

**GiantKONE**

# GFS25 GFN25

Freight Elevator(SMR)

Freight Elevator(MRL)

**GiantKONE Elevator Co., Ltd.**

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**KONE**

a KONE  
Company



# CENTENNIAL KONE AND GLORY

Founded in 1910 in Helsinki, Finland, KONE Group pioneered the application of machine-room-less technology and has developed into a global leader in the elevator and escalator industry, operating in over 60 countries worldwide.

GiantKONE Elevator Co., Ltd. was established in China in 2005 as a subsidiary of KONE Group. Since its inception, it has been dedicated provide high-quality urban passenger transportation solutions. From a comprehensive product portfolio to advanced R&D, manufacturing, installation, and maintenance technologies, as well as diverse visual design options, GiantKONE delivers new experiences for its customers.

## 1910

KONE Group was Founded in 1910 in Helsinki, Finland.

## 2005

GiantKONE established in China in 2005 as a subsidiary of KONE Group.

## 3,000+

Staff.

## 50,000

Maximum annual production capacity.

## GFS25/GFN25 Specifications

Freight elevator adopts high efficiency and energy-saving permanent magnet synchronous gearless traction machine, new 4:1 structure suspension system layout, door drive mechanism with excellent performance, high-strength, and wear-resistant car design. It is suitable for factories, production lines, warehouses, shopping malls, shopping centers, exhibition halls, and other places.

| Speed (m/s) | Load Capacity (kg) | Maximum Travel (m) | Maximum Number of Landings |
|-------------|--------------------|--------------------|----------------------------|
| 0.5         | 2,000/3,000/5,000  | 30                 | 12                         |
| 1.0         | 2,000/3,000/5,000  | 50                 | 16                         |

### Classification of loads

The elevator is used based on the type of load, which is divided into three categories.

#### ■ Class A loads

Loading and unloading by hand or with the aid of light carts. The load should be evenly distributed on the bottom of the car. It should not be concentrated in one place.

#### ■ Class C loads

C1: Industrial truck load, the truck can be transported with the elevator. The total weight of the handling tool and the goods during loading and unloading shall not exceed the elevator's maximum weight capacity.

\* Remark: For freight elevators, the default setting is C1; for other Class C loads, please consult the relevant GKE technical staff.

## ENERGY EFFICIENT PERMANENT MAGNET SYNCHRONIZATION GEARLESS TRACTION MACHINE

### 1 SPACE SAVING

The permanent magnet synchronous lift saves space and improves performance. It is easy to transport, lift and install.

### 2 STABLE OPERATION

The gearless traction machine does not need to use a gear reduction mechanism, which makes it quieter and smoother.

### 3 GREEN AND ENVIRONMENTALLY FRIENDLY

The gearless traction machine doesn't need lubricating oil.

There's no need to replace the oil in the daily maintenance process.

It avoids the pollution and flammable danger caused by the leakage of oil.

### 4 ENERGY SAVING AND CONSUMPTION REDUCTION

The gearless tractor has a low starting current and high transmission efficiency.

The gearless tractor uses less energy than conventional machines.



## INTELLIGENT CONTROLLER

- Advanced vector control technology offers superior motor speed regulation, enhancing elevator comfort during operation.
- The integration of modular computer control and reliable frequency conversion technology creates a compact system, greatly improving control and operational efficiency.
- Convenient door nudging button allows for hands-free operation when handling goods.
- Reinforced cabin and door design reduces wear and tear caused by cargo collisions.
- The car frame, bottom, guide rails, and other components can be tailored to different working conditions and customer needs, offering flexibility.

**FLEXIBLE DECORATION  
TO COMPLEMENT  
BUILDING DESIGN**

**Load Capacity ≤5000kg**

| 218 (Std.) |

| Car with COP 218 |



- CEILING:** Integrated ceiling for freight elevators  
(safety windows for MRL freight elevators)
- CAR WALLS:** Painted steel plate
- CAR DOOR:** Painted steel plate
- COP:** 218
- FLOOR:** Checkered steel plate

B - Built-in(Standard)  
O - Optional

| ITEMS                  | MATERIAL                 | CONFIGURATION |
|------------------------|--------------------------|---------------|
| Car walls & Car door   | Painted steel plate      | B             |
|                        | Hairline stainless steel | O             |
| COP face plate         | Hairline stainless steel | B             |
| Floor                  | Checkered steel plate    | B             |
| Door hall & door frame | Painted steel plate      | B             |
|                        | Hairline stainless steel | O             |
| Wall frame             | Painted steel plate      | O             |
|                        | Hairline stainless steel | O             |



Dot Matrix



Segment

| Color options for Painted steel plate |



RAL 7040 Graphite Gray



RAL 7005 Fresh Gray



RAL 9010 Ivory White

# ELECTRICAL FUNCTION CONFIGURATION TABLE

● Standard  
○ Optional

## SECURITY FUNCTIONS

### Rescue and fault monitoring

|         |   |   |
|---------|---|---|
| ASC T   | Uplink overspeed protection             | ● |
| BFS     | Buffer detection                        | ● |
| BMV R   | Resistor braking                        | ● |
| CCM A   | Call in the machine room                | ● |
| CDC     | Car door detection                      | ● |
| CDL O   | Car door limit                          | ● |
| CLFM    | Car lighting switch                     | ● |
| COD     | Correction run                          | ● |
| DCD     | Door lock detection                     | ● |
| DOP     | No door allowed                         | ● |
| DSC     | Downstream overspeed protection         | ● |
| DTS     | Run time detection                      | ● |
| EEC C   | Car exit detection                      | ○ |
| EEC S   | Shaft exit inspection                   | ○ |
| EMH O   | Pit emergency stop                      | ● |
| EMR     | Car roof emergency stop                 | ● |
| IDJ     | Communication evaluation                | ● |
| LAF     | Stop at a different station             | ● |
| LCM A   | Machine room outbound calls             | ● |
| MAF M   | Machine room main switch                | ● |
| MOP T   | Overheating protection                  | ● |
| OLP     | Trip protection                         | ● |
| OSG CM  | Speed limiter safety switch             | ● |
| PAS U   | Give priority to release                | ● |
| PDD N/R | Phase detection                         | ● |
| RDC O   | Repeatedly opening and closing the door | ● |

|        |  |   |
|--------|--|---|
| RDF CN | Rescue run   | ● |
| SDB    | Fault self-diagnosis                               | ● |
| SGE    | Safety gear safety switch                          | ● |
| TEL    | Failure classification                             | ● |
| TWS C  | Car speed limiter rope<br>Tightening safety switch | ● |
| UCMP   | Car accidental movement protection                 | ● |
| ACU C  | Voice comfort                                      | ● |

### Emergency operation

|        |                          |   |
|--------|--------------------------|---|
| FID BO | Firefighting deactivated | ○ |
| FRD    | Firefighting operation   | ○ |
| LPS VN | Run synchronously        | ● |

### Emergency backup power operation

|       |                        |   |
|-------|------------------------|---|
| CEL S | Emergency lighting     | ● |
| EBS S | Emergency power supply | ● |
| PEL   | Emergency leveling     | ○ |

### Emergency communications

|       |                     |   |
|-------|---------------------|---|
| ABE C | Car roof alarm bell | ○ |
| ISE F | Five-way calling    | ● |

## CONTROL FUNCTION

### Priority and special service function

|        |                      |   |
|--------|----------------------|---|
| ATS C  | Driver function      | ○ |
| AUD I  | Audio interface      | ○ |
| CTV I  | Video interface      | ○ |
| DOE B  | Door opening delay   | ○ |
| EAQ    | Earthquake detection | ○ |
| EFC    | Energy feedback      | ○ |
| OSS LC | Floor exit           | ● |

|         |                       |   |
|---------|-----------------------|---|
| SED WSR | Maintenance operation | ● |
|---------|-----------------------|---|

### Idle car allocation

|       |  |   |
|-------|--|---|
| PAM C | Idle waiting for passengers            | ● |
| PAS C | idle waiting for passengers, sub-floor | ○ |

### Optimize the traffic flow function

|     |                             |   |
|-----|-----------------------------|---|
| BLF | Direct drive with full load | ● |
| DUP | Parallel operation          | ○ |

## INFORMATION FUNCTIONS

### Information display outside the car

|        |                                    |   |
|--------|------------------------------------|---|
| CPI LO | Car position, dot matrix           | ○ |
| CPI LS | Car position, segment code         | ● |
| DIA L  | Running direction display          | ● |
| LAL DN | Arrival light                      | ○ |
| LCL    | Outbound call registration display | ● |

### Information display in the car

|        |                            |   |
|--------|----------------------------|---|
| CCL    | Incoming call display      | ● |
| CPI CO | Car position, dot matrix   | ○ |
| CPI CS | Car position, segment code | ● |
| CRB C  | Internal call buzzer       | ○ |
| DIA C  | Running direction display  | ● |
| OLF C  | Overload reminder          | ● |

### Information display on the maintenance control screen

|        |                              |   |
|--------|------------------------------|---|
| CIL A  | Control cabinet parts labels | ● |
| CPI PS | Location indication          | ● |
| DAL GP | Disturbance warning          | ○ |
| LIL AM | Warning signal               | ○ |

|       |             |   |
|-------|-------------|---|
| SCN N | Start count | ● |
|-------|-------------|---|

### Remote monitoring screen display

|     |                      |   |
|-----|----------------------|---|
| HES | Community monitoring | ○ |
| LIL | BA interface         | ○ |

## PASSENGER COMFORT FUNCTIONS

### Entering and exiting the car

|         |                               |   |
|---------|-------------------------------|---|
| ACL B   | Precise re-leveling           | ● |
| ADO     | Open early                    | ● |
| DCB I   | Close the door inside the car | ● |
| DOB OI  | Open the door inside the car  | ● |
| NDC     | Forced to close the door      | ○ |
| RAA     | Start outbound call response  | ● |
| REO S   | Outbound calls reopen         | ● |
| SRC RNC | Light curtain detection       | ● |

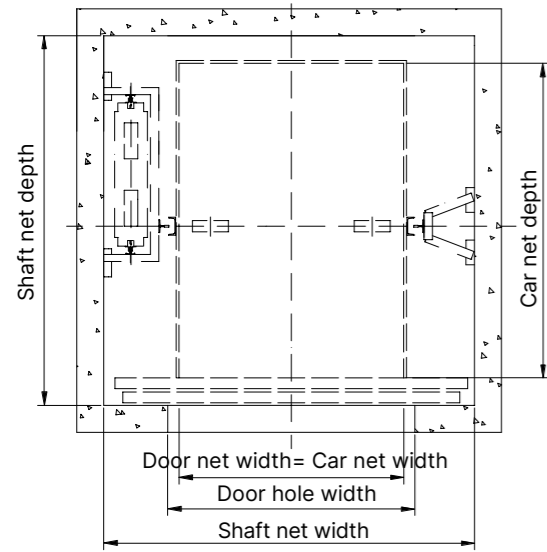
### Abuse, misuse protection

|       |                                   |   |
|-------|-----------------------------------|---|
| CCB   | Reverse internal call             | ● |
| FCC R | Command elimination               | ● |
| FCC C | Internal calls to prevent trouble | ● |

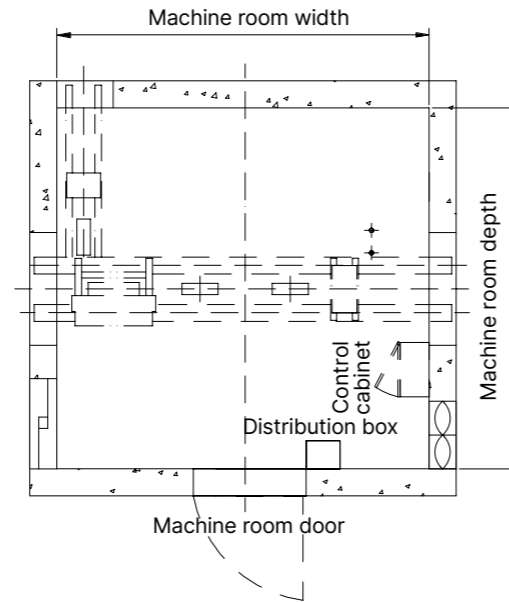
### Ride comfort

|        |                         |   |
|--------|-------------------------|---|
| DIR S  | Dock directly           | ● |
| OCL AF | Car lighting control    | ○ |
| OCV AF | Car ventilation control | ○ |
| STP    | start compensation      | ● |

# LAYOUT AND SPECIFICATION (GFS25)



Sectional drawing of the shaft

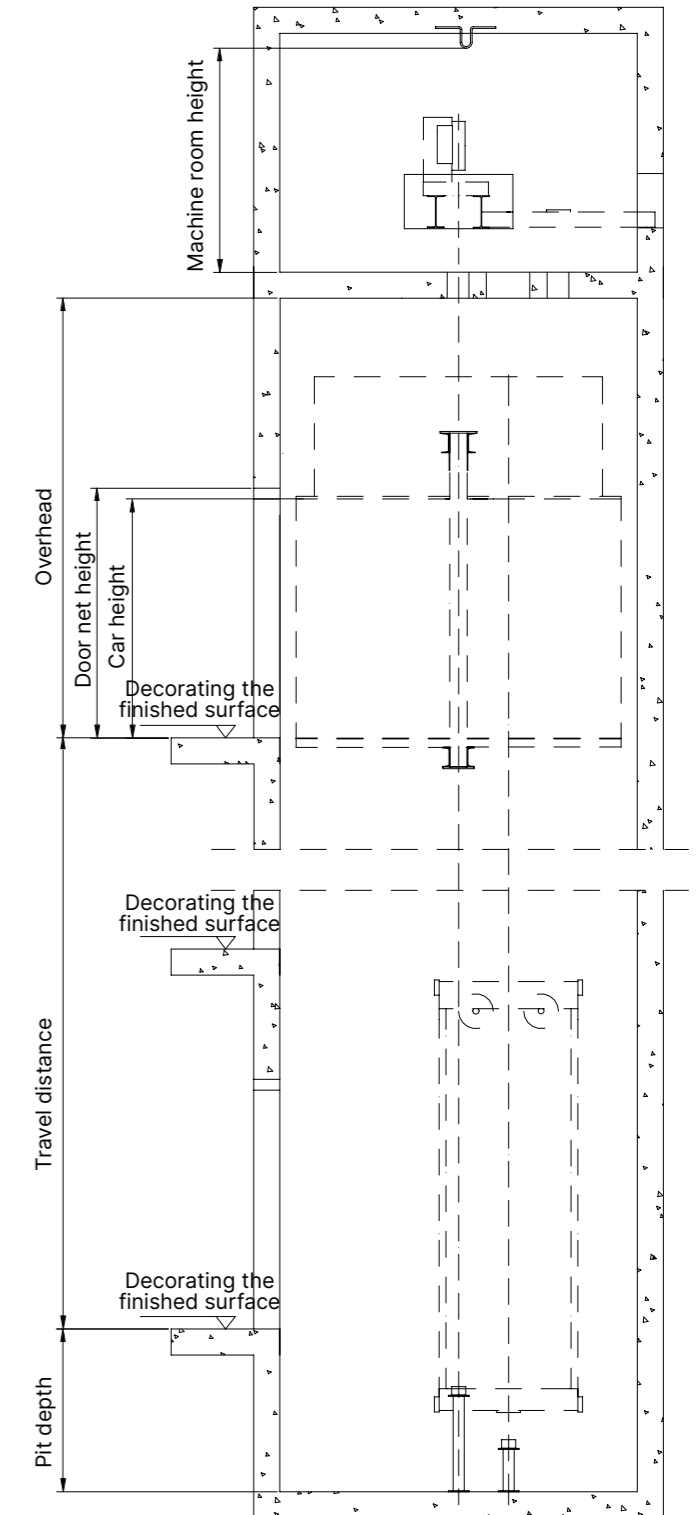


Sectional drawing of the machine room

## SINGLE DOOR

| Load Capacity (kg) | Speed (m/s) | Maximum number of stops | Maximum travel distance (m) | Car width (mm) | Car depth (mm) | Car height (mm) | Door size (mm) | Shaft width (mm) | Shaft depth (mm) | Overhead (mm)    | Pit depth (mm) | Machine room height (mm) | Classification of loads |
|--------------------|-------------|-------------------------|-----------------------------|----------------|----------------|-----------------|----------------|------------------|------------------|------------------|----------------|--------------------------|-------------------------|
| 2000               | 0.5         | 12                      | 30                          | 1500           | 2700           | 2200            | 1500×2200      | 2600             | 3100             | 4000             | 1400           | 2100                     | A                       |
|                    | 1.0         | 16                      | 50                          | 1500           | 2700           | 2200            | 1500×2200      | 2600             | 3100             | 4050             | 1400           | 2100                     | A                       |
| 3000               | 0.5         | 12                      | 30                          | 2000           | 2800           | 2200            | 2000×2200      | 3300             | 3200             | 4000             | 1400           | 2100                     | A                       |
|                    | 0.5         | 12                      | 30                          | 2000           | 2800           | 2200            | 2000×2200      | 3300             | 3200             | 4350             | 1400           | 2100                     | C                       |
|                    | 1.0         | 16                      | 50                          | 2000           | 2800           | 2200            | 2000×2200      | 3300             | 3200             | 4050             | 1400           | 2100                     | A                       |
| 5000               | 0.5         | 12                      | 30                          | 2400           | 3600           | 2400            | 2400×2400      | 4000             | 4000             | 4300<br>(4800*1) | 1500           | 2500                     | C                       |
|                    | 1.0         | 16                      | 50                          | 2400           | 3600           | 2400            | 2400×2400      | 4000             | 4000             | 4350<br>(4800*1) | 1500           | 2500                     | C                       |

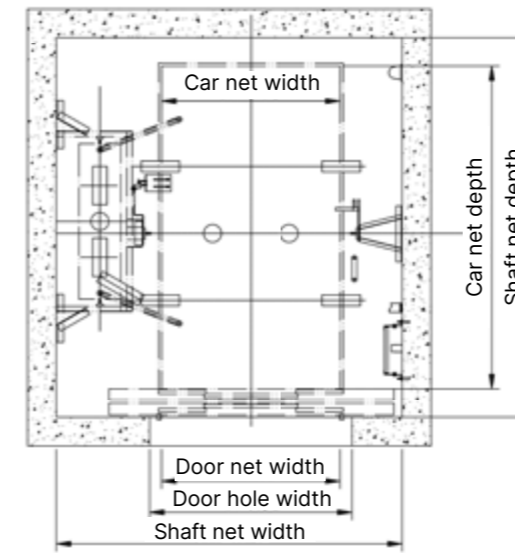
\*1: This dimension is only applicable to elevator cars with six-rail arrangement.  
The maximum number of stops in this table shall be calculated based on the actual Car height or door height and is not proportional to the maximum number of stops.



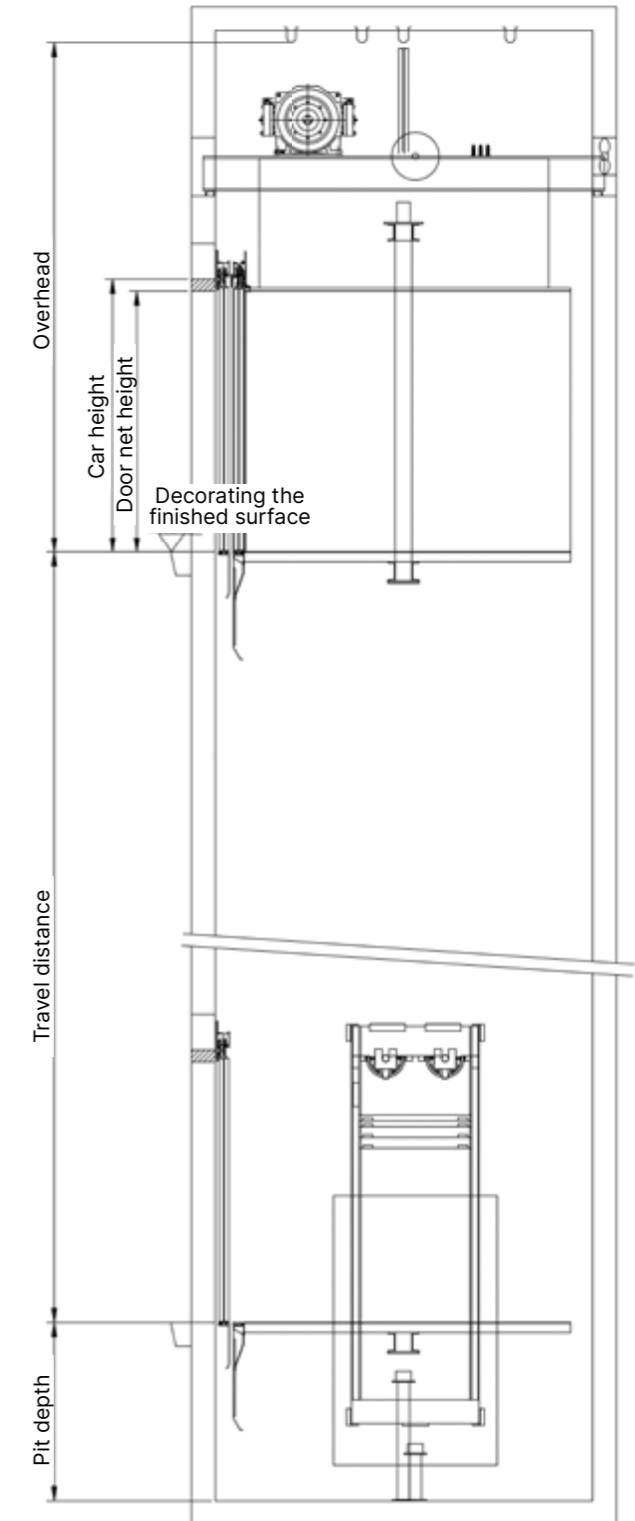
Side view of the shaft

\* The layout plans on this page are for reference only, please contact the sales team for specific layouts.

# LAYOUT AND SPECIFICATION (GFN25)



Sectional drawing of the shaft



Side view of the shaft

## SINGLE DOOR

| Load Capacity (kg) | Speed (m/s) | Maximum number of stops | Maximum travel distance (m) | Car width (mm) | Car depth (mm) | Car height (mm) | Door size (mm) | Shaft width (mm) | Shaft depth (mm) | Overhead (mm) | Pit depth (mm) | Classification of loads |
|--------------------|-------------|-------------------------|-----------------------------|----------------|----------------|-----------------|----------------|------------------|------------------|---------------|----------------|-------------------------|
| 2000               | 0.5         | 12                      | 30                          | 1500           | 2700           | 2200            | 1500×2200      | 2730             | 3100             | 4300          | 1500           | A                       |
|                    | 1.0         | 16                      | 50                          | 1500           | 2700           | 2200            | 1500×2200      | 2730             | 3100             | 4300          | 1500           | A                       |
| 3000               | 0.5         | 12                      | 30                          | 2000           | 2800           | 2200            | 2000×2200      | 3672             | 3200             | 4400          | 1500           | A                       |
|                    | 0.5         | 12                      | 30                          | 2000           | 2800           | 2200            | 2000×2200      | 3672             | 3200             | 4400          | 1500           | C                       |
|                    | 1.0         | 16                      | 50                          | 2000           | 2800           | 2200            | 2000×2200      | 3672             | 3200             | 4400          | 1500           | A                       |
| 5000               | 0.5         | 12                      | 30                          | 2400           | 3600           | 2400            | 2400×2400      | 4300             | 4000             | 4700          | 1700           | C                       |
|                    | 1.0         | 16                      | 50                          | 2400           | 3600           | 2400            | 2400×2400      | 4300             | 4000             | 4700          | 1700           | C                       |

The maximum number of stops in this table shall be calculated based on the actual Car height or door height and is not proportional to the maximum number of stops.

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