Orona 3G

X-27

Solution for high-rise buildings

Machine-room above electrical gearless solution.

General specifications

Load	450 to 1,000 kg / 630 to 1,600 kg (2 and 2.5 m/s)
Capacity	6 to 13 persons / 8 to 21 persons (2 and 2.5 m/s)
Speed	1.6 / 2 - 2.5 m/s
Maximum travel	120 m / 130 m (2 and 2.5 m/s)
Maximum floors served	64 floors
Entrances	1 front / 2 open through
Drive system	Regulated gearless (240 connections / hour)
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 Domo Packs / Orona 3G Public Packs / Orona 3G Plus

Standard Optional

1 DRIVE

Compact, quiet, gearless, energy efficient, speed regulated (VVVF) 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 ACCESIBLE 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.

ECO-EFFICIENCY ADAPTABILITY DESIGN AND ACCESSIBILITY CONTROL AND SAFETY

19/05

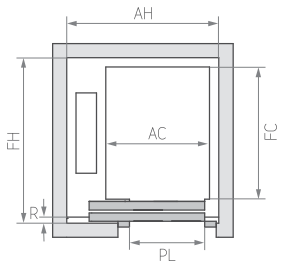
Customised solution, examples of dimensions*

Load / capacity			Car			Lift shaft[0]							
								Side-opening doors[1]		Central-opening doors[1]			
						Entrances							
Speed	Persons	Q Load	AC Width	FC Depth	PL Clear opening	Accessibility	No. of entrances	AH[2] Width	FH[3] Depth	AH Width	FH[4] Depth	HF[5] Pit	HUP[6] Headroom
1.6 m/s	6	450 kg	1,000	1,250	800		1	1,500	1,800	1,750	1,750	1,200[5]	3,550[6]
							2x180[0]	1,600	1,700	1,750	1,600		
	8	630 kg	1,100	1,400	800		1	1,500	1,950	1,750	1,900		
							2x180[0]	1,700	1,850	1,750	1,750		
	10	800 kg	1,350	1,400	800		1	1,750	1,950	1,750	1,900	1,250[5]	3,600[6]
							2x180[0]	2,000	1,850	2,000	1,750		
	13	1,000 kg	1,600	1,400	900		1	2,000	1,950	2,000	1,900		
							2x180[0]	2,250	1,850	2,250	1,750		
			1,100	2,100	900		1	1,700	2,650	1,950	2,600		
							2x180[0]	1,750	2,550	1,950	2,450		
2 m/s - 2.5 m/s	8	630 kg	1,100	1,400	900		1	1,700	2,000	1,950	1,950	1,815[7] - 2,180[8]	4,000[9] - 4,250[10]
							2x180[0]	1,800	1,850	2,050	1,750		
	10	800 kg	1,350	1,400	900		1	1,800	2,000	1,950	1,950		
							2x180[0]	2,050	1,850	2,150	1,750		
	13	1,000 kg	1,600	1,400	1,000		1	2,050	2,000	2,150	1,950		
							2x180[0]	2,300	1,850	2,400	1,750		
			1,100	2,100	1,000		1	1,800	2,700	2,150	2,650		
							2x180[0]	1,850	2,550	2,150	2,450		
	17	1,275 kg	2,000	1,400	1,100		1	2,500	2,050	2,500	2,000	1,865[7] - 2,230[8]	
							2x180[0]	2,800	1,850	2,500	1,750		
			1,200	2,300	1,100		1	1,850	2,850	2,350	2,850		
							2x180[0]	2,000	2,750	2,350	2,650		
	21	1,600 kg	2,100	1,600	1,100		1	2,550	2,250	2,550	2,150	2,085[7] - 2,230[8]	
							2x180[0]	2,900	2,050	2,850	1,950		
			1,400	2,400	1,200		1	2,150	2,950	2,550	2,950		
							2x180[0]	2,200	2,850	2,550	2,750		

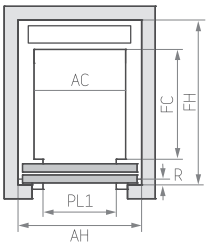
0 Minimum plumb measurements
1 TT doors / CC doors
2 Accessible space below the pit (counterweight with safety gear) add 70 mm to AH
3 R=60 mm, shaft depth with TT 2 panel telescopic door tracks projecting 60 mm on the landing
4 R=40 mm, shaft depth with CC 2 panel central door tracks projecting 40 mm on the landing
5 For travels over 75 m, HF=1,300 mm
6 Minimum HUP for internal car height (HC) of 2,100 mm
If side counterweight Q>630kg, HUP min=3,800 mm
7 (2m/s) HF minimum (HF=BC+1410) Table BC=100
8 (2,5m/s) HF minimum (HF=BC+1795) Table BC=100
9 (2m/s)HUP minimum with side counterweight (HUP=HC+1681) * Table HC=2300
(2m/s) HUP minimum with rear counterweight (HUP=HC+1561)
10 (2,5m/s) HUP minimum with side counterweight (HUP=HC+1905) *Table HC=2300
(2,5m/s) HUP minimum with rear counterweight (HUP=HC+1785)
*The information is not contractually binding and is subject to the conditions of the shaft
TT - 2 panel telescopic door
CC - 2 panel central door

Layout*

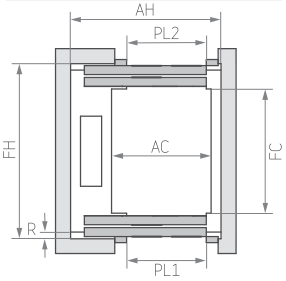
1 ENTRANCE side counterweight



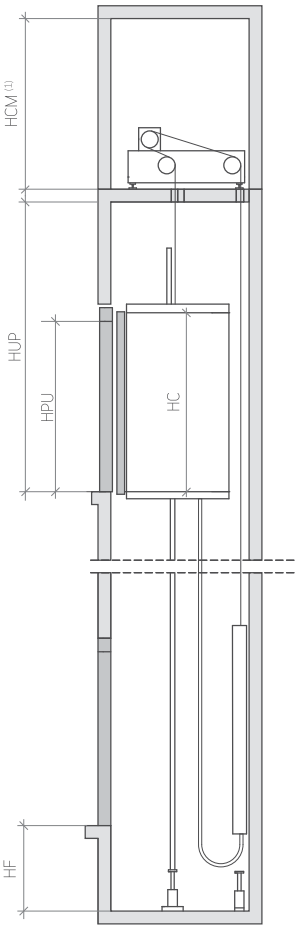
1 ENTRANCE rear counterweight



2 ENTRANCES (OPEN THROUGH)



VERTICAL SECTION



(1) HCM - minimum 2,000 mm

* Note: The diagrams are for guidance only.

Customised car dimensions

Car width

Car depth	2,100	2,000	1,900	1,800	1,700	1,600	1,500	1,400	1,300	1,200	1,100	Clear door opening	800	900	1,000	1,100	1,200	1,300	1,400	1,500
1,600							13	13	12	11	10									
1,500						13	13	12	11	10	9									
1,400					13	13	12	11	10	9	8									
1,300				13	13	12	11	10	9	8	8									
1,200			13	12	12	11	10	9	9	8	6									
1,100	13	13	12	11	11	10	9	8	8	7										
1,000	12	12	11	10	10	9	8	7	7	6										
900	11	10	10	9	8	8	7	7	6											

Car width

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

Note: Dimensions for one entrance. Car width and depth variable in increments of 5 mm.
For simplification, table samples increments of 100 mm.