MACHINE-ROOM-LESS FREIGHT AND SERVICE ELEVATOR

KONE TranSys™
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.
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 30m³ 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 V²F 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 ±5mm 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.

<table>
<thead>
<tr>
<th>MAIN SPECIFICATIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity (kg)</td>
<td>1600, 2000, 2500, 3000, 3500, 4000</td>
</tr>
<tr>
<td>Speed (m/s)</td>
<td>Up to 1.0</td>
</tr>
<tr>
<td>Max. travel (m)</td>
<td>Up to 40</td>
</tr>
<tr>
<td>No. of floors</td>
<td>Up to 12</td>
</tr>
<tr>
<td>Control</td>
<td>Down or full collective</td>
</tr>
<tr>
<td>Group size</td>
<td>Simplex or duplex</td>
</tr>
<tr>
<td>Hoisting machine</td>
<td>Gearless KONE EcoDisc®</td>
</tr>
<tr>
<td>Doors</td>
<td>Automatic center opening</td>
</tr>
<tr>
<td>Car door height (cm)</td>
<td>2100, 2200, 2300, 2400</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Case example, Load 2000 kg/0.5 m/s</th>
<th>Conventional hydraulic</th>
<th>Gearless KONE Transys™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed (m/s)</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Motor power (kW)</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>Starting current (AMP)</td>
<td>112 S/D</td>
<td>18</td>
</tr>
<tr>
<td>Main fuse size (AMP)</td>
<td>63</td>
<td>16</td>
</tr>
<tr>
<td>Power consumption (kWh) &gt; 100,000 starts/year</td>
<td>10.400</td>
<td>5800</td>
</tr>
<tr>
<td>Thermal losses (kW)</td>
<td>5.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Oil requirements (L)</td>
<td>240</td>
<td>0</td>
</tr>
<tr>
<td>Noise (dBA)*</td>
<td>Typically 70</td>
<td>Less than 55</td>
</tr>
<tr>
<td>Machine room (m²)</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

* Measured 1 m from machine.
A WIDE CHOICE OF DURABLE INTERIOR MATERIALS

CAR OPERATING PANEL (COP)

KDS 50

Brushed stainless steel faceplate

Full height COP
**CEILINGS**

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

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

- **Type:** CL91
  - Finishing: Silver brushed stainless steel (ST4)
  - Lighting: T5 fluorescent tubes

**CAR BUFFER RAILS**

- **BR1**
  - Steel

- **BR1**
  - Wood

**HANDRAIL**

- **HR61**
  - Round silver brushed

- **HR64**
  - Bended silver brushed

**WALL MATERIALS**

- Painted steel
  - PP1B Linen Brown
  - PP20 Wool Gray

- 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

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

Shaft dimensions

- Car interior height
  - SH = 3900 mm
  - TL = 2180
- Door cutout height = 2100
- Door height = 2300

<table>
<thead>
<tr>
<th>DIMENSIONS IN HORIZONTAL SECTION WITHOUT FRONT WALL*</th>
<th>DIMENSIONS IN VERTICAL SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. load (kg)</td>
<td>Car size (mm)</td>
</tr>
<tr>
<td>1600</td>
<td>1400 x 2400</td>
</tr>
<tr>
<td>1600</td>
<td>1400 x 2400</td>
</tr>
<tr>
<td>2000</td>
<td>1500 x 2700</td>
</tr>
<tr>
<td>2000</td>
<td>1500 x 2700</td>
</tr>
<tr>
<td>2500</td>
<td>1800 x 2700</td>
</tr>
<tr>
<td>2500</td>
<td>1800 x 2700</td>
</tr>
<tr>
<td>3000</td>
<td>2000 x 2750</td>
</tr>
<tr>
<td>3000</td>
<td>2000 x 2750</td>
</tr>
<tr>
<td>3500</td>
<td>2100 x 3000</td>
</tr>
<tr>
<td>3500</td>
<td>2100 x 3000</td>
</tr>
<tr>
<td>4000</td>
<td>2100 x 3400</td>
</tr>
<tr>
<td>4000</td>
<td>2100 x 3400</td>
</tr>
</tbody>
</table>

| 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
## 1. SAFETY FEATURES

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

Precautions for special emergencies:
- FID AO: Fire detection, whole building, alternative return floor, doors open
- FID BO: Fire detection, whole building, doors open
- FID SO: Fire detection, manual switch, doors open
- FRD: Freeman’s drive

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

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

### Means of emergency communication

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

### Other safety features and maintenance

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

## 2. PASSENGER COMFORT FEATURES

### Entering and exiting

- ACL B: Accurate Relevelling, Doors Open
- NUD S: Nudging Service, shortened time by counting stops
- DCB: Door close button
- DCB I: Door close button with indicator
- DOB O: Door open button, normally open
- DOB OI: Door open button with indicator
- QCC: Quick close from new car call
- SRC RNC: Curtain of light
- RED O: Reopen by landing call
- FCC: False Car Call Cancelling
- LCC: Landing Call Cross Coupling
- SPB BP: Stuck push button supervision
- CCB: Car Calls Backwards

**Traveling comfort, including ventilation and light**

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

## 3. SECURITY FEATURES

### Anti-burglary

- LOC E: Locking of car calls, reopen devices inoperative in closed doors, mechanically
- LOC O: Locking of car calls, reopen devices operate normally
- LOL E: Locking of landing calls, reopen devices inoperative in closed doors, mechanically
- LOL O: Locking of landing calls, reopen devices operate normally
- FRE: Fast recall

### SPECIAL FEATURES

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

### Priority services and service modes for special use

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

### Parking of free cars

- PAD C: Parking at pre-defined floor, doors closed
- PAM C: Parking at main floor, doors closed
- PAS C: Parking at secondary floor, doors closed

### Real-time adaptation to prevailing traffic

- IDP: Intensive down peak
- ITP: Intensive two way peak
- IUP: Intensive up peak
- BLF: Bypass load function

## 4. CONTROL FEATURES

### Adaptation to building

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

### Parking in service

- ACU F: Interface, loudspeaker with interface for announcement device
- CCL: Car call registered light
- CPI CO: Car position indicator in car, dot matrix
- CRB C: Car call registered buzzer
- DIA C: Direction arrows in car
- OLF C: Overload function

### Information in Maintenance Access Panel

- CPI PS: Car position indicator in maintenance access panel
- SCN N: Start counter, number of starts, not losing data in power failure
- DAL GP: Disturbance alarm
- TSD ES: Traffic supervision display, with LEDs, in supervision room
- LIL AM: Lift link, alarm, mode signals
- LIL AMB: Lift link, alarm, position binary
- KONE E-LINK: Elevator Monitoring and command system
- CRM D/DV: KONE China Remote Monitoring, data transmission and voice alarm service

**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.