



# MACHINE-ROOM-LESS FREIGHT AND SERVICE ELEVATOR

# TO MOVE FREIGHT, YOU NEED AN ELEVATOR THAT'S BUILT FOR FREIGHT

To move freight, you need an elevator that is designed specifically for moving freight. That means a powerful hoisting machine. Durability to cope with rough treatment. A smooth ride to handle fragile loads. Leveling accuracy for easy loading and unloading. Wide doors that maximize the usage of space in the car.

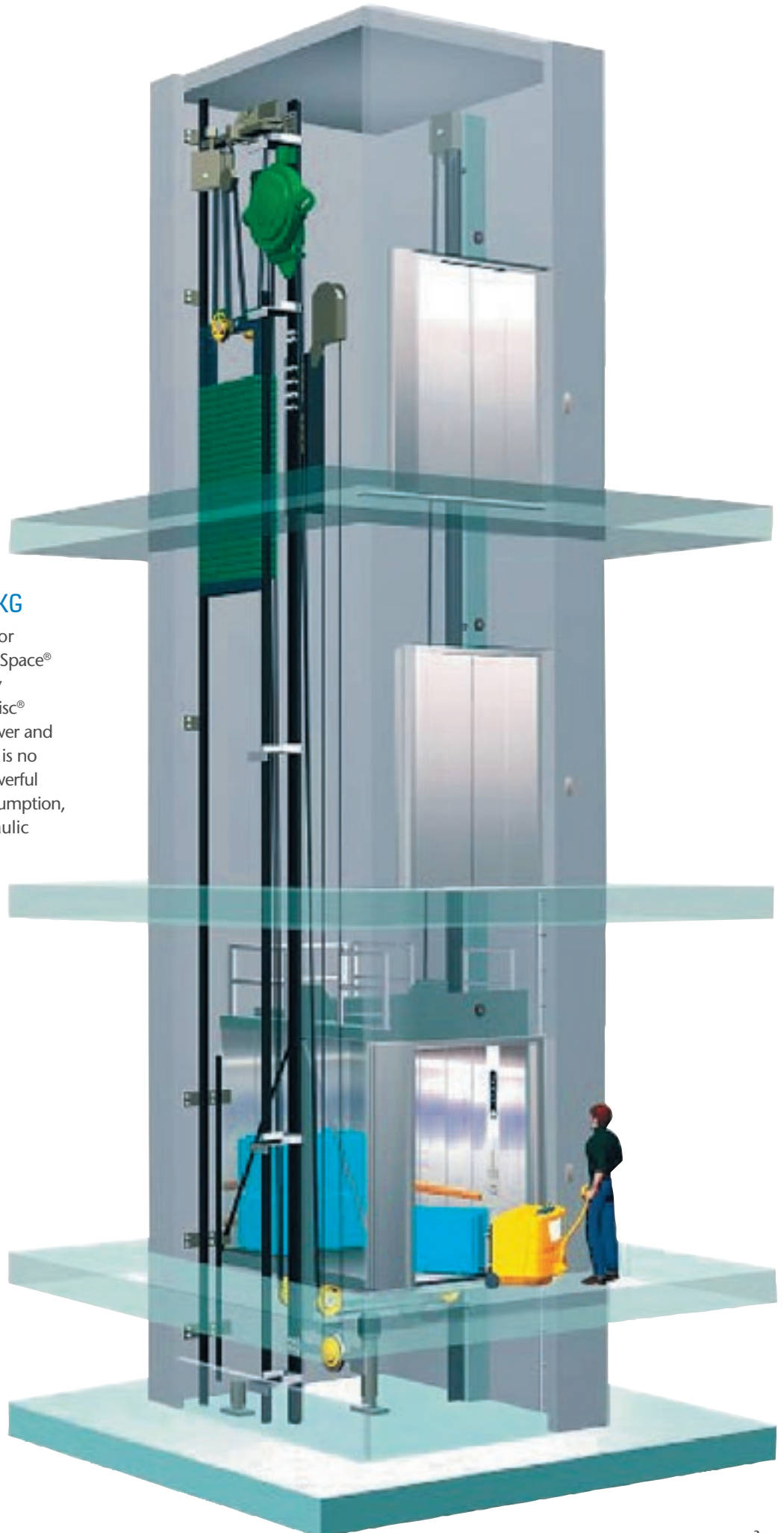
The powerful and high-performance KONE TranSys™ freight elevator solution is ideal for a multitude of demanding vertical freight transportation tasks in a variety of buildings: supermarkets, shopping malls, airports, warehouses, hospitals, hotels, industrial plants and offices.

The new KONE TranSys™ freight elevator brings all of the advantages of machine-room-less elevator technology to the higher range of freight elevators.



## THE POWER TO LIFT 4000 KG

The KONE TranSys™ freight elevator solution is based on the KONE MonoSpace® platform. It incorporates the highly reliable and eco-efficient KONE EcoDisc® hoisting machine for exceptional power and performance. Moving up to 4000 kg is no problem for this workhorse. This powerful machine also reduces electricity consumption, compared with a conventional hydraulic drive.



# OUTSTANDING POWER AND PERFORMANCE

## EXCEPTIONALLY SPACE-EFFICIENT

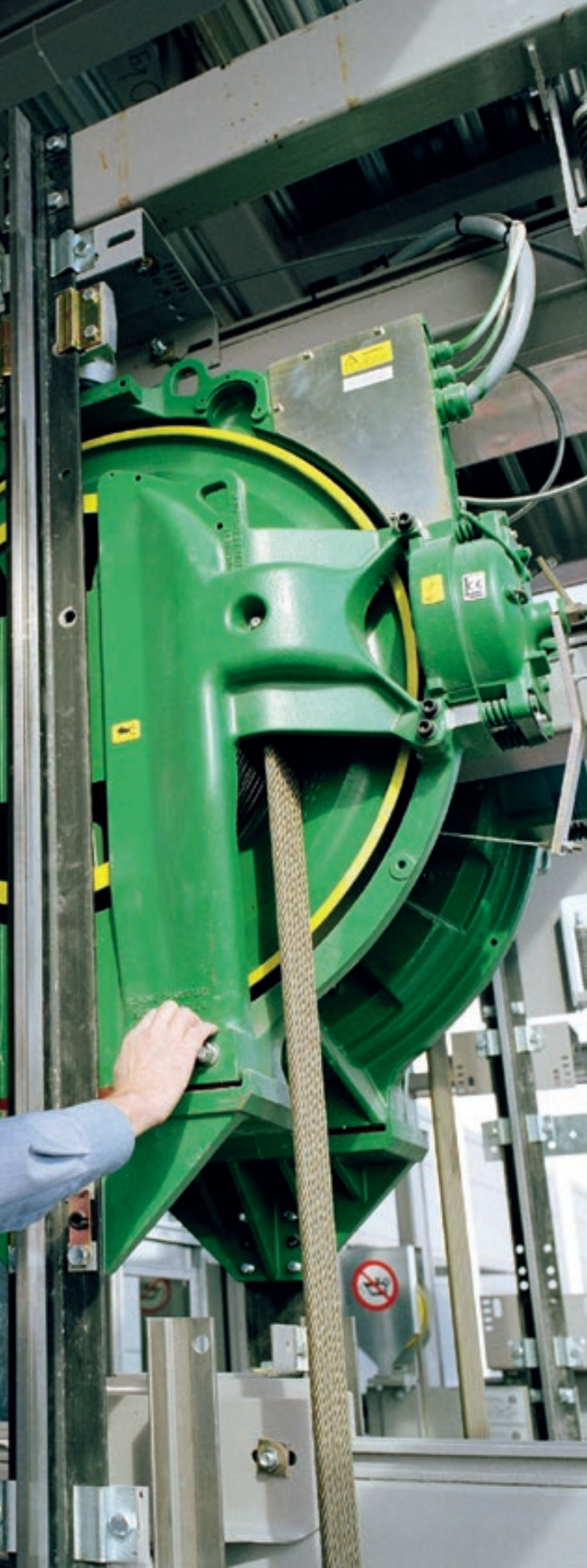
The KONE TranSys™ freight elevator needs no machine-room at all. This means:

- Easier positioning of the elevator in the building
- Reduced building construction time and costs
- More efficient, safer elevator installation processes
- Up to 30m<sup>3</sup> extra building space that can be used more profitably.

## RELIABLE, HIGH PERFORMANCE

The KONE TranSys freight elevator solution provides reliable operation, outstanding traffic performance and a smooth ride. The ride quality is the result of the motor's low rotational speeds. The V<sup>3</sup>F variable frequency drive prevents current peaks and ensures excellent stopping accuracy, making it easier and safer to load and unload.





### **NO OIL AND LOW ENERGY USAGE**

The low friction, gearless construction of the KONE EcoDisc® hoist reduces wear, so it increases the reliability and durability of the machine. KONE EcoDisc is also compact and eco-efficient – it consumes half as much electricity as a conventional hydraulic machine. And no oil is required, reducing fire risk and environmental impact.

### **EASY LOADING AND UNLOADING**

Powered by the gearless KONE EcoDisc machine, the KONE TranSys freight elevator solution features quiet operation, smooth running to protect fragile loads and  $\pm 5$ mm leveling accuracy to make loading and unloading easier.

### **WIDE LOAD RANGE**

The KONE TranSys freight elevator solution is available in different car sizes to transport freight of various sizes and loads. With a maximum load capacity of 4000 kg, it can meet virtually every freight transportation requirement in a variety of building types.

# SPECIAL DESIGN

The KONE TranSys™ cars and doors are built for the job. The car is finished in stainless or powder-painted steel, protected by buffer rails, and equipped with direct, fluorescent lighting. A second car operating panel is optional and combined with a 400 mm minimum floor-to-floor distance to suit the through-car application.



## MAIN SPECIFICATIONS

Load capacity (kg)	1600, 2000, 2500, 3000, 3500, 4000
Speed (m/s)	Up to 1.0
Max. travel (m)	Up to 40
No. of floors	Up to 12
Control	Down or full collective
Group size	Simplex or duplex
Hoisting machine	Gearless KONE EcoDisc®
Doors	Automatic center opening
Car door height (cm)	2100, 2200, 2300, 2400
Code compliance	EN81-20, EN81-1:1998, EN81-70 and GB7588-2003

# EXTRA-WIDE DOORS

The KONE TranSys™ elevator is equipped with full-width, center opening doors, which retract fully for the easy movement of passengers and goods. Further door area protection includes a curtain of light. The strong double skin door panels are finished in stainless, powder-painted steel or zinc coated steel.



## SUPERIOR PERFORMANCE, COMPARED WITH CONVENTIONAL HYDRAULIC DRIVE

Case example, Load 2000 kg/0.5 m/s	Conventional hydraulic	Gearless KONE TranSys™
Speed (m/s)	0.6	0.5
Motor power (kW)	28	6
Starting current (AMP)	112 S/D	18
Main fuse size (AMP)	63	16
Power consumption (kWh) > 100,000 starts/year	10.400	5800
Thermal losses (kW)	5.8	1.9
Oil requirements (L)	240	0
Noise (dBA)*	Typically 70	Less than 55
Machine room (m <sup>2</sup> )	6	0

\* Measured 1 m from machine.

# A WIDE CHOICE OF DURABLE INTERIOR MATERIALS

## CAR OPERATING PANEL (COP)



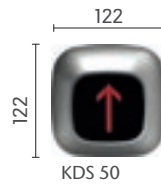
Full height COP  
Brushed stainless steel faceplate



## HALL INDICATOR (HI)



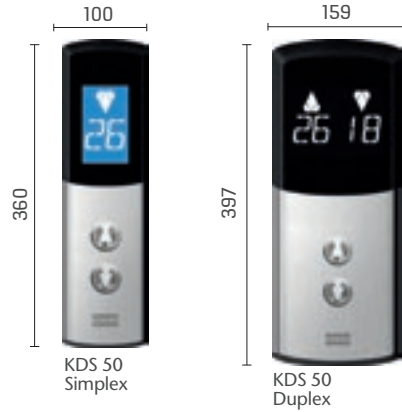
## HALL LANTERN (HL)



## LANDING CALL STATION (LCS)



## LANDING CALL STATION WITH INDICATOR (LCI)



Note:  
For full landing  
signalization  
offering please  
see detailed  
signalization  
marketing  
brochures or  
contact our  
sales person.

## CEILING



Type: **LF1**  
Finishing: PP10 White painted RAL 9010  
Lighting: T5 fluorescent tubes



Type: **CL88**  
Finishing: Silver brushed stainless steel (ST4)  
Silver brushed stainless steel (ST43)  
Lighting: LED spot



Type: **CL91**  
Finishing: Silver brushed stainless steel (ST4)  
Silver brushed stainless steel (ST43)  
PP10 White painted RAL 9010  
Lighting: T5 fluorescent tubes



Type: **CL94**  
Finishing: Silver brushed stainless steel (ST4)  
Silver brushed stainless steel (ST43)  
PP10 White painted RAL 9010  
Lighting: T5 fluorescent tubes

## CAR BUFFER RAILS



**BR1**  
Steel



**BR1**  
Wood

## HANDRAIL



**HR61**  
Round silver brushed



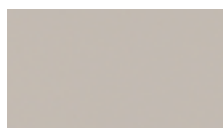
**HR64**  
Bended silver brushed  
▪ EN81-70 compliant  
▪ AS1735.12 compliant  
▪ G compliant

## WALL MATERIALS

### Painted steel



**PP18**  
Linen Brown



**PP20**  
Wool Gray

Available for Car door  
and Landing door

### Brushed stainless steel



**ST4**  
Silver



**ST43**  
Silver

### Textured steel



**TS2**  
Flemish Linen

## FLOOR MATERIALS

### Rubber



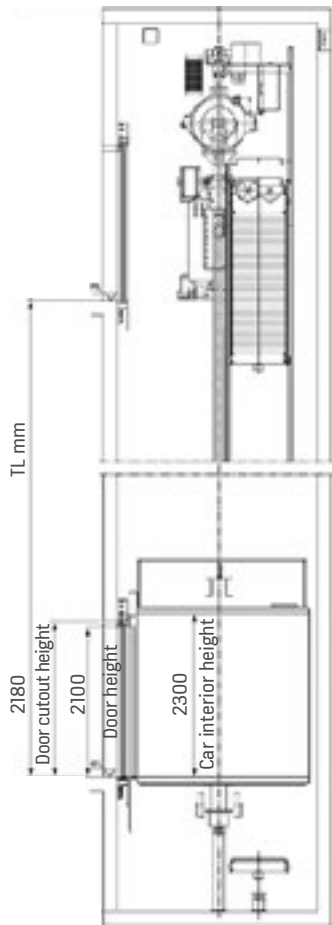
**RC7**  
Black Coin Pattern

### Zinc coated steel

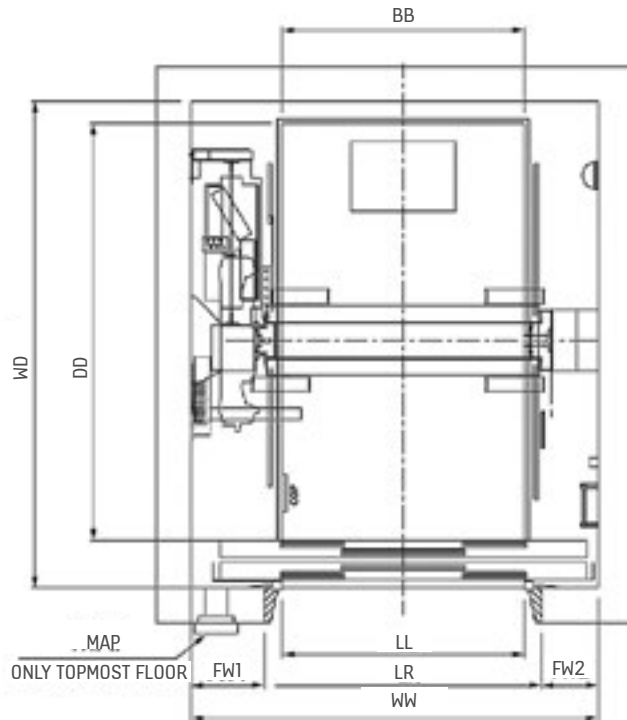


**FE-1**  
Tear Plate

# PLANNING GUIDE



Shaft dimensions



Shaft plan

## DIMENSIONS IN HORIZONTAL SECTION WITHOUT FRONT WALL\*

Max. load (kg)	Car size (mm)	Car type	Shaft width (mm)	Shaft depth, nominal (mm)	Door width, nominal (mm)
1600	1400 x 2400	SEC	2350	2800	1400
1600	1400 x 2400	TTC	2350	2950	1400
2000	1500 x 2700	SEC	2500	3100	1500
2000	1500 x 2700	TTC	2500	3250	1500
2500	1800 x 2700	SEC	2900	3080	1800
2500	1800 x 2700	TTC	2900	3250	1800
3000	2000 x 2750	SEC	3285	3130	2000
3000	2000 x 2750	TTC	3285	3300	2000
3500	2100 x 3000	SEC	3360	3290	2100
3500	2100 x 3000	TTC	3360	3370	2100
4000	2100 x 3400	SEC	3360	3690	2100
4000	2100 x 3400	TTC	3360	3770	2100

## DIMENSIONS IN VERTICAL SECTION

Max. load (kg)	Car interior height (CH)	Pit depth (PH) nominal (mm)	Overhead (SH) nominal (mm)
1600/2000	2200	1450	3900
1600/2000	2300	1450	3900
1600/2000	2400	1450	3900
2500/3000	2200	1600	4100
2500/3000	2300	1600	4200
2500/3000	2400	1600	4300
3500/4000	2200	1800	4200
3500/4000	2300	1800	4200
3500/4000	2400	1750	4300

\* Car with front wall is also available as standard. Correspondent dimensions are available in technical documentation for sales documents.

### Car types:

TTC = Through Type Car (front and rear opening)

SEC = Single Entrance Car

# CONTROL SYSTEM FEATURES

## 1. SAFETY FEATURES

### Rescue and failure detection

<b>COD</b>	Correction drive feature
<b>MOP TC</b>	Motor Protection
<b>PDD N</b>	Phase failure detection
<b>RDF RC</b>	Recall drive, drive buttons up and down, extra run button to enable
<b>EEC C</b>	Emergency exit contact in car
<b>DTS</b>	Drive time supervision
<b>LOA M</b>	Locking of automatic car door, mechanical lock
<b>DZI N</b>	Door zone indication, no buzzer

### Precautions for special emergencies

<b>FID BO</b>	Fire detection, whole building, doors open
<b>FID SO</b>	Fire detection, manual switch, doors open
<b>FRD</b>	Fireman's drive

### Operation during stand-by power and recovery from power break

<b>EBD A</b>	Emergency battery drive, automatic
<b>LPS TN</b>	Elevator position synchronising, terminal floor, nominal speed
<b>CEL S</b>	Car emergency light, separate light
<b>EBS S</b>	Emergency battery supply with supervision
<b>EPD MCF</b>	Emergency power drive, to main floor, doors closed, full service

### Means of emergency communication

<b>ABE C</b>	Alarm bell under/top of car
<b>ABE M</b>	Alarm bell at main floor
<b>ISE F</b>	Five-way intercom system
<b>ISE N</b>	Net intercom system

### Other safety features and maintenance

<b>BOF</b>	Buttons to operate car doors for service purposes
<b>CCM A</b>	Car calls from machine room, all floors, also landing calls
<b>CDC</b>	Car door contact
<b>CDL O</b>	Car door limit switches, separate open limit
<b>DOP</b>	Door opening prevention switch in Maintenance Access Panel
<b>EMH O</b>	Emergency stop switch in well, one switch
<b>EMR</b>	Emergency stop switch on car roof
<b>OSG C</b>	Overspeed governor
<b>OST T</b>	Overspeed governor test
<b>SED WSR</b>	Service Drive, without limitations, car roof buttons with extra run buttons
<b>SGE</b>	Safety gear contact
<b>TWS C</b>	Tension weight switch of overspeed governor, car
<b>LCD</b>	Landing calls disconnect

## 2. PASSENGER COMFORT FEATURES

### Entering and exiting

<b>ACL B</b>	Accurate Releveling, Doors Open
<b>NUD S</b>	Nudging Service, shortened time by counting stops
<b>DCB</b>	Door close button
<b>DCB I</b>	Door close button with indicator
<b>DOB O</b>	Door open button, normally open
<b>DOB OI</b>	Door open button with indicator
<b>QCC</b>	Quick close from new car call
<b>SRC RNC</b>	Curtain of light
<b>REO O</b>	Reopen by landing call

### Protection against inconvenience caused by misuse

<b>FCC</b>	False Car Call Cancelling
<b>LCC</b>	Landing Call Cross Coupling
<b>SPB BP</b>	Stuck push button supervision
<b>CCB</b>	Car Calls Backwards

### Traveling comfort, including ventilation and light

<b>OCL A</b>	Operation of car light
<b>OCV A</b>	Operation of car ventilation, automatic
<b>OCV AF</b>	Operation of car ventilation, automatic, switch to turn off
<b>LWD</b>	Load Weighing Device
<b>CLS O</b>	Car Light Supervision

## 3. SECURITY FEATURES

### Anti-burglary

<b>LOC E</b>	Locking of car calls, reopen devices inoperative in closed doors, mechanically
<b>LOC O</b>	Locking of car calls, reopen devices operate normally
<b>LOL E</b>	Locking of landing calls, reopen devices inoperative in closed doors, mechanically
<b>LOL O</b>	Locking of landing calls, reopen devices operate normally
<b>FRE</b>	Fast recall

## 4. CONTROL FEATURES

### Adaptation to building

<b>BMV R</b>	Braking method of V <sup>3</sup> F-drive
<b>CLF C</b>	Car light fuse and car light main switch
<b>MAF C</b>	Main fuses control panel
<b>MAS C</b>	Main switch in control panel
<b>FCS L</b>	Failure current switch, one phase for lighting
<b>TTC CTS</b>	Through type car

### Priority services and service modes for special use

<b>DOE B</b>	Door open with extended time
<b>OSS COI</b>	Out of service switch in car, doors open, lights on, indication
<b>OSS LC</b>	Out of service switch at landing, doors closed, lights off
<b>PRC K</b>	Priority operation
<b>PRL LA/LO</b>	Priority at landings, low priority, all car calls/ one car call
<b>ATS C</b>	Attendant service, using car call buttons as indicators

### Parking of free cars

<b>PAD C</b>	Parking at pre-defined floor, doors closed
<b>PAM C</b>	Parking at main floor, doors closed
<b>PAS C</b>	Parking at secondary floor, doors closed

### Real-time adaptation to prevailing traffic

<b>IDP</b>	Intensive down peak
<b>ITP</b>	Intensive two way peak
<b>IUP</b>	Intensive up peak
<b>BLF</b>	Bypass load function

## 5. INFORMATION FEATURES

### Information to passengers at landing

<b>CPI EO/LO</b>	Car position indicator at entrance floor/landings, dot matrix
<b>GOL ETD</b>	Acoustic device for arrival, at landing
<b>LCL</b>	Landing call registered light
<b>LAL DB</b>	Lanterns at landing, at deceleration points, switch on if no DIR

### Information to passengers in car

<b>ACU F</b>	Interface, loudspeaker with interface for announcement device
<b>CCL</b>	Car call registered light
<b>CPI CO</b>	Car position indicator in car, dot matrix
<b>CRB C</b>	Car call registered buzzer
<b>DIA C</b>	Direction arrows in car
<b>OLF C</b>	Car overload function

### Information in Maintenance Access Panel

<b>CPI PS</b>	Car position indicator in maintenance access panel
<b>SCN N</b>	Start counter, number of starts, not loosing data in power failure
<b>DAL GP</b>	Disturbance alarm
<b>TSD ES</b>	Traffic supervision display, with LEDs, in supervision room
<b>LIL AM</b>	Lift link, alarm, mode signals
<b>LIL AMB</b>	Lift link, alarm, position binary
<b>KONE E-LINK™</b>	Elevator Monitoring and command system

Black font: Standard built in features  
Blue font: Optional features

KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE NanoSpace™ and KONE UltraRope®.

KONE employs close to 52,000 dedicated experts to serve you globally and locally.

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