Hairline finish stainless steel
Car door	Black color hairline finish stainless steel
Car floor	Marble tile (JQ-1013)
COP	POP-G1L-104C
Indicator	10.4inch Color LCD
Handrail	Stainless steel flat type hand rail
Remark	Applies to models with a capacity of 1150kg or more.

Design variations

PRM-2



DLX-31



DLX-27



SL-3X



The actual product colors may vary slightly from those printed colors in this catalog. Please consult our local distributor before adoption about the material and the color.

RESIDENCE

OPTIONAL

DLX-24

Front side view



Back side view



Ceiling design	DLX-24 with pattern C
Car side panel (Return panel)	Vibration finish stainless steel
Car side panel (Side panel)	Rose gold color hairline finish stainless steel
Car side panel (Rear panel)	Rose gold color hairline finish stainless steel and Mirror finish stainless steel
Kick plate	Nil
Car door	Mirror finish stainless steel
Car floor	Vinyl tile (TSF-1C)
COP	COP-G1L-57B
Indicator	5.7 inch Color LCD
Handrail	Stainless steel round type hand rail

Design variations



OPTIONAL TL-1



OPTIONAL DLX-21



OPTIONAL TL-S2





OPTIONAL

DLX-31

Front side view



Back side view



Ceiling design	DLX-31
Car side panel (Return panel)	Black color hairline finish stainless steel
Car side panel (Side panel)	Black color hairline finish stainless steel and Mirror etching finish stainless steel
Car side panel (Rear panel)	Black color hairline finish stainless steel and Mirror etching finish stainless steel
Kick plate	Nil
Car door	Mirror etching finish stainless steel
Car floor	Marble (JQ-1012)
COP	POP-G1L-57B
Indicator	5.7 inch Color LCD
Handrail	Nil

Design variations

DLX-24



DLX-25



PRM-2



STANDARD OT 1





OPTIONAL

DLX-22

Front side view



Back side view



Ceiling design	DLX-22
Car side panel (Return panel)	Vibration finish stainless steel
Car side panel (Side panel)	Vibration finish stainless steel and Mirror finish stainless steel
Car side panel (Rear panel)	Vibration finish stainless steel and Mirror finish stainless steel
Kick plate	Nil
Car door	Mirror finish stainless steel
Car floor	Marble (JQ-1013)
COP	POP-G1L-57B
Indicator	5.7 inch Color LCD
Handrail	Nil

Design variations

DLX-21



DLX-28



OPTIONAL DLX-23



OPTIONAL DLC-1





Hall Decoration Item Variation

The combination of elevator hall equipment and specifications extends design. It can be easily harmonized with the entrance design of the building.













Hall design 3

Hall design 6

Hall design 7

Hall design 1 OPTIONAL

Hall jamb Wide type jamb with transom

Hairline finish stainless steel

Hall door Hairline finish stainless steel Hall transam Hairline finish stainless steel

Hall sill Hardened aluminium

Hall indicator Nil

Hall button HB-G1K Hall lantern HL-G1-O







Note: In the case of jamb with transom, fire-proof specification cannot be applied to the transom.

The actual product colors may vary slightly from those printed colors in this catalog.

Hall design 2 OPTIONAL

Wide type jamb Painted steel panel (1NS) Hall jamb

Hall door Painted steel panel (1NS)

Hall transam

Hardened aluminium Hall sill

HI-G34-O Hall indicator Hall button HB-G1K Hall lantern Nil



HI-G34-O





Hall design 3 OPTIONAL 1 08 M

Hall jamb

Wide type jamb
Painted steel panel (3NS)

Hall door Painted steel panel (3NS)

Hall transam

Hardened aluminium Hall sill

Hall indicator

Hall button HIB-G1NL Hall lantern HL-G1-O





HL-G1-O







Hall design 4 OPTIONAL

Hall jamb

Wide type jamb Hairline finish stainless steel

Hall door Painted steel panel (62YS)

Hall transam

Hall sill Hardened aluminium

HIB-G1L-43B

Hall indicator / Hall button

Hall lantern









Hall design 5 OPTIONAL

Hall jamb Wide type jamb

Painted steel panel (114PBS)

Hall door Painted steel panel (114PBS)

Hall transam

Hall sill Hardened aluminium

HI-G1-O Hall indicator Hall button HB-G1K Hall lantern



HB-G1K





Hall design 6 STANDARD

Hall jamb Narrow type jamb

Painted steel panel (77GS)

Hall door Painted steel panel (77GS)

HIB-G1N

Hall transam

Hall sill Hardened aluminium

Hall indicator /

Hall lantern

Hall button







Hall design 7 OPTIONAL

Wide type jamb Hairline finish stainless steel Hall jamb

Hall door Hairline finish stainless steel

Hall transam

Hardened aluminium Hall sill

HI-G1L-57B Hall indicator Hall button HB-G1K

Hall lantern



HI-G1L-57B









OPERATION SYSTEMS



Car Operation Panel: POP type

*Note: Applicable to Wide Car type models

Car Operation Panel



Indicator



Button 2

10.4 inch Color LCD

KB-3 (Orange light)

PRM-1



OPTIONAL OPTIONAL

The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel









The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel: POP type

*Note: Applicable to Wide Car type models

Car Operation Panel



OPTIONAL



Button

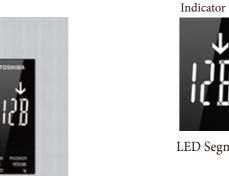
LED Segment

GS-3LB

DLX-31



Car Operation Panel



Button

LED Segment

GS-5B-WT

SL-P1







Car Operation Panel: FCOP type

*Note: Applicable to Deep Car type models

Car Operation Panel



OPTIONAL





8.4 inch Color LCD

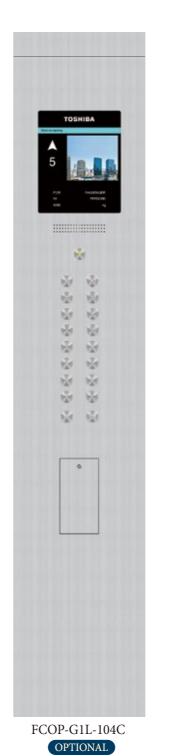
KB-7 (Orange light)

DLX-21



The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel







The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel: FCOP type

※Note: Applicable to Deep Car type models

Car Operation Panel



FCOP-G1NS

OPTIONAL

Indicator



GS-3LB

LED Segment

TL-S2



The actual product colors may vary slightly from those printed colors in this catalog.

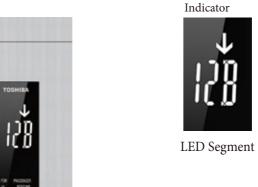
Car Operation Panel

遊 遊

\$ \$

FCOP-G1NL

STANDARD



Button

GS-5B-WT



The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel: COP type

*Note: Applicable to all models

Car Operation Panel







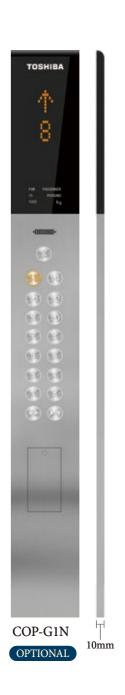
5.7 inch Color LCD

KB-7 (Orange light)



Car Operation Panel







Hall Indicator Button: HIB type

Hall Indicator Button



Hall Indicator Display

4.3inch Color LCD



LCD Segment



LED Segment



LED Dot Matrix

%Note: A white color or orange color can also be selected for the LED light.

Orange light



White light



Detail of display



Hall Indicator Button

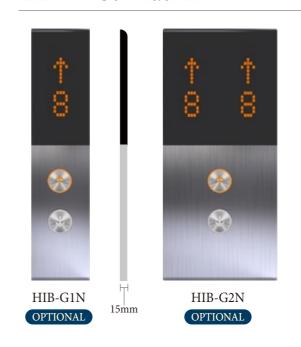
LCD Segment

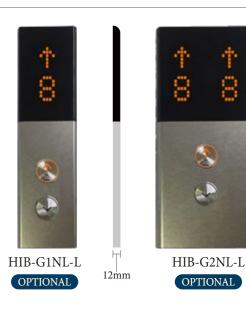


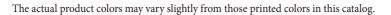
LED Segment



LED Dot Matrix







HIB-G1K3

OPTIONAL

HIB-G2K3

OPTIONAL

Hall Indicator

Hall Indicator OPTIONAL









LED Dot matrix

LCD Hall Indicator OPTIONAL

5.7 inch Color LCD



HI-G1L-57B

With monitoring

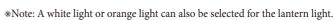


Out of service

Controlled status

Hall Lantern

Hall Lantern OPTIONAL











HL-G1-O (Orange light)

HL-G2-W (White light)

HL-G3-O (Orange light)

HL-G4-O (Orange light)

Hall Button OPTIONAL





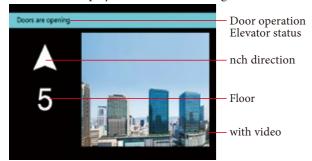
Car Position Indicator

Large LCD Indicator for Car Operation Panel OPTIONAL

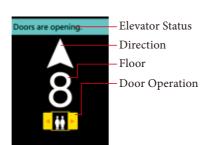
These 10.4 inch and 8.4 inch LCD indicators are capable of displaying in the elevator's various conditions (emergency operations, maintenance status) in large icons and letter in highly visible colors.

10.4 inch Color LCD

General car display (Without monitoring)



8.4 inch Color LCD



General car display (With monitoring)



A 8

Doors are opening.

A With monitoring



Display under controlled status



5.7 inch Color LCD

General car display





With video

Controlled status



LCD Segment





LED Dot matrix



Functions

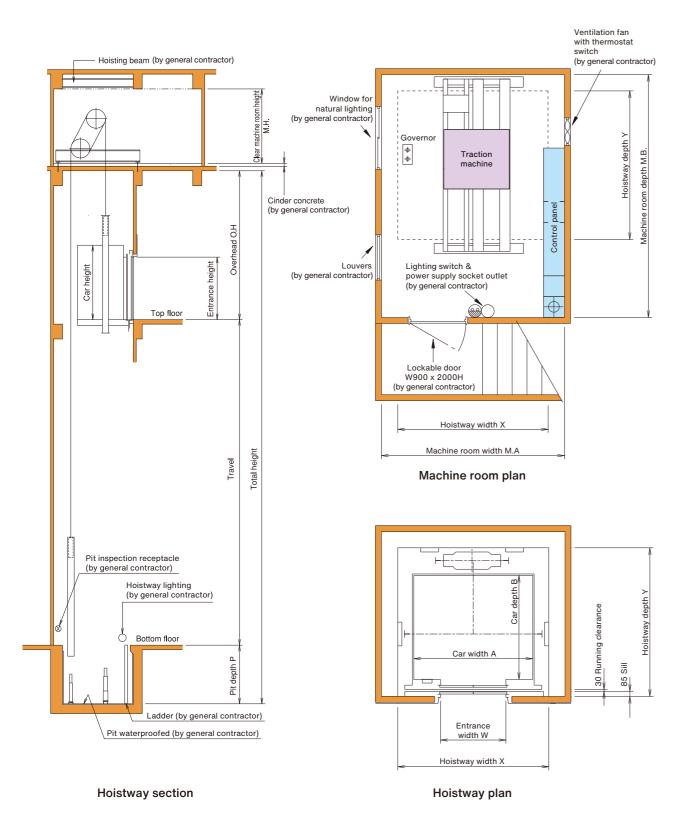
 \bigcirc :STANDARD \triangle :OPTIONAL

Functions	Notes	Descriptions					
	Simplex selective-collective fully automatic operation	Fully automatic operation by hall and car calls for single car	0				
	Duplex selective collective fully automatic operation	Fully automatic operation for 2 cars in the same group	Δ				
Operations	Group supervisory control system	For supervisory operation of groups of more than 4 cars, please contact us					
	FLOORNAVI	Destination Control System	Δ				
	Independent operation	Lift car separated from group control operation and responde to car call only					
	Attendant operation	Operation by attendant by switch & button provided at service cabinet in COP					
	Automatic landing function when system fails	When system failure occurs, the lift will automatically land at the nearest floor and the door will open for passengers to exit	0				
	Automatic withdrawn from group operation	If an elevator under a group supervisory operation fails to run for some reason, the elevator is cut out of the group and the other elevators automatically back up the faulty one to continue the group supervisory operation					
	Car inspection operation [INS]	During car inspection operation, the lift car will run at slowly speed without responding to hall call	0				
	Overload protection	The car overload buzzer will sound to prevent overloading and the doors will remain open	0				
	Fireman's operation	In the event of fire, when the Fireman's switch is activated, the designated lift will be ready for firemen to use					
	Fire emergency operation	In the event of fire, all lifts will return to the designated floor and stop operation to allow passengers to exit					
	Emergency operation indication at COP	In the event of an emergency, the emergency operation status will be displayed at COP					
Safety Functions	Power failure emergency operation	In the event of power failure, all lifts will return to the designated floor by emergency power supply from the building to allow passengers to exit					
	Automatic landing during power failure [TOSLANDER]	In the event of power failure, the lift will land at the nearest floor by emergency battery	Δ				
	Earthquake emergency operation	In the event of an earthquake, the elevator will detect the seismic signal and land at the nearest floor	Δ				
	In-car emergency lamp (Self-charging)	In the event of power failure, the in-car emergency lamp will be activated	0				
	Emergency call button	A button for passenger to make an emergency call when they are trapped inside the lift	0				
	Door open when lift car is overloaded	The doors will re-open when over load is detected, even during the closing of doors	0				
	2 in 1 door safety [Multi-beam door safety + Mechanical door safety]	A combination of multi-beam door safety and mechanical door safety	0				
	Home landing	To reduce passenger waiting time, the lift will return to the designated floor and stand by	Δ				
Service Functions	Service floor cut-off selection [Software interface]	This is of the free setting type, where the elevator superintendent for every building is free to set and modify service cutt-off floors even after in use. This is the most appropriate type for such office buildings as their tenants are not yet fixed before complection.	Δ				
	Service floor cut-off selection [Manual]	linstalling a switch or a timer on the supervisory panel, disables registration of car calls or hall calls for a basement floor's or an intermediate floors or intermediate floors thus engaging in non-stop(bypass) without servicing there.					

○:STANDARD △:OPTIONAL

Functions	Notes	Descriptions						
	Full car bypass	When the lift car is full, the lift will bypass all hall calls and go straight to the designated floor	Δ					
	Car call cancellation	The floor call can be cancelled from the COP by pressing the floor button twice within 3 second	0					
	Nuisance call cancellation	Incorrect or nuisance floor calls can be cancelled to eliminate unnecessary operation	0					
	Door repeated opening	When an obstacle is detected, the door will repeatedly open and close until the obstacle is removed	0					
	Car indicator	Car indicator with the car operating panel						
	Adjustable door opening time	Adjusts the door opening time to reflect building usage						
	Door open extension button	Extends the door opening time	Δ					
	Car chime	A chime installed in the car ceiling will sound when the lift arrives						
	Hall chime [1 car or 2 car]	A chime installed in the lift lobby will sound when the lift arrives						
	Hall chime [Group control]	A chime installed in the lift lobby will sound when the lift arrives	0					
	Car full load indicator	"Full Load" will display on the hall indicator when the lift car is full	0					
	Hall lantern	The hall lantern will light up when the lift arrived	Δ					
	Sub car operating panel [Single entrance (Front side retuen panel)]	Additional car operating panel						
Service Functions	Sub car operating panel [Double entrance (Rear side retuen panel)]	Additional car operating panel						
	Out of service indicator	"Out of Service" will display on the hall indicator when the lift car is faulty						
	Parking operation [Manual]	Parks the lift at designated floor by key-switch						
	Parking operation [Automatic]	Parks the lift at designated floor auotmatically						
	Car lighting automatic cut-off	When the lift is not in operation after a pre-determined period of time, the car light will turn off automatically	0					
	Ventilation fan automatic cut-off	When the lift is not in operation after a pre-determined period of time, the ventilation fan will turn off automatically	0					
	Door Open button lamp [For automatically cut-off car lighting]	The "Door Open" button will remain lit when the lift car light is turned off automatically	0					
	Nuisance call cancellation at reversal	Cancel intentionally registered nuisance calls automatically in the reversal travel direction	0					
	Multi-channel intercom	The intercom system can communicate with multi-stations simultaneously	0					
	Designated floor stop operation	Automatically stops the lift at the designated floor for crime prevention purposes						
	Card access system	Allows activation of the disnated floor call by IC card ** Card Access System by others"						
	Speech synthesizer	Announces car operations						
	Supervisory panel	Located in the building control room, etc. to monitor the status and control of each lift						

Hoistway Layout



Specifications

Type Nos.of Capacity		Capacity	Speed Cage size Internal(mm				C/W	Hoistway	Hoistway size(mm)		Machine room dimensions (mm)		Motor	Max.	_Max.		
Туре		Person	(kg) 1		A×B	Height	Width	Height	C/VV	X×Y	ОН	Р	MA×MB	MH	Capacity (kW)	Service Stops(s)	Travel (m)
P8-CO120	w			2		o.g	· · · · · · · · · · · · · · · · · · ·	o.g		Α.	5950	2450			8.0	, , , ,	
P8-CO150	W			2.5							6150	2450			10.0		
P8-CO180	W			3						1990×1860	6450	2750	2340×3350		12.0		
P8-CO210	w	8	630	3.5	1400×1100	2300	800	2100	Rear		6850	3250		2250	14.0		
P8-CO240	W			4							7450	3850			16.0		
P8-CO300	W			5						1990×1910	8400	4050	2340×3400		20.0		
P12-CO120	W			2							5950	2450			12.0		
P12-CO150	W			2.5						04500440	6150	2450	05.400000		14.0		
P12-CO180	W	40	000	3	4000::4050	2200	900	2100	D	2150×2110	6450	2750	2540×3600	2050	18.0		
P12-CO210	W	12	900	3.5	1600×1350	2300	900	2100	Rear		6850	3250		2250	20.0		
P12-CO240	W			4						2150~2160	7450	3850	2540×3650		22.0		
P12-CO300	W			5						2150×2160	8400	4050	2540^3050		28.0		
P13-CO120	W			2							5350	2450			12.0		
P13-CO150	W			2.5						2150×2260	5550	2450	2540×3750		16.0		
P13-CO180	W	13	1000	3	1600×1500	2300	900	2100	Rear	2130^2200	5850	2750	2540^3750	2250	18.0		
P13-CO210	W	13	1000	3.5	1000*1300	2000	300	2100	INCAI		6250	3250		2230	22.0		
P13-CO240	W			4						2150×2310	6850	3850	2540×3800		24.0		
P13-CO300	W			5						2100-2010	7800	4050	201010000		30.0		
P15-CO120	W			2							5350	2450			14.0		
P15-CO150	W			2.5						2350×2260	5550	2450	2740×3750		18.0		
P15-CO180	W	15	1150	3	1800×1500	2300	1000	2100	Rear	2000 2200	5850	2750	2. 10 0.00	2250	22.0		
P15-CO210	W			3.5							6250	3250			26.0		
P15-CO240	W			4						2350×2310	6850	3850	2740×3800		28.0		
P15-CO300	W			5							7800	4050			36.0	64	200
P18-C0120	W			2							5350	2450			18.0		
P18-C0150	W			2.5						2550×2260	5550 5850	2450 2750	2940×3750		22.0		
P18-C0180	W	18	1350	3	2000×1500	2300	1000	2100	Rear			3250		2250	30.0		
P18-C0210	W			3.5							6250				34.0		
P18-C0240	W			4 5						2550×2310	6850 7800	3850 4050	2940×3800		42.0		
P18-CO300	W			2							5350	2450			20.0		
P21-CO120 P21-CO150	W			2.5							5550	2450			24.0		
P21-C0150	W			3						2550×2460	5850	2750	2940×3950		30.0		
P21-C0160	W	21	1600	3.5	2000×1700	2300	1100	2100	Rear		6250	3250		2250	34.0		
P21-C0210	W			4							6850	3850			40.0		
P21-CO300	W			5	-					2550×2510	7800	4050	2940×4000		48.0		
P24-C0120	w			2							5350	2450			22.0		
P24-C0150	W			2.5							5550	2450			28.0		
P24-CO180	W			3						2750×2510	5850	2750	3040×4000		34.0		
P24-CO210	W	24	1800	3.5	2100×1750	2300	1200	2100	Rear		6250	3250		2250	38.0		
P24-C0240	W			4							6850	3850			44.0		
P24-C0300	W			5						2750×2560	7800	4050	3040×4050		54.0		
P27-C0120	W			2							5350	2450			26.0		
P27-CO150	W			2.5						07500710	5550	2450	00.404000		32.0		
P27-CO180	W		0005	3	0400. 405-	2200	1200	2400	_	2750×2710	5850	2750	3040×4200	0050	38.0		
P27-CO210	W	27	2025	3.5	2100×1950	2300	1200	2100	Rear		6250	3250		2250	44.0	-	
P27-CO240	W			4					2750×2762	6850	3850	2040~4250		50.0	†		
P27-CO300	W			5	1					2750×2760	7800	4050	3040×4250		62.0		

W: Wide car

Note:

- The above table complies with EN81-20/50 standards.
- Please contact to our local distributor to check for other standards.
- In case of travel is 40m or more, add 150mm to OH dimension and TC dimension at the above-stated dimension.
- Hoistway dimensions take into account the error of up to 50 mm after the construction work.
- The hoistway dimensions in chart are the minimum requirement.
 The hoistway structure wall must be 150mm thick or more.
- Piping, wiring and cables which is not relevant to elevator are prohibited inside the hoistway.
- OH value in the chart is for standard ceiling. As for the non-standard cars, please consult our local distributor.
- If the size of the hoistway is greater than the above sizes, OH will be larger. Please consult our local distributor.
- If the location of Power source panel, Control panel and Electric power supply are changed. Please consult our local distributor.

Works by Others

Works below are not included in elevator installation works:

► Hoistways

- 1. Hoistway construction and fire-proofing work, and opening work for jambs, indicators and push-buttons, etc.

 Please note that chipping or padding work is performed as required, in case the structural error is 30 mm or more.
- 2. Installation work of separating beams, intermediate beam, back beam and lateral beams (as required).
- 3. Installation work of the base plate for each floor and of bed steel for furnishing the equipments related to landing entrance, in case of hoistways of steel structure of PC structure.
- 4. Fire-proofing work for the steel frame material in steel structured hoistways, and fire-proofing work around landing entrances (as required).
- 5. Finishing works of walls and floors, etc., around entrances, after furnishing equipments related to landing entrances.
- 6. Furnishing work of base steel or others for furnishing rail brackets, particularly for elevated floor heights (as required).
- 7. Installation work of the entrance or the gangway for pit inspection (as required).
- 8. Water-proofing work of the pit (including drainage if necessary).
- 9. Re-arrangement of the building body in case of usable space under the pit.
- 10. Installation work of emergency exits for rescue purposes when there are floors at which the elevator does not stop and installation of a fascia plate.
- 11. Shelter equipments from rain at landing entrances directly exposed to the air in the place like roof.
- 12. Installation work of hooks or beams on top of the elevator shaft.
- 13. Installation work of lighting in hoistway (as required).
- 14. Installation work of vent opening at the top of shaft (as required).
- 15. Installation work of a net or wall to prevent falling into the pit (in case of the pit level is different.)
- 16. All works related to the building structure other than those above.

► Machine rooms

- 1. Construction work for machine rooms and installation works for their entrances (including sound proofing work if necessary)
- 2. Fire-proofing work for machine rooms and opening work for machine room floors.
- 3. Installation work of machine beam supports and spacers.
- 4. Cinder concreting and its finishing work after floor piping in machine rooms.
- 5. Installation work of hooks or beams on ceilings in machine rooms.
- 6. Installation work of stairs leading to machine rooms and stairs in machine rooms (if necessary)
- 7. Installation work of lighting windows.
- 8. Dust-proof finish of the floor.

► Works for Equipment

- 1. Wiring work of the power supply for motors and that for lighting equipments, and of grounding to the power source panels of elevators in the Elevator shaft.
- 2. Wiring work of the power supply to the supervisory panels.
- 3. Piping and wiring works of interphones outside the hoistway and of others necessary for elevators.
- 4. Supply and installation of switching devices for emergency power supply in the event of power failure and two pairs of relay contacts for normal / emergency power identification, and their piping and wiring work (if necessary).
- 5. Piping and wiring work of supervisory panels, alarm panels and inter-communication systems, etc., outside the hoistways.
- 6. Furnishing work of receptacles for inspection in pits.

► Temporary Works

The following matters must be arranged:

- 1. To secure the site office for installation work and the stock yard for materials without charge.
- 2. Enclosure to be used during the installation work.
- 3. Supply of electric power for installation work and the trial operation for adjustment.
- 4. Security to ensure sufficient passage for carrying heavy goods.
- 5. Regarding the use of the elevator for the building construction work, a contract with a separate written estimate is required.

Note

When planning elevator equipments, please take the following items into consideration:

- 1. Provide the power facility so that the voltage regulation of power supply at the receiving terminals in the hoistway is kept within $\pm 10\%$ for motor, and $\pm 2\%$ for lighting equipments.
- 2. In the hoistways, please ensure the temperature does not exceed 40 °C and humidity 90% (monthly mean) and 95% (daily mean).
- Please do not allow ingress of chemically toxic gas or excess amount of dust enter into the hoistways, that makes the metal or electrical contacts corrode.

For the estimate inquiry, please inform us of the following:

- 1. Building name and address.
- 2. Desired type and number of set.
- 3. Number of stops.
- 4. Floor height.
- 5. Voltage and frequency of main power supply.
- 6. Desired completion date.

Memo

Global Network

- Head office / Manufacturing base
- Head office

A TOSHIBA ELEVATOR AND BUILDING SYSTEMS CORPORATION

Head Office: 72-34, Horikawa-cho, Saiwai-ku, Kawasaki 212-8585, Japan Factory: 1 Toshiba-cho, Fuchu City, Tokyo 183-8511

B TOSHIBA ELEVATOR (SHENYANG) CO., LTD.

Head Office: No.5 Feiyun Road Hunnan New District Shenyang, The People's Republic of China

TOSHIBA ELEVATOR (CHINA) CO., LTD.

Head Office: No. 685 Wen Chuan Road, Baoshan District, Shanghai 201901, The People's Republic of China.

CHEVALIER (HK) LIMITED

59

Head Office: 22nd Floor, Chevalier Commercial Centre, 8 Wang Hoi Road, Kowloon Bay, Hong Kong

M S ELEVATORS Sdn. Bhd.

Head Office: 8th Floor, Wisma Penang Garden, 42 Jalan Sultan Ahmad Shah, 10050 Penang, Malaysia. Factory: 2530, Lorong Perusahaan 10, Prai Industrial Estate, 13600 Prai, Province, Wellesley, Malaysia.

M S ELEVATORS ENGINEERING Sdn. Bhd.

Head Office: 8th Floor, Wisma Penang Garden, 42
Jalan Sultan Ahmad Shah, 10050 Penang, Malaysia.

KL Office: Wisma MS, No.15, Jalan 2/116 D,

Kuchai Entrepreneurs' Park, Off Jalan Kuchai Lama, 58200 Kuala Lumpur, Malaysia.

TOSHIBA JOHNSON ELEVATORS (INDIA) PVT. LTD.

Head Office: 602, 6th Floor, C&B Square, Sangan Complex 127, Andheri Kurla Road. Andheri (East), Mumbai, 400059 India

TOSHIBA ELEVATOR MIDDLE EAST (L.L.C.)

Head Office: P. O. Box 16733, Dubai, UAE

through our technology and our spirit.

This planet is our shared heritage. We must live together, grow together and delight in one another.

[For more information]

Toshiba Elevator and Building Systems Corporation

Head office: 72-34, Horikawa-cho, Saiwai-ku, Kawasaki 212-8585, Japan

https://www.toshiba-elevator.co.jp/elv/infoeng/

Together with our global partners, we connect with Asia and then the world,

