



MINIWATT

Electrical Lifting
Homelift

High
efficiency
energy-saving
Lifts



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01

WeAre

The first company to produce battery-only homelift

Over 15 years of development

A.R.E. Srl was founded in 2009 thanks to the futuristic vision of Franco Antonelli, an elevation sector pioneer. His experience, which dates back to 1953, has revolutionised the way we design lifts with insights that have since become major sector milestones.

In 1995, Franco took up the challenge of finding a solution to the issue of accessibility for disabled people, a problem which the regulations at the time did not allow a traditional lift to solve. This led to him developing innovative technology for home lifts. His insight enabled home lifts to exceed the traditional 4-metre limit and transformed these products with their limited installation opportunities and reputation for being unsafe into highly reliable solutions that are considerably more versatile than traditional lifts.

Franco's search for new solutions continued in the years that followed. In 2003, he introduced a revolution in the industry: the use of batteries as the main power source for lifts. Up until that point, in fact, batteries had only been used on the sidelines and for stairlift.

Franco Antonelli's entrepreneurial vision was realised in 2009 with the birth of A.R.E., which stands for Ascensori a Risparmio Energetico (Energy Saving Lifts). Today, under the leadership of Franco's son, Filippo Antonelli, A.R.E. continues to invest in technological research for developing increasingly efficient, cutting-edge solutions.



Energy efficiency has always been our goal. We invest constantly in the development of technologies that offer innovative, high energy performance solutions.

Our technology

Patented technology **ARE SMART-POWER®**

The cabin-free
homelift

ARE
SMART-POWER®

MINIWATT is an homelift launched on the market for the first time in 2010.

Unlike other traditional elevators it doesn't have a car but a platform with linen stainless steel safety edges. MINIWATT, like all our lifts, benefits from ARE SMART POWER technology.



Anti-Blackout System

The MINIWATT homelift's main power supply is based on the use of batteries. It is, therefore, possible to continue using the lift even if there is an unexpected power cut, which guarantees accessibility and safety at all times.



Energy recovery system

While in use, the energy produced by MINIWATT is not wasted as heat but stored in the batteries by optimising the performance levels of the lift and dramatically bringing down electricity supply costs.



Maximum committed power

The maximum committed power by the MINIWATT is only 130W, comparable to that required for using a common household appliance.



SOL-ARE Solar panels

The possibility of having the MINIWATT homelift with solar panels means solar power can be used as a source of sustainable energy.



Highest energy efficiency

MINIWATT offers higher performance levels than those of an oleodynamic lift with lower electricity consumption.

Anti-Blackout System



A.R.E. technology, unlike that used by other manufacturers, relies on the use of BATTERIES as the main power system for its lifting systems and only uses the power grid to run the battery charging system. That technology guarantees that MINIWATT can operate normally even in the event of a power cut (on average up to 60 runs).

This is the concept of “ALWAYS WORKING” common to all A.R.E. Lifts.



Maximum committed power



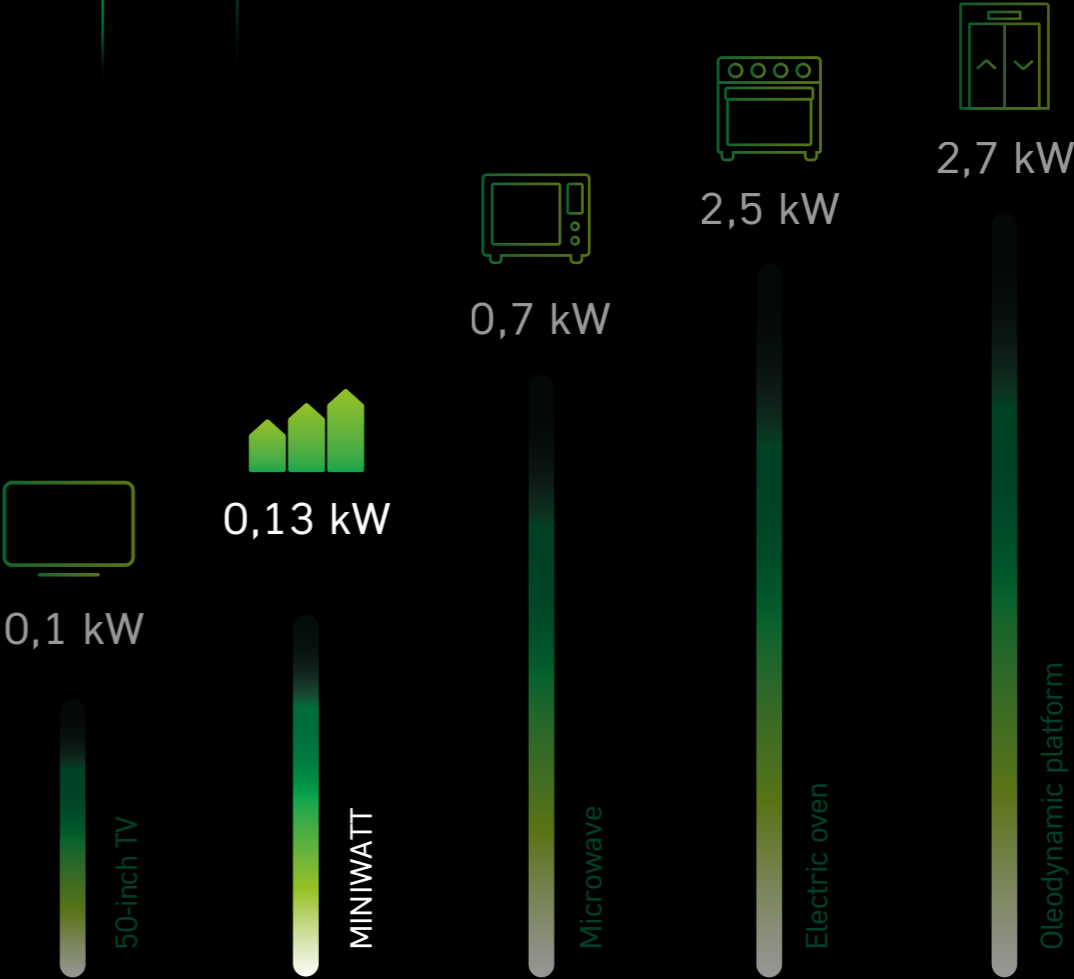
Most of the contracts for residential homes have a power usage of around 3 kW with a tolerance of +10%, that is, it is possible to withdraw up to 3.3 kW without any time limits.

Over and above this limit, the supplier automatically cuts the energy supply by making the meter switch “trip” which then needs to be manually re-activated.

Frequent cut-offs indicate a need for more power to meet the higher demands. In these cases, a request will need to be made to the supplier to increase the power supply by changing the existing contract and this will involve higher supply costs.

Thanks to the technology developed by A.R.E., the maximum committed power by MINIWATT is just 0.13 kW, on a par with that of an average electrical appliance.

There is no need, therefore, to change the supply contract stipulated, nor is there any need to install another meter with a higher power level. This is an advantage as the supplier’s management costs for supplying electricity will not increase.

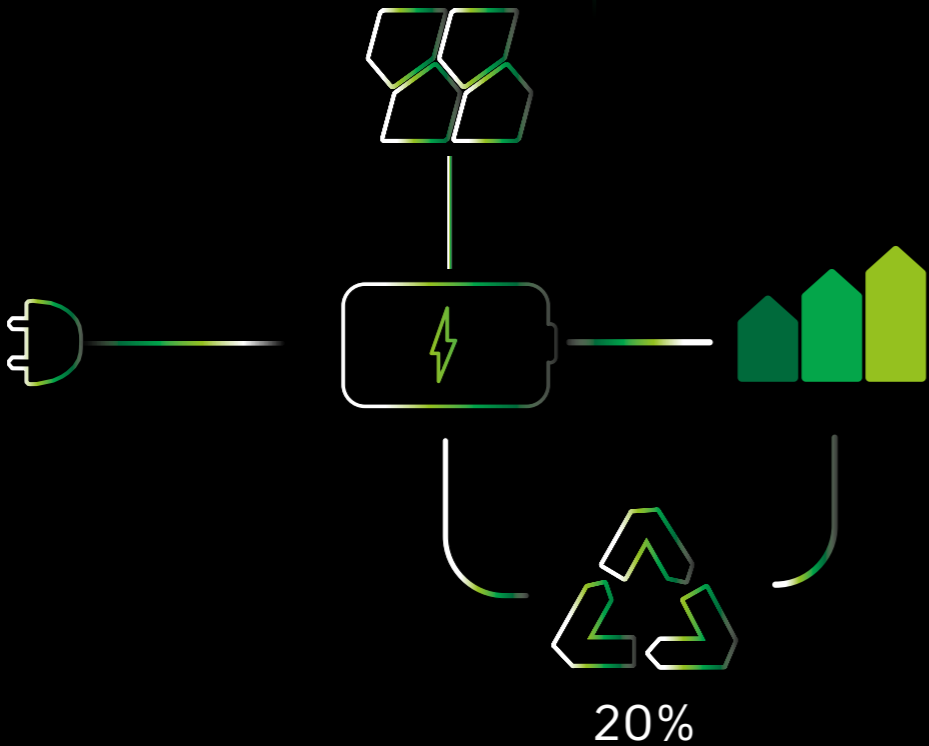


Energy recovery system



The MINIWATT homelift can generate energy during normal usage phases: when the platform is going up empty or when the platform is going down full. The energy produced is not lost but stored in the batteries in order to be used for the next travel.

Thanks to the use of this technology, on average, one in every five times it is used, it does not absorb energy from the grid but uses what has been stored in the batteries. Self-powering guarantees a real reduction in consumption which translates into lower running costs.



SOL-ARE Recharge from solar panels



SOL-ARE® is the new technological innovation patented by ARE. The main function of SOL-ARE is to optimise the battery charging process by using solar energy produced by the photovoltaic panel.

ENERGY SAVING

The system automatically selects the ideal energy source (grid or photovoltaic panel) in order to reduce the amount of energy drawn from the grid, until it reaches a consumption level of ZERO.

ENVIRONMENTAL SUSTAINABILITY

Integrating the photovoltaic panel in a system is environmentally friendly because it promotes the use of renewable energy sources.

AUTOMATIC MANAGEMENT OF THE ELECTRICAL POWER

SOL-ARE® manages battery charging in a smart way, automatically changing the set operation mode, if the frequency of platform use requires it.

AUTOMATIC MANAGEMENT OF THE ELECTRICAL POWER

The system decides the amount of current to draw from the grid autonomously, in compliance with the parameters defined for the minimum and maximum power.

HOURLY PROGRAMMING

Being able to set the charging mode on an hourly basis, allows you to adapt the charging strategy to the daily uses of the lift, in order to minimise the consumption of electricity from the grid.

SOL-ARE® is equipped with 3 operating modes that the user can set on an hourly basis throughout the day, according to the expected use of the MINIWATT homelift.



ECO FULL
to be used during periods of moderate traffic.



ECO HYBRID
to be used during periods of heavy traffic.



ECO NIGHT
to be used during periods of low or no traffic.



**MANGUSTA
MINIWATT**



SOL-ARE®



Other advantages

Not only energy saving



Comfortable & quiet

Soft departure and arrival, stopping precision and silence are the distinctive features of MINIWATT, designed and manufactured to offer maximum comfort.



Machine room less

With MINIWATT, there is no need for space to house oleodynamic control units and manoeuvring switchboards. The motor unit is located inside the lift well and the manoeuvring switchboard can be incorporated into a floor door.



Safety

MINIWATT has a speed limiter which prevents uncontrolled cabin movement wherever it is. This limiter equates to compulsory devices found in lifts which comply with EN81-20:2014, 5.6.



Our guide rails

The guide rails of MINIWATT Homelift have been designed to ensure practicality, efficiency and aesthetic care. Made of metal sheet, they simplify installation thanks to a compact double guide rail configuration, which replaces the four guide rails of traditional solutions. The maximum length of 2400mm facilitates handling and optimizes carriage, making them ideal even for small or existing shafts. The absence of lubricants keeps the guide rails clean, while the possibility of painting them makes them ideal even for panoramic lifts with a refined design.

The cabin-free homelift

The design solution

Each Miniwatt is a unique-piece

MINIWATT is a battery-powered electric homelift. Unlike conventional elevators, instead of a cabin it has a platform with sensitive edges made of linen finish stainless steel.

The platform is located inside a shaft, which can be built in masonry or a metal structure.

MINIWATT blends in perfectly with the space it is installed in.

The mechanics, in fact, are hidden by a guard that can be made of traditional RAL painted sheet metal or stainless steel if an even more elegant effect is required.

One of MINIWATT's most important features is that it can serve the top floor landing with a gate instead of a conventional door.

This makes it the ideal choice for any environment with a low-height top floor, as is often the case with attics and/or lofts.

Thanks to its wide range of materials and colours, each MINIWATT is a unique item that can satisfy any customer request.

03



Swing doors & Gate

Semi-automatic swing doors, manual opening and automatic closure by return spring.
Adaptable to any environment, with combinations of finishes, colours, glass and sizes.
The aluminium handle shown in the pictures is included with the door.

WINDOW



C1
standard model



V1
optional model



P1
optional model



PS1
optional model



V2
optional model



V3
optional model



D7
optional model



D1
optional model

✓ Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish

✓ Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish





FIRE RESISTANT
optional model

EI-120 Fire resistant single panel swing door with electrical safety lock. Semiautomatic, manual opening and automatic closing with return spring and damper, uprights with carters.



THERMAL BREAK
optional model

Thermal break door to a hinged degree of transmittance thermal U = 2,12 W/mqk mineral wool in the leaf and in the frame (box). Gaskets of cold-proof stop along the door perimeter and lower floor hood profile.

✔ Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish



ALLUMINIUM
optional model

Single panel Alluminium

Panoramic model swing door with mechanical safety lock. Leaf made by extruded aluminium profile and panoramic glass without glazing beads, uprights and lintel made by extruded aluminium if the width is 100 mm, if different built in steel sheet and aluminium covered, stainless steel sill profile. Semiautomatic, manual opening and automatic closing with return spring and damper. Uprights with carters.



Stainless steel tube handle T20



Profiles in natural silver color anodized aluminium

✔ Natural Alluminium | RAL Paint finish Alluminium



ARMOURED
optional model

Armored Swing Door with a thickness of 70mm and a mechanical security lock. Additional CISA-type armored door lock with half barrel and recessed knob inside the shaft and external defender. Semi-automatic, manual opening and automatic closing through a return spring and damper, cased uprights.

✔ Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish



CRYSTAL
optional model

Crystal model single panel swing door with safety lock. Leaf in tempered laminated glass, stainless steel handle and hinges. Semiautomatic, manual opening and automatic closing with adjustable hydraulic door closer, located inside the lintel and provided with 90° stop. Uprights with carters.



optional model

T20/30 | RC40 | TC30
Profiles in natural anodized silver aluminum

✔ Stainless Steel | RAL Paint finish

Metal structure

MINIWATT can be supplied complete with metal structure well suited to being positioned both inside and outside the construction.

All the structures comply with current construction standards. It is possible to request glass cladding and panels in RAL painted metal sheets.

In order to meet all our customers' requirements, descent walkways are available (with parapets in metal or glass) with completely closed walkways, complete with transom windows and rain canopies (with sheet metal or glass cladding) and RAL painted side doors.

☑ RAL Paint finish | Galvanised & RAL Paint finish

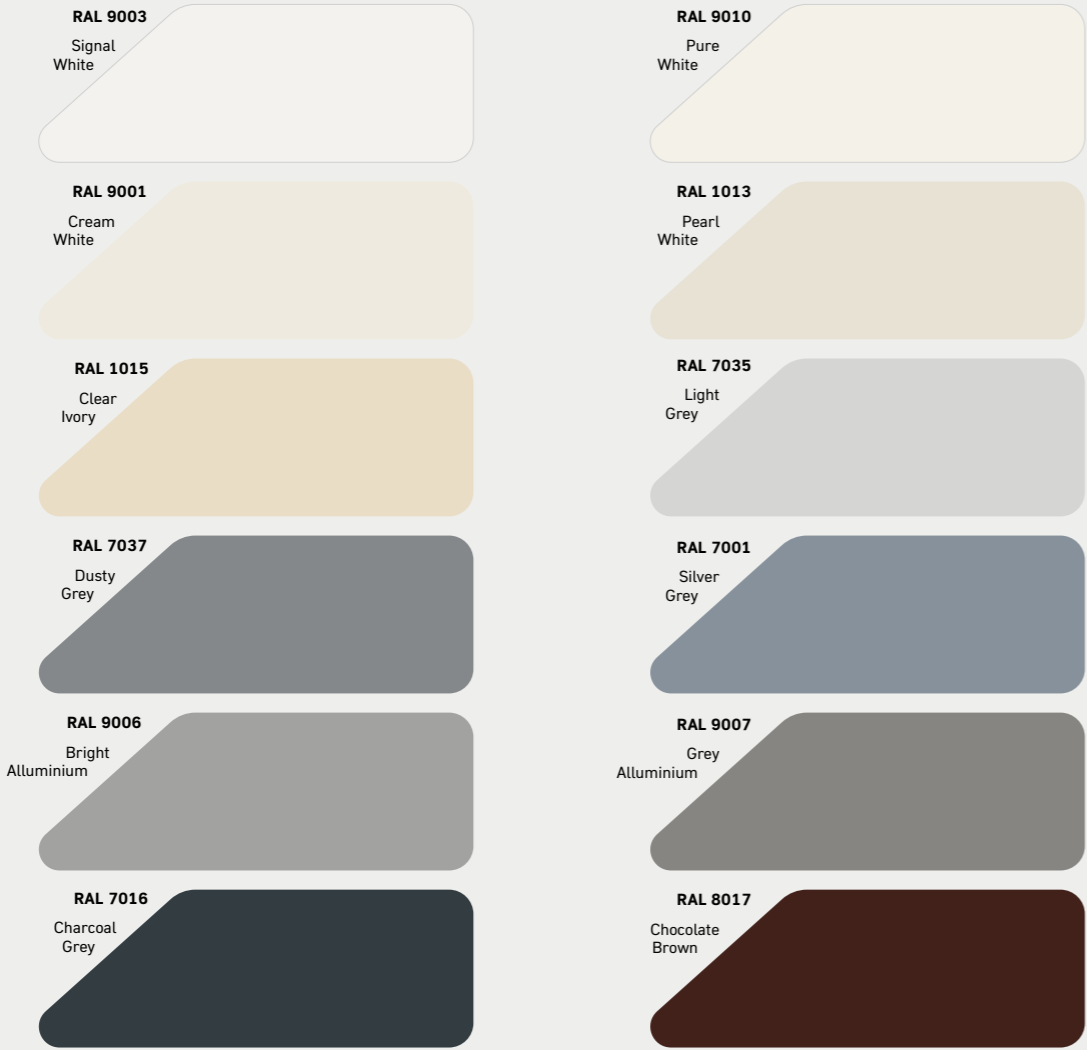


Finishes

RAL paint finish¹

standard

The colours shown may not be correctly represented. Please refer to the official RAL cards when choosing the RAL colour.

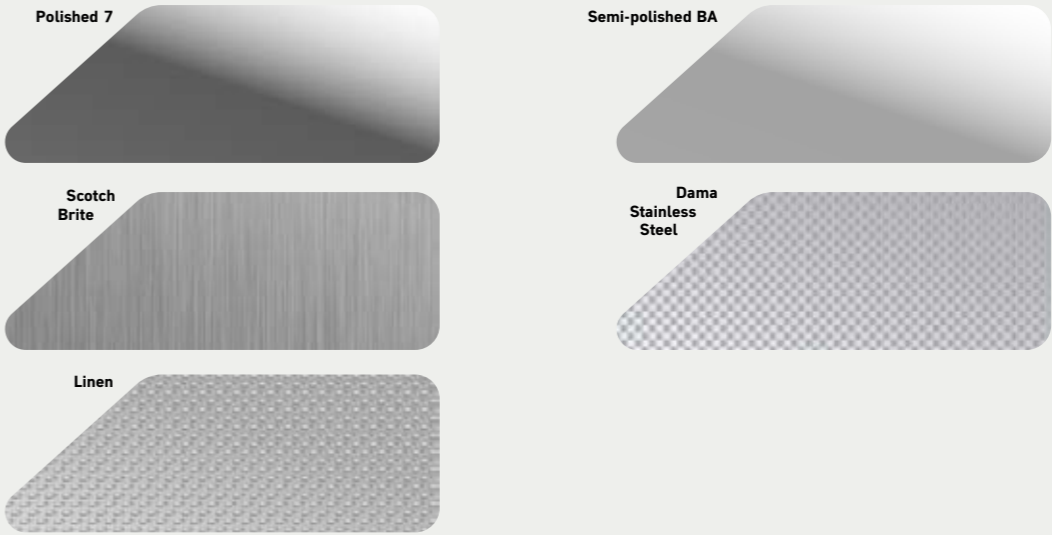


✓ Swing door | Gate | Technical cabinet | Structure | Panelling | Mobil panel

Stainless steel

optional

We recommend choosing from the available options by following the table below.

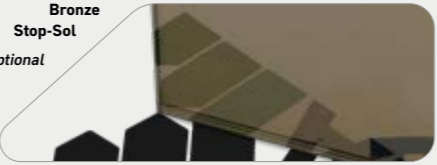
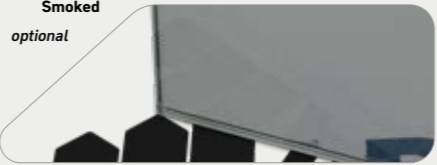
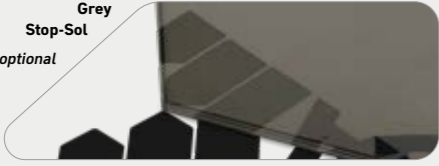
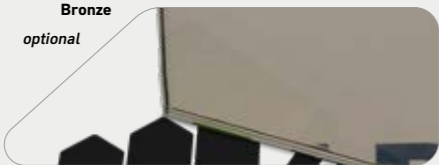


✓ Crystal door | Technical cabinet | Crystal gate | Panelling | Mobile panel

STAINLESS STEEL	For indoor	For outdoor	Seafront
AISI 430 Scotch Brite	✓	×	×
AISI 304 Semi-polished BA	✓	✓	×
AISI 304 Polished 7	✓	✓	×
AISI 304 Dama Stainless steel	✓	✓	×
AISI 304 Linen	✓	✓	×
AISI 316 Semi-polished BA	✓	✓	✓

Glass

For each environment, we offer you the opportunity to choose the finish that best enhances it.

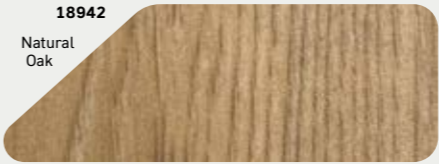


- ✔ Window swing door | Plugging structure | Crystal door | Alluminium door | Crystal gate | Alluminium gate
Panoramic gate | Panelling | Mobil panel

PVC

standard

These floors are a PUR Pearl surface, a combination of embossing and lacquering that guarantee the finished smooth and elegant matte feature that is highly resistant to scratches, tread and wear.



Floor's
Client

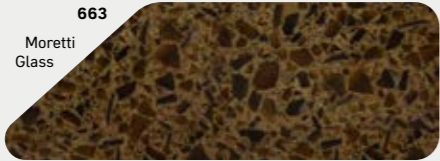
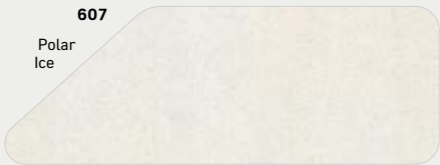
Set for client
coating tickness
max 15 mm

- ✔ Platform floor

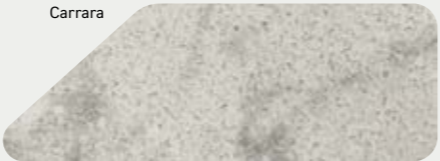
Granit Touch

optional

Floor obtained using a mix grits of granite, quartz, glass and interlacing of glass mosaic. Most of the raw materials used are obtained by recycling Post-Consumption products. The perfect combination of these materials creates the right balance between technology and respecting the environment.



✓ Platform floor



Finishing summary

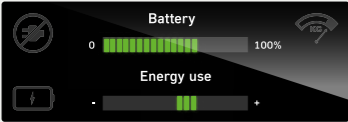
	Gate	Swing doors	Cabinet	Structure	Mobile panel	Panelling
Rust-proof Paint Finish	0	0	0	×	×	×
Galvanised and RAL Paint finish	0	0	0	0	×	×
RAL Paint Finish	S	S	S	S	S	S
Stainless Stell	0	0	0	0	0	0
Natural Alluminium	0	0	×	×	×	×
RAL Paint Finish Aluminium	0	0	×	×	×	×
Glass	0	0	×	×	0 ¹	0 ¹

0 = optional | S = standard | x = non provided
¹ A feasibility assessment by the technical office is required



Accessories

Display



✔ Car display

SMART
standard

Energy level display



✔ Car display

TRICOLOR
optional

LCD display
Frame or flush anti-scratch and anti-impact transparent polycarbonate screen



✔ Landing display

TFT¹
optional

High-resolution TFT display
Available 4.3" e 2.8"



✔ Landing display

ICARO
optional

LCD display
Frame or flush anti-scratch and anti-impact transparent polycarbonate screen

Buttons



STANDARD
standard

AISI 304 stainless steel button with braille.



VANDAL-PROOF IP54
optional

Vandal-proof button with braille with degree of protection IP54.



Landing control panel

optional



AIDA 65

Width 65 mm.
Available with
icaro wire display.
Wall secured, without
building work

- ✓ Scotch-Brite stainless steel
- ✓ Polished stainless steel



AIDA 85

Width 85 mm.
Available with
vertical TFT 4.3''
display.
Wall secured, without
building work

- ✓ Scotch-Brite stainless steel
- ✓ Polished stainless steel



SOFT 75

Width 75 mm.
Available with
icaro wire display
Possibility of box
to be walled

- ✓ Scotch-Brite stainless steel
- ✓ Blu polished stainless steel



VENICE 80

Width 80 mm.
Available with TFT
vertical display 2.8''
Installable only with
a recessed box

- ✓ Black glass
- ✓ White glass



Handle

optional



R40

Scotch-Brite
stainless steel
AISI 304
40 x 15 x L 1260



Q20

Scotch-Brite
stainless steel
AISI 304
20 x 20 x L 320



RC40

Scotch-Brite
stainless steel
AISI 304
40 x 10 x L 500

T20 - T30

Scotch-Brite
stainless steel
AISI 304
ø20 x L 300
ø30 x L 500



TC30

Scotch-Brite
stainless steel
AISI 304
ø30 x L 500
ø30 x L 1000



Enabling system

optional

ALPHANUMERIC KEYPAD



Backlit, IP 68, single contact only
120 x 58 x 22 mm

✓ Landing



I-BUTTON

Vandal-resistant electronic key.
IP51



ENABLE KEYS

Key contact.
IP51
available:
- 2 positions, 1 extraction
- 2 positions, 2 extractions

AUTOMATIC SWING DOOR OPENING/CLOSING SYSTEM

✓ Only for indoor



Technical specifications

006

Technical features

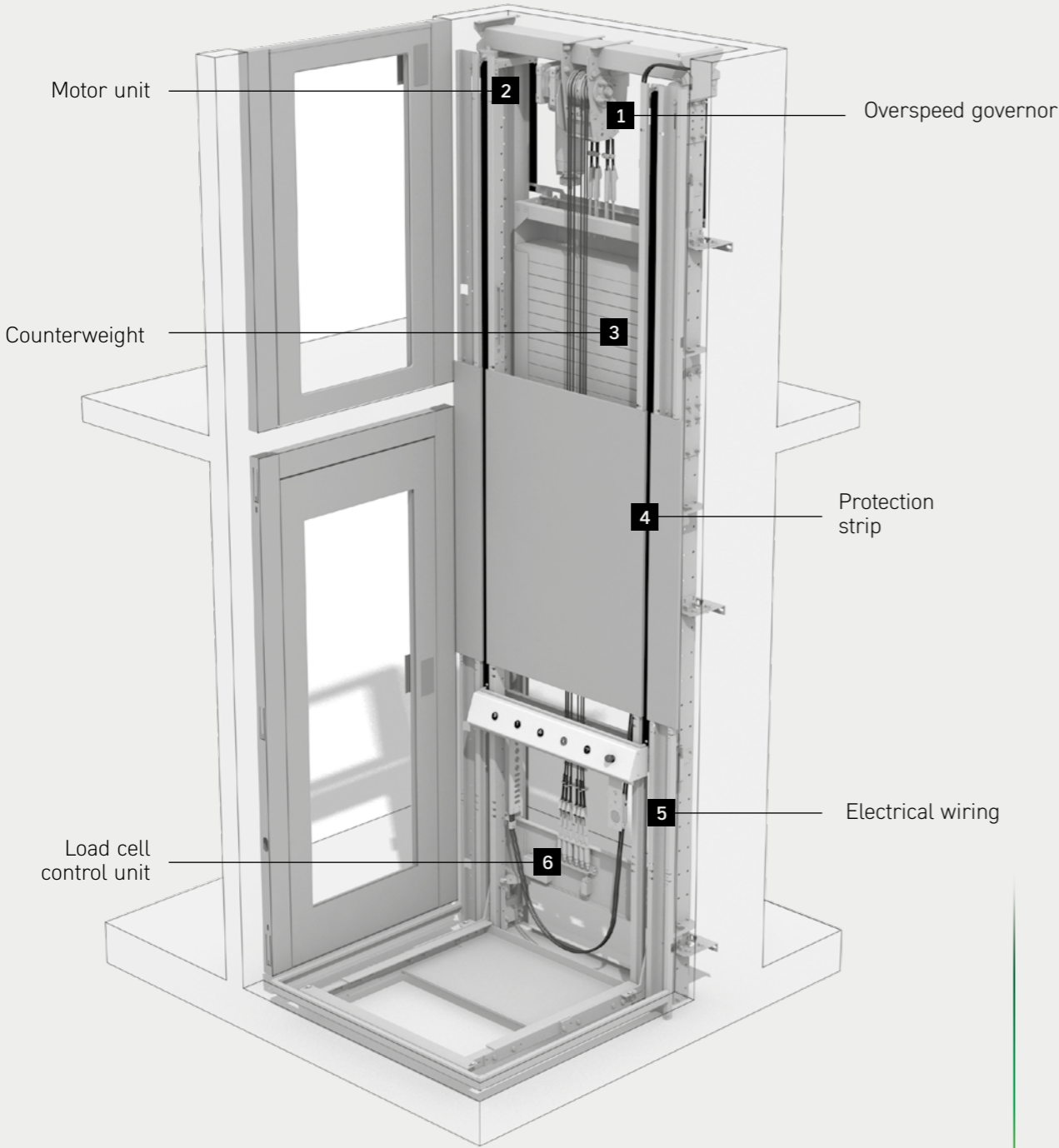
Capacity	300 kg	400 kg
Reference legislation	Direttiva Macchine 2006/42/CE - EN81-41:2011 (where applicable)	
Capacity max (People)	4	5
Maximum Speed (m/s)	0,15	0,15
Maximun number of stops	8	8
Hourly insertions	45	45
Travel (mm)	14000 ¹	14000 ¹
Headroom (mm)	2000 ²	2000 ²
Pit (mm)	130	130
Maximum car's area (m²)	1,2	1,6
Lift power supply	battery	battery
Committed power (kW)	0,13	0,13
Inrush absorption from the network (A)	0,7	2
Mains power supply (V)	230	230
Maximum travels in case of blackout ³	60	45
Recovery energy system	standard	standard
Anti Blackout System	standard	standard
SOL-ARE	optional	optional

¹ With glass mobile panel and glass Panelling maximum travel 7000 mm
³ The number of travels may vary depending on the battery charge.

² In case of opening H2000 at the highest floor, see tables below

Type of shaft	Min. headroom	Plant configuration	Min. interfloor
Masonry	2100	With doors on opposite sides and/or adjacent ⁴ (mm)	300
Structure for outdoor	2300		
Structure for indoor	2250	With doors on the same side (mm)	H door frame + 100

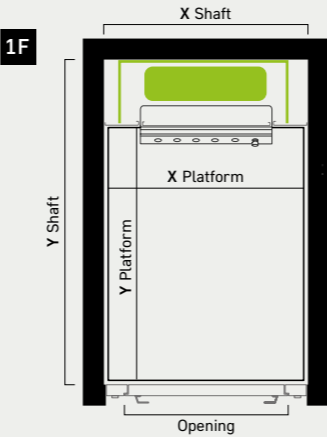
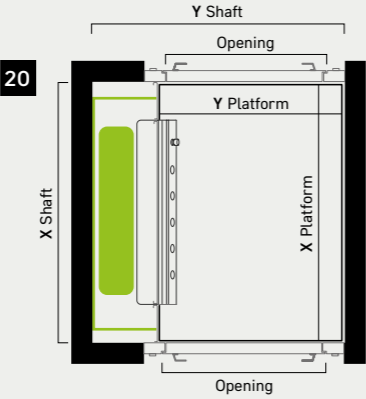
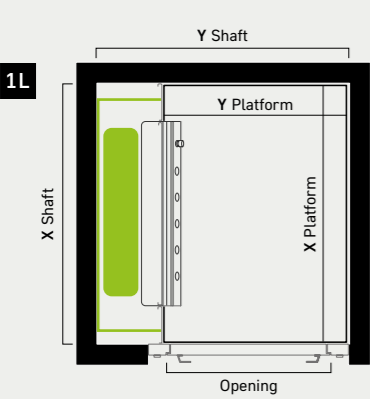
⁴ Plants with close planes at both ends are not feasible



Standard

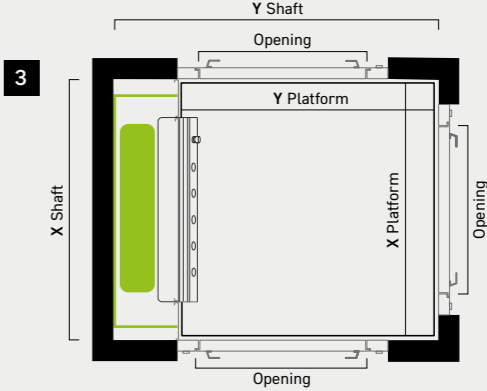
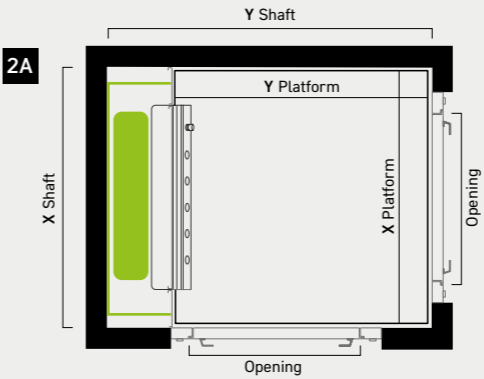
Capacity			Platform				Existing shaft		Structure	
Load (kg)	People	Accessibility	X (mm)	Y (mm)	Opening (mm)	Access	X (mm)	Y (mm)	X (mm)	Y (mm)
300	4		1200	850	750	1L	1240	1190	-	-
300	4		1200	900	750	1L	1240	1240 ³	1344	1344 ¹
300	4		1200	850	750	20	1240	1190	-	-
300	4		1200	900	750	20	1240	1240 ³	1344	1344 ¹
300	4		950	1200	750	1F ⁴	990	1540	1094	1644
400	5		1200	1200	800	2A	1240	1540	1344	1644 ²
400	5		1200	1200	800	3	1240	1540	1344	1644 ²
350	4		1300	950	800	1L	1340	1290 ³	1444	1394 ¹
350	4		1300	950	800	20	1340	1290 ³	1444	1394 ¹
350	4		1000	1300	800	1F ⁴	1040	1640	1144	1744
400	5		1400	1100	900	1L	1440	1440	1544	1544 ²
400	5		1400	1100	900	20	1440	1440	1544	1544 ²
400	5		1100	1400	900	1F ⁴	1140	1740	1244	1844

¹ Technical cabinet on request/feasibility | ² Add 40mm to Y shaft for technical cabinet side door | ³ Add 10mm to Y shaft for technical cabinet side door
⁴ Technical cabinet side door not available

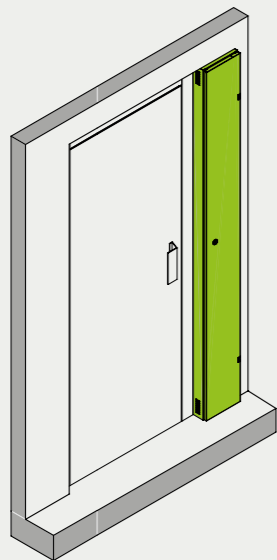


The smallest

Capacity			Platform				Existing shaft		Structure shaft			
Load (kg)	People	Accessibility	X (mm)	Y (mm)	Opening (mm)	Access	X (mm)	Y (mm)	X (mm) only for indoor	Y (mm) only for indoor	X (mm) for outdoor & indoor	Y (mm) for outdoor & indoor
150	1		680	580	500	1L	720	920	780	1030	824	1054
150	1		680	580	500	20	720	920	780	1030	824	1054
150	1		680	580	500	1F	720	920	780	1030	824	1054
150	1		680	580	500	2A	720	920	-	-	-	-
150	1		680	700	500	2A	-	-	780	1150	824	1174
150	1		680	580	500	3	720	920	-	-	-	-
150	1		680	700	500	3	-	-	780	1150	824	1174

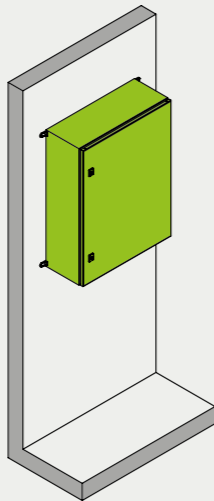


Technical cabinet

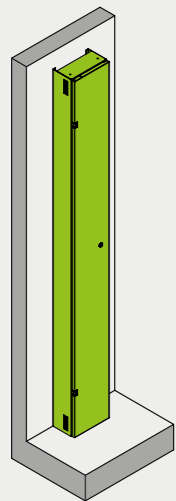


SWING DOOR SIDE¹
W280 x D200 x H2100
Finishes:
✓ As per landing door

¹ Not available with the alluminium, the crystal, the fire resistant e the H non standard.



ON THE WALL
W600 x D260 x H800
Finishes:
✓ RAL paint 7035



ON THE WALL
W280 x D200 x H2100
Finishes:
✓ As per landing door
✓ If painted metal shaft:
the same colour of the shaft

WeAre



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