

Orona 3G

X-16

## Machine-room-less electrical gearless solutions (MRLG)

High efficiency for public buildings.

Enhanced reliability.

The solution with enhanced robustness and comfort for the most demanding environments and specifications.

### General specifications

|                       |  |
|-----------------------|--|
| Load                  | 630 to 1,600 kg  |
| Capacity              | 8 to 21 persons  |
| Speed                 | 1 - 1.6 m/s  |
| Maximum travel        | 50 - 75 m  |
| Maximum floors served | 32 floors  |
| Entrances             | 1 front / 2 open through                                   |
| Drive system          | Regulated gearless   |
| Controller            | ARCA III controller, low energy consumption multiprocessor |
| Door types            | Automatic side-opening / Automatic central-opening         |
| Clear door opening    | From 800 to 1,600 mm (in 100 mm increments)                |
| 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   | Orona 3G Public Packs / Orona 3G Public Plus               |

Standard Optional



#### 1 DRIVE

Compact, quiet, gearless, energy efficient, speed regulated (VVVF) permanent magnet electric motor.



#### 2 SOLID DOORS

Extra robust doors with reduced sound levels inside and outside the lift and which are specially constructed for high volume passenger traffic.



#### 3 PARAMETRIC/FLEXIBLE

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



#### 4 ACCESSIBLE SPACE BELOW THE PIT

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



#### 5 ROBUST LIFT CAR

Provides greater comfort during lift travel, with reduced vibration and noise.



#### 6 TRACTION ROPES

Orona small diameter ropes replace traditional steel ropes. As a result of their lighter weight, longer lifespan and greater flexibility, it is possible to use a more compact, efficient and eco-friendly gearless machine.



#### 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 <sup>0</sup> |                       |                       |                       |                       |        |                           |       |       |
|-----------------|---------------|----------|----------|----------|----------|--------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|---------------------------|-------|-------|
| Speed           | Accessibility | Persons  | Q Load   | AC Width | FC Depth | PL Clear opening   | No. of entrances        | Side-opening doors    |                       | Central-opening doors |                       | HF Pit | HUP <sup>4</sup> Headroom |       |       |
|                 |               |          |          |          |          |                    |                         | AH <sup>1</sup> Width | FH <sup>2</sup> Depth | AH Width              | FH <sup>3</sup> Depth |        |                           |       |       |
| 1 m/s           | ♿             | 8        | 630 kg   | 1,100    | 1,400    | 900                | 1                       | 1,700                 | 1,675                 | 1,950                 | 1,625                 | 1,050  | 3,550                     |       |       |
|                 |               |          |          | 1,350    | 1,400    | 900                | 2x180 <sup>0</sup>      |                       | 1,850                 |                       | 1,750                 |        |                           |       |       |
|                 |               | 10       | 800 kg   | 1,600    | 1,400    | 1,000              | 1                       | 1,975                 | 1,675                 | 1,975                 | 1,625                 |        |                           |       |       |
|                 |               |          |          | 1,100    | 2,100    | 1,000              | 2x180 <sup>0</sup>      |                       | 1,850                 |                       | 1,750                 |        |                           |       |       |
|                 | 13            | 1,000 kg | 1,775    | 2,300    | 1,100    | 1                  | 2,225                   | 1,675                 | 2,225                 | 1,625                 |                       |        |                           |       |       |
|                 |               |          | 1,200    | 2,300    | 1,100    | 2x180 <sup>0</sup> |                         | 1,850                 |                       | 1,750                 |                       |        |                           |       |       |
|                 | ♿             | 21       | 1,600 kg | 1,700    | 1,950    | 1,000              | 1                       | 2,085                 | 2,700                 | 2,450                 | 2,200                 |        |                           | 1,150 | 3,600 |
|                 |               |          |          | 1,400    | 2,400    | 1,200              | 2x180 <sup>0</sup>      |                       |                       |                       | 2,850                 |        |                           |       |       |
| 17              |               | 1,275 kg | 1,700    | 1,950    | 1,000    | 1                  | 2,085                   | 2,700                 | 2,450                 | 2,200                 |                       |        |                           |       |       |
|                 |               |          | 1,400    | 2,400    | 1,200    | 2x180 <sup>0</sup> |                         |                       |                       |                       | 2,850                 |        |                           |       |       |
| 1.6 m/s         | ♿             | 8        | 630 kg   | 1,100    | 1,400    | 900                | 1                       | 1,725                 | 1,675                 | 1,950                 | 1,625                 | 1,200  | 3,700                     |       |       |
|                 |               |          |          | 1,350    | 1,400    | 900                | 2x180 <sup>0</sup>      |                       | 1,850                 |                       | 1,750                 |        |                           |       |       |
|                 |               | 10       | 800 kg   | 1,600    | 1,400    | 1,000              | 1                       | 1,975                 | 1,675                 | 1,975                 | 1,625                 |        |                           |       |       |
|                 |               |          |          | 1,100    | 2,100    | 1,000              | 2x180 <sup>0</sup>      |                       | 1,850                 |                       | 1,750                 |        |                           |       |       |
|                 | 13            | 1,000 kg | 1,775    | 2,300    | 1,100    | 1                  | 2,225                   | 1,675                 | 2,225                 | 1,625                 |                       |        |                           |       |       |
|                 |               |          | 1,200    | 2,300    | 1,100    | 2x180 <sup>0</sup> |                         | 1,850                 |                       | 1,750                 |                       |        |                           |       |       |
|                 | ♿             | 21       | 1,600 kg | 1,700    | 1,950    | 1,000              | 1                       | 1,935                 | 2,600                 | 2,450                 | 2,200                 |        |                           | 1,250 | 3,750 |
|                 |               |          |          | 1,400    | 2,400    | 1,200              | 2x180 <sup>0</sup>      |                       |                       |                       |                       |        |                           |       |       |
| 17              |               | 1,275 kg | 1,700    | 1,950    | 1,000    | 1                  | 2,085                   | 2,700                 | 2,450                 | 2,200                 |                       |        |                           |       |       |
|                 |               |          | 1,400    | 2,400    | 1,200    | 2x180 <sup>0</sup> |                         |                       |                       |                       | 2,850                 |        |                           |       |       |

0 Minimum plumb measurements

1 Accessible space below the pit (counterweight with safety gear) add 50 mm to AH

2 Shaft depth with door tracks projecting 60 mm on the landing

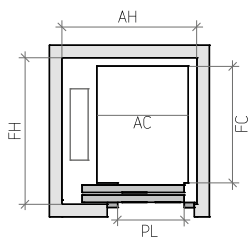
3 Shaft depth with door tracks projecting 40 mm on the landing

4 HUP minimum for internal car height (HC) 2,100 mm.

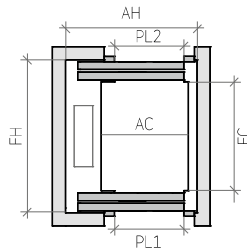
\* The information is not contractually binding and is subject to the conditions of the shaft

## Layout

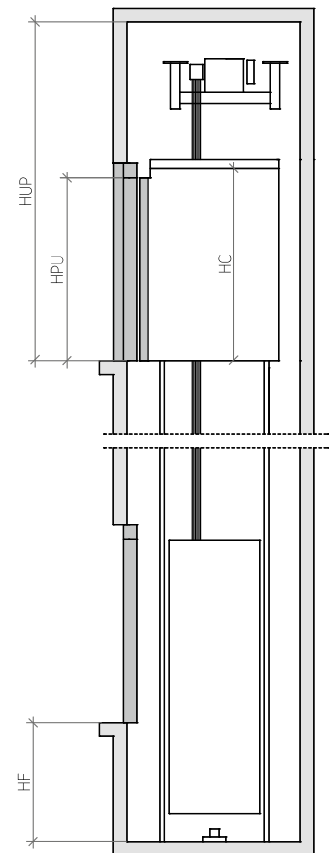
1 ENTRANCE



2 ENTRANCES (OPEN THROUGH)



VERTICAL SECTION



## Customised car dimensions

|           |       |       |       |       |       |       |       |       |       |       |       |       | Car width          |    |       |     |       |       |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|----|-------|-----|-------|-------|-------|-------|-------|-------|-------|--|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 20 | 18    |     | 2,100 |       |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 20 | 18    | 17  |       | 2,000 |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 20 | 19    | 17  | 16    |       | 1,900 |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 20 | 19    | 18  | 16    | 15    |       | 1,800 |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 20 | 19    | 18  | 16    | 15    | 14    |       | 1,700 |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 21 | 19    | 18  | 16    | 15    | 14    | 13    | 12    |       | 1,600 |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 21                 | 21 | 19    | 18  | 17    | 17    | 15    | 14    | 13    | 13    | 11    |  | 1,500 |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21        | 21    | 20    | 19    | 18    | 17    | 16    | 15    | 14    | 13    | 13    | 12    | 11    | 10                 |    | 1,400 |     |       |       |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20        | 19    | 18    | 17    | 16    | 16    | 15    | 14    | 13    | 12    | 11    | 10    | 9     | 8                  |    | 1,300 |     |       |       |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19        | 18    | 17    | 16    | 15    | 14    | 13    | 13    | 12    | 11    | 10    | 9     | 9     | 8                  |    | 1,200 |     |       |       |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 15                 | 14 | 13    | 13  | 12    | 11    | 11    | 10    | 9     | 8     | 8     |  | 1,100 |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 12                 | 12 | 11    | 10  | 10    | 9     | 8     |       |       |       |       |  |       | 1,000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |       |       |       |       |       |       |       |       |       |       |       |       | 11                 | 10 | 10    | 9   | 8     | 8     |       |       |       |       |       |  |       | 900   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2,500     | 2,400 | 2,300 | 2,200 | 2,100 | 2,000 | 1,900 | 1,800 | 1,700 | 1,600 | 1,500 | 1,400 | 1,300 | 1,200              |    | 800   | 900 | 1,000 | 1,100 | 1,200 | 1,300 | 1,400 | 1,500 | 1,600 |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Car depth |       |       |       |       |       |       |       |       |       |       |       |       | Clear door opening |    |       |     |       |       |       |       |       |       |       |  |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: Car width and depth variable in increments of 5 mm.

For simplification, table samples show increments of 100 mm.