




# MB-27

## Machine-room above electrical gearless solutions


With the latest direct drive (Gearless) technology.  
Designed for high-rise buildings.  
Great flexibility and high performance.



### GENERAL SPECIFICATIONS




|                       |  |
|-----------------------|--|
| Load                  | 450 to 1,000 kg  |
| Capacity              | 6 to 13 persons  |
| Speed                 | 1.6 m/s  |
| Maximum travel        | 120 m  |
| Maximum floors served | 64 floors  |
| Entrances             | 1 front - 2 open through                                 |
| Drive system          | Direct gearless  |
| Controller            | ARCA II controller, low energy microprocessor            |
| Door types            | Automatic side-opening - Automatic central-opening       |
| Clear door opening    | From 700 to 1,000 mm (at intervals of 100 mm)            |
| Door height           | 2,000 - 2,100 - 2,200 - 2,300 mm                         |
| Car dimensions        | Parametric car dimensions                                |
| Internal car height   | 2,100 - 2,200 - 2,300 - 2,400 mm                         |
| Aesthetic solutions   | MBR1 - MBR2 - MBR3 - MBR4 - MBS1 - MBS2 - MBS3 - MB Plus |
|                       | Standard <small>Optional</small>                         |

**1 Drive**     
Compact, quiet, gearless, energy efficient, speed regulated (VVF) permanent magnet electric motor.


**2 Machine room**   
A traditional solution simplifying lift maintenance.



**3 Robust lift car**   
Provides greater comfort during lift travel, with reduced vibration and noise.

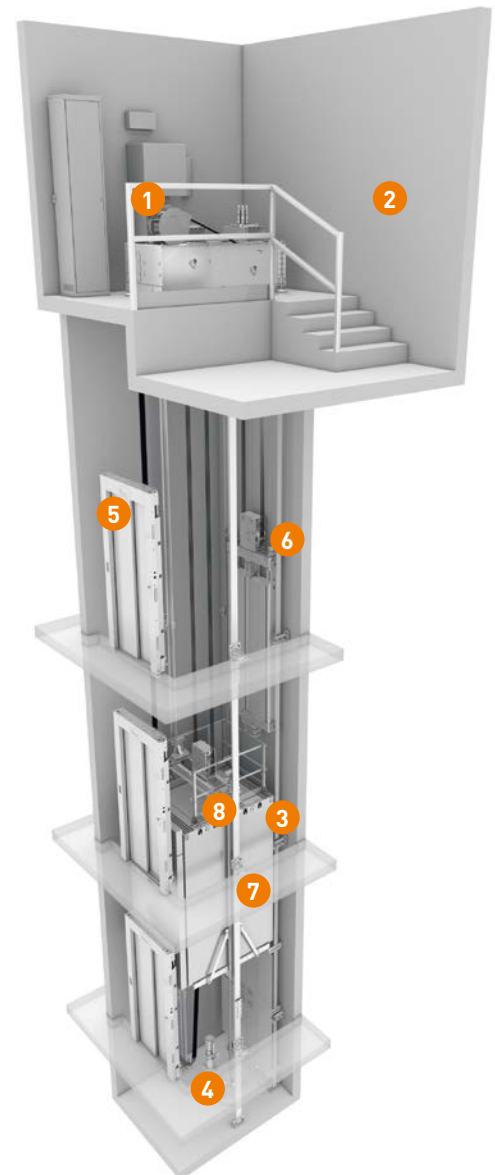
**4 Accessible space below the pit**    
Adapts the lift to suit buildings which have an accessible space below the pit (optional).

**5 Doors**     
Compact permanent magnet motor for fast, accurate and quiet door operation giving the most advanced performance. Advanced door opening and full height infra red door protection edges. Optional Solid Door for high flow situations.

**6 Parametric / Flexible**    
Flexible car and door configurations ensure available shaft dimensions can be optimised (optional).

**7 Cars**   
Reinforced wall panels and flooring provides durability for heavy duty usage. Flexible configurations offering optimum car and door dimensions.

**8 Automatic rescue system**    
With floor level indication to ensure fast, efficient and safe evacuation of passengers in the event of an emergency. As an option, the system can incorporate a fully-automatic rescue device to evacuate passengers in the event of a power failure.



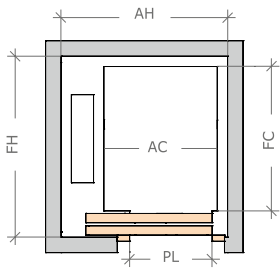
# STANDARD DIMENSIONS

| Load / Capacity |          |        | Car      |          |                  | Lift shaft *  |                  |                       |                       |                       |                       |                     |                             |       |       |
|-----------------|----------|--------|----------|----------|------------------|---------------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|-----------------------------|-------|-------|
| Speed           | Persons  | Q Load | AC Width | FC Depth | PL Clear opening | Entrances     |                  | Side-opening doors    |                       | Central-opening doors |                       | HF <sup>4</sup> Pit | HUP <sup>5</sup> Last Floor |       |       |
|                 |          |        |          |          |                  | Accessibility | No. of entrances | AH <sup>1</sup> Width | FH <sup>2</sup> Depth | AH Width              | FH <sup>3</sup> Depth |                     |                             |       |       |
| 1.6 m/s         | 6        | 450 kg | 1,000    | 1,250    | 800              | ♿             | 1                | 1,500                 | 1,800                 | 1,750                 | 1,750                 | 1,200               | 3,550                       |       |       |
|                 |          |        |          |          |                  |               | 2 x 180°         | 1,600                 | 1,700                 | 1,750                 | 1,600                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 1                | 1,500                 | 1,950                 | 1,750                 | 1,900                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 2 x 180°         | 1,700                 | 1,850                 | 1,750                 | 1,750                 |                     |                             |       |       |
|                 | 8        | 630 kg | 1,100    | 1,400    | 800              | ♿             | 1                | 1,750                 | 1,950                 | 1,750                 | 1,900                 |                     |                             | 1,250 | 3,600 |
|                 |          |        |          |          |                  |               | 2 x 180°         | 2,000                 | 1,850                 | 2,000                 | 1,750                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 1                | 2,000                 | 1,950                 | 2,000                 | 1,900                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 2 x 180°         | 2,250                 | 1,850                 | 2,250                 | 1,750                 |                     |                             |       |       |
|                 | 10       | 800 kg | 1,350    | 1,400    | 800              | ♿             | 1                | 2,000                 | 1,950                 | 1,950                 | 2,600                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 2 x 180°         | 1,700                 | 2,550                 | 1,950                 | 2,450                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 1                | 1,700                 | 2,650                 | 1,950                 | 2,600                 |                     |                             |       |       |
|                 |          |        |          |          |                  |               | 2 x 180°         | 1,750                 | 2,550                 | 1,950                 | 2,450                 |                     |                             |       |       |
| 13              | 1,000 kg | 1,600  | 1,400    | 900      | ♿                | 1             | 2,000            | 1,950                 | 2,000                 | 1,900                 | 1,250                 | 3,600               |                             |       |       |
|                 |          | 1,100  | 2,100    | 900      |                  | 2 x 180°      | 2,250            | 1,850                 | 2,250                 | 1,750                 |                       |                     |                             |       |       |
|                 |          | 1,600  | 1,400    | 900      |                  | 1             | 2,000            | 1,950                 | 2,000                 | 1,900                 |                       |                     |                             |       |       |
|                 |          | 1,100  | 2,100    | 900      |                  | 2 x 180°      | 2,250            | 1,850                 | 2,250                 | 1,750                 |                       |                     |                             |       |       |

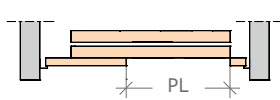
1. Accessible space below the pit (counterweight with safety gear) add 30 mm to AH.
  2. Shaft depth with door tracks projecting 60 mm on the landing.
  3. Shaft depth with door tracks projecting 40 mm on the landing.
  4. For longer travels to 75 m, HF = 1,300 mm
  5. HUP minimum for internal car height (HC) 2,100 mm (HUP = HC + 1,350).  
Analyse for each example. If side counterweight Q > 630 kg, HUP min = 3,800 mm.
- \* Minimum plumb measurements.

## LAYOUT

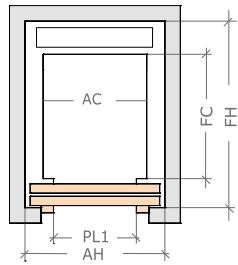
1 Entrance side counterweight



Wide-framed door detail



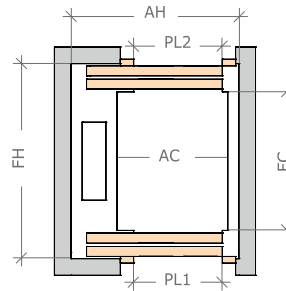
1 Entrance depth counterweight



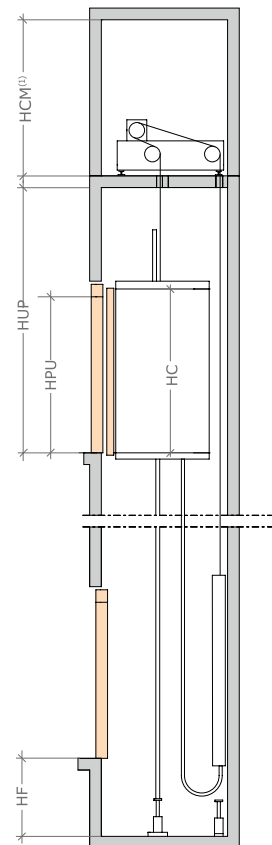
Wide-framed door detail



2 Entrances (open through)



Vertical section



(1) HCM - minimum 2,000 mm

## CUSTOMISED CAR DIMENSIONS

|    |       |       |       |       |       |       |       |       |       |       |       |       |     |       |       |       |       |       |       |       |    |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|----|
|    |       |       |       |       |       | 13    | 12    | 11    | 10    | 1,600 |       |       |     |       |       |       |       |       |       |       |    |
|    |       |       |       |       |       | 13    | 13    | 11    | 10    | 9     | 1,500 |       |     |       |       |       |       |       |       |       |    |
|    |       |       |       |       |       | 13    | 13    | 12    | 11    | 10    | 8     | 1,400 |     |       |       |       |       |       |       |       |    |
|    |       |       |       |       |       | 13    | 13    | 12    | 11    | 10    | 9     | 8     | 8   | 1,300 |       |       |       |       |       |       |    |
|    |       |       |       |       |       | 13    | 12    | 12    | 11    | 10    | 9     | 9     | 8   | 6     | 1,200 |       |       |       |       |       |    |
|    |       |       |       |       |       | 13    | 13    | 12    | 11    | 10    | 9     | 8     | 8   | 7     | 1,100 |       |       |       |       |       |    |
|    |       |       |       |       |       | 12    | 12    | 11    | 10    | 10    | 9     | 8     | 7   | 6     | 1,000 |       |       |       |       |       |    |
|    |       |       |       |       |       | 11    | 10    | 10    | 9     | 8     | 8     | 7     | 7   | 6     | 900   |       |       |       |       |       |    |
| FC | 2,100 | 2,000 | 1,900 | 1,800 | 1,700 | 1,600 | 1,500 | 1,400 | 1,300 | 1,200 | 1,100 | AC    | 800 | 900   | 1,000 | 1,100 | 1,200 | 1,300 | 1,400 | 1,500 | PL |

Note: Car width and depth variable in increments of 5 mm.. For simplification, table samples show increments of 100 mm.