



SB 200

ENCLOSED PLATFORM LIFT

BARDUVA PROVIDES COST EFFECTIVE SOLUTIONS FOR CUSTOMERS WITH DIFFERENT FINANCIAL CAPABILITIES



Barduva has been in the lifting equipment market for almost 20 years.

From the very start the creation of our platform lifts was based on our own technical solutions using the latest research in mechanics and electronics.

All the components of our products are developed exclusively by professional engineers of our firm. Lift assembly and testing are carried out in our factory as well, this way taking our product quality and

customer service to a significantly higher level than it is commonly accepted in the industry. We can create new products, adopt innovative technologies and offer the shortest lead time for existing products.

The years of experience in development, highly qualified constructors and engineers, constantly improving methods of production management and established worldwide partnerships make us very competitive in the market and provide a reliable basis for the successful development of our company.

**WE ARE ALWAYS OPEN TO INNOVATIONS AND
CUSTOMISED SOLUTIONS. FLEXIBILITY AND
RESPONSIVENESS ARE OUR MAIN PRIORITIES.**

SB 200

Screw driven enclosed platform lift



- > FLEXIBLE DESIGN
- > LOW SPACE REQUIREMENTS
- > HIGH LEVEL OF SECURITY
- > POWER-SAVING TECHNOLOGIES
- > FLEXIBLE DIGITAL CONTROL SYSTEM
- > SMOOTH ADJUSTABLE MOVEMENT
- > FAST AND INTUITIVE INSTALLATION
- > EXTERIOR DESIGN OPTIONS
- > DURABLE SCREW DRIVE
- > WIDE RANGE OF OPTIONS AND ACCESSORIES

SB200 is a vertical platform lift assembled using high quality materials and designed to meet the characteristics of ultimate performance and outstanding aesthetics.

Passengers are lifted by the platform inside the shaft which is constructed of special multilayered steel sandwich type panels or glass panels.

The platform is moving at a maximum speed of 0.15 m/s. Every trip starts and ends with exceptional smoothness. The platform, the control panel and its buttons are adapted to be used by any category of passengers, including wheelchair users and the visually impaired.

A screw driven system ensures durability and the highest level of security compared to other types of drives used in similar platform lifts.

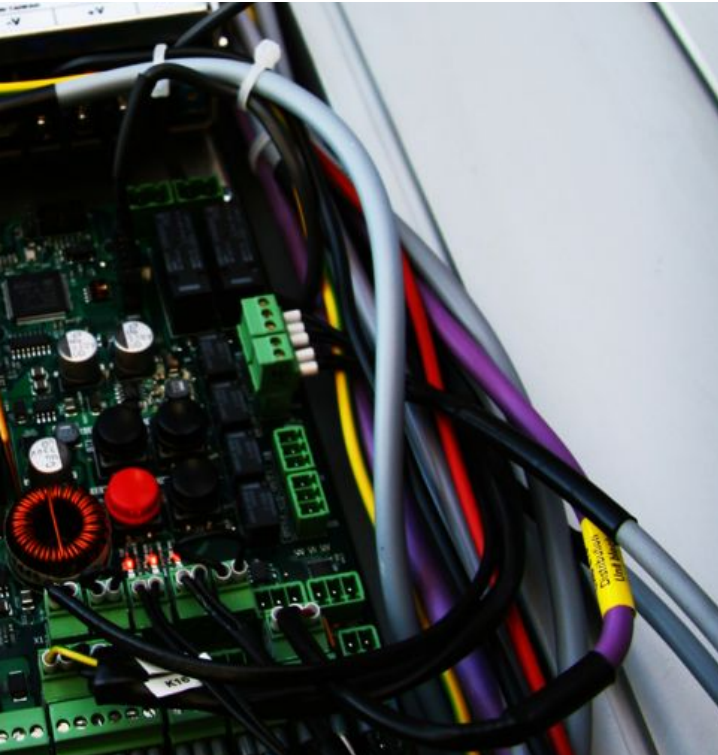
Platform control system supports up to 6 stops and 3 doors at each stop. SB200 has a standard load capacity of up to 450 kg and a travel height of 13 meters.

NEW CAPABILITIES AND CHARACTERISTICS OF THE SB200 CONTROL SYSTEM



INCREASED RELIABILITY AND FLEXIBILITY

- Advanced system of diagnostics, which considerably simplifies service. The most important signals and states are displayed on the diagnostic panel and if necessary, the structure of the displayed signals can always be expanded or changed.
- A detailed record of all the events in the system. With a computer it is possible to watch the current and last diagnostic messages of the system and to identify any malfunctions in the system to within the code lines in the software.
- A software update of all electronic units in the system, without their uninstallation, is possible.
- The system carries out exact measurements of voltages and currents, controls overloads, automatically defines sequence of phases, and reacts to interruptions or asymmetry of phases. The system is tolerant to change through the alternation of phases.
- The system (without reinstallation) can be remade from a single-phase in to three-phase and vice versa. Thus, the software isn't required to be changed.
- With a 3-phase power source, the frequency converter isn't used in the elevator. It increases reliability of the drive and reduces the probability of emergency shutdowns because of converter errors.
- Positioning and speed sensor accuracy is increased, making movements of the platform smoother and exact.
- There is continuous control of the integrity of information communication lines. The movement stops in case of damage to the communication lines.
- Susceptibility to a lowered power supply voltage is reduced.
- The level of electromagnetic radiation from the elevator is drastically reduced in a 3-phase configuration.
- A control system for lubrication is provided.
- Solenoids can malfunction. The exact reasons for this are often not clear, but monitoring is necessary to record the malfunction and to take action.
- The accumulator helps to increase the reliability of the operation of the solenoids.



SIMPLIFIED ASSEMBLY AND SETUP

- Applications of a flat connecting cable between a platform and pit.
- Length of connecting wires between modules on the platform is reduced.
- The new type of an encoder that doesn't demand adjustment is applied.
- Assembly is simplified - all relays are located on a PCB. There is no need for manual wiring for the electronic PCB.
- Conductors and sockets for the SafeLine installation and other solutions from third-party firms are allocated in advance.

FOR END USERS

- Level of high-frequency noise from the motor is reduced.
- The accuracy of the platform positioning is increased several times (about 0.2 mm).
- The endurance to overloading is increased. Now the platform can move more than 600 kg of freight during long time.
- In case of a power outage, the operation of locks, automatic closers and electromagnets continue to work from a backup voltage source, including locks, door openers and etc.
- Emergency lowering of the platform is switched automatically and can be controlled both from the panel on the platform, and from buttons on the base unit.
- For emergency lowering separate accumulators aren't required.
- The built-in accumulators are charged automatically.
- The emergency drive can lower and lift a platform weighing 200 kg for 30 min.
- There was a possibility of illumination brightness control on the platform.
- The voice notification is now a built-in function. It is possible to record voice or music any volume.
- Heater relays for temperature control in the pit and on the platform are built in.
- Ability for connection of external systems of the user are expanded (fire alarm system, additional doors, security alarm system and so forth.).
- In case of a fire alarm system activation, any floor (usually the ground floor) can be designated as the emergency landing location.
- The system has a built-in WI-FI transceiver.



DESIGN

The operation principle of SB200 is based on the screw self-locking gear. The engine is mounted on the platform itself and rotates a threaded nut, which moves along the stationary screw, this way lifting the platform.

The shaft is constructed on the basis of an anodized aluminum frame interconnected with the panels of a client's choice. Multi-layered sandwich panels and laminated glass panels come as a standard.

A maximum of three doors may be installed on each floor with either left or right swing. The doors on the top floor stop may be designed in the form of gates. This type of construction looks aesthetic and modern and gives a clear view of the surroundings.

At the request of the client, the platform and panels may be painted in any color of RAL scale. SB200 is a standard color RAL9006 (white aluminum).



APPLICATION

SB200 is designed for a comfortable use by all categories of passengers, including the elderly and people with limited mobility.

Our platform lift fits perfectly both in the interior of buildings, and in a variety of external architectural styles even, in some cases, improving the aesthetics of buildings. In the case of internal installation, SB200 has all the essential qualities of a platform lift: minimum overall dimensions, no pit and machine room, silent operation and low energy consumption.

SB200 may be installed in libraries, museums, hospitals, schools, airports, railway stations, aboveground and underground passages or parking. Our lifts are widely used in private houses, cottages and apartment buildings.

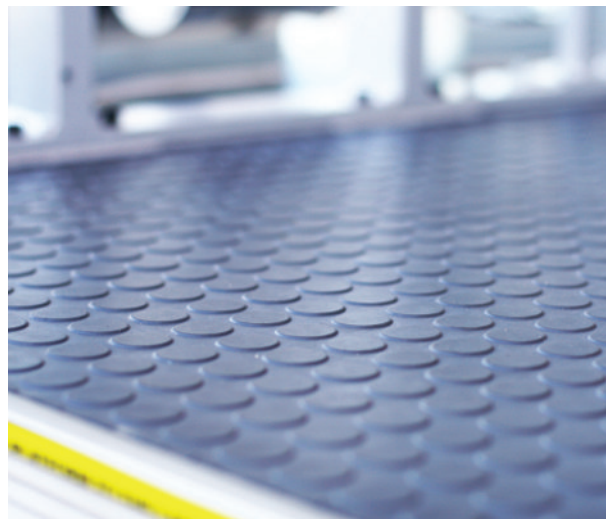
SB200 is durable and unpretentious in service, adaptable to dipainted in any color of RAL scale. SB200 is a standard color RAL9006 (white aluminum).



COMFORT

The absence of the lift cabin in SB200 lets us make a spacious and light platform. A standard platform (1485 x 1070 mm) ensures a comfortable journey for a person with a wheelchair and his attendant. The control of the platform is very simple and intuitive, with a stable system to incorrect commands or its subsequences. A passenger may stop and resume the movement at any time of the trip and even change the lift's moving direction. The beginning and the ending of the lifting process are performed in very smooth easing algorithms and don't evoke any uncomfortable feelings for sensitive people.

A uniformly backlit control panel, with a comfortable handle below, contains large buttons with embossed symbols at a convenient height for accessing from sitting or standing positions.



PLATFORM FLOOR

The platform floor cover is made of rough anti-skid material, which is highly adhesive and abrasion resistant. The floor coating material may contain logos, promotional materials or pictures according to our clients' needs.



LED LIGHTING

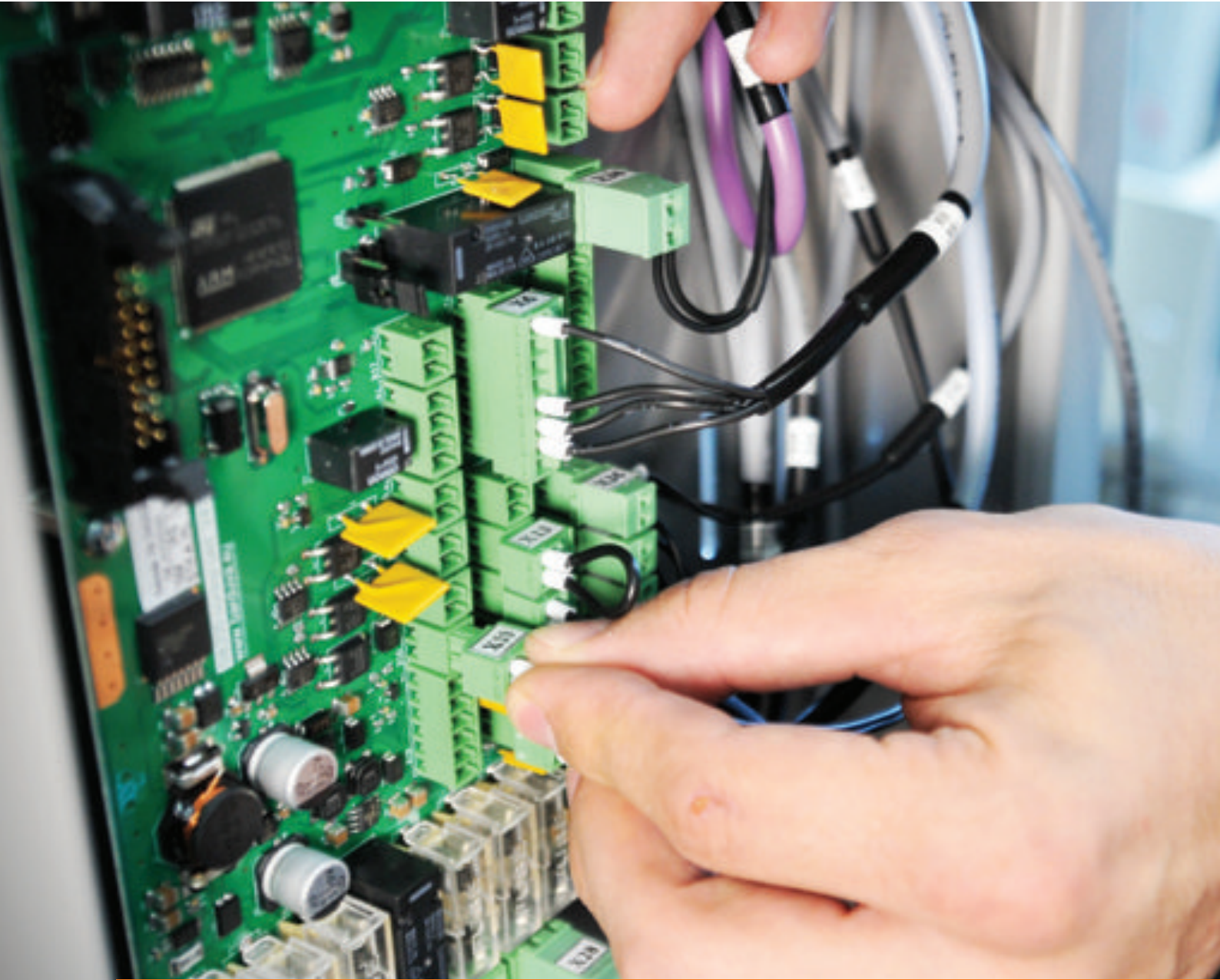
We use the latest LED technology for lighting of SB200 as it is cost-effective, durable and has a wide palette range. The sets of a large number of LED elements provide uniform illumination and an excellent aesthetic appearance.

Energy saving LED lighting may stay on for a long time even in case of an emergency power failure.

A backup battery installed on the platform may keep the necessary level of lighting for a couple of hours.



WE ARE READY TO SATISFY ANY INDIVIDUAL REQUEST OF A CLIENT REGARDING PLATFORM DESIGN OR LIGHTING OPTIONS BASED ON LED AND OTHER TECHNOLOGIES.



INNOVATION

Vertical platform lift SB200 combines time-tested design solutions and new approaches to electronic control and fault diagnosis. By using the highest quality materials and components, our task is to increase the longevity of the lift and to minimize the downtime associated with troubleshooting and maintenance.

The elevator control system can be equipped with a special diagnostic module that provides the detailed information on the status of all platform nodes and system sensors.

The module informs about the usage of

SB200, including the number of lifts and trip distances. It also enables to perform the adjustments on the lift operating settings, including speed and smoothness, the height of stops, lock closing time, button modes and much more.

With a sufficient expertise of staff a computer may be used instead of a module to implement the modifications and even reprogram the system completely. The diagnostic module helps to perform the functions of the remote monitoring, voice messaging and two-way wireless speakerphone via GSM.



COST EFFICIENCY

The maximum efficiency of SB200 is achieved by using lighter materials, power saving lighting technologies and selecting a specific electric drive.

The electric drive of the lift is constructed on the basis of an electronic frequency converter, which has the best characteristics of power consumption compared to directly connected motors, and enables the adjustment of the speed and smoothness of movement.

SB200 lifts come with either a three-phase or single-phase frequency converter, depending on the capabilities of the present electrical

circuit and intensiveness of lift usage. The frequency converter always provides the engine with the most optimal energy supply and prevents any energy wastage at the same time adapting to the grid voltage drops.



RELIABILITY AND SECURITY

Barduva is continuously improving its vertical screw driven platform in terms of security and reliability indexes. The product reliability is the feature which is beneficial to both consumers and manufacturers.

Long time testing has shown that even after 50.000 cycles and more than 600.000 meters of travel the amortization of the main gear was hardly recognizable.

The control system of SB200 lift has passed stringent tests on the impact of the strong external electrical interference and received a certificate of electromagnetic compatibility (EMC).

Technical maintenance service performed a general analysis on the lift design and its schematic solutions, in order to identify any possible weaknesses in security, and came to the conclusion.

Conclusion that all measures are fully implemented, confirming the certificate of conformity. The security measures implemented in the SB200, comply with one of the most stringent European standard EN81-41: 2010.

SB-200 always fixes itself at an exact indicated position thanks to the triple braking torque system:

- Self braking torque of a nut and a screw;
- Electromechanical brake inside the motor;
- Electromechanical brake on the nut, executed by powerful solenoids.

In case of emergency situations the lift mechanism is supplied with a manual emergency descent.

Optionally, the emergency lowering mechanism may be actuated by an electric motor with a backup battery.

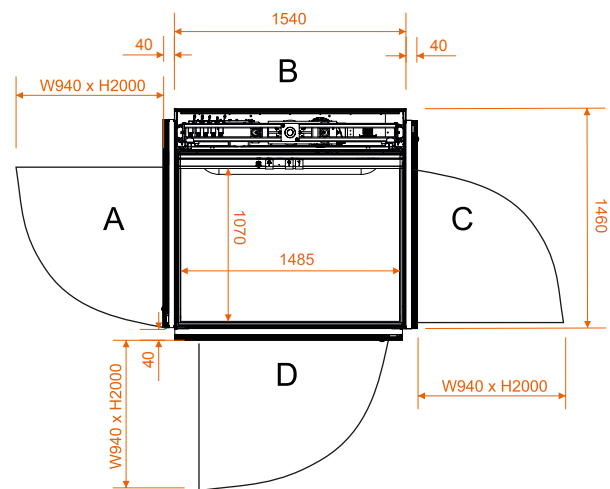


TECHNICAL SPECIFICATIONS

STANDARD VERSION

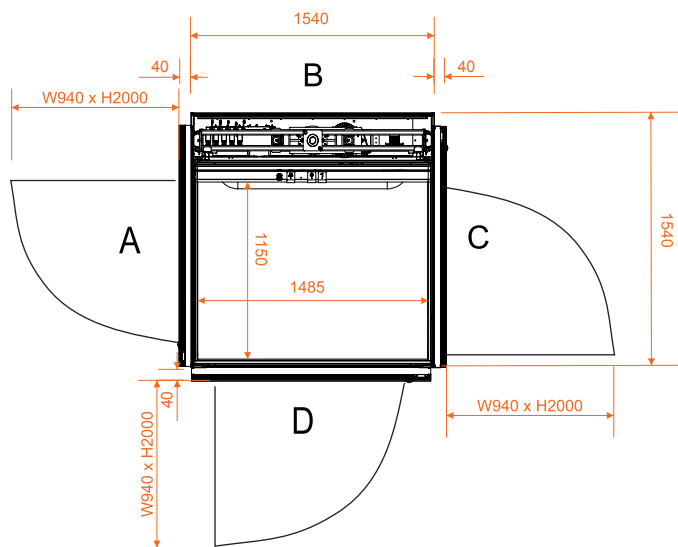
Rated load	up to 450 kg and more
Capacity	up to 5 persons
Drive system	Screw-driven
Speed	Maximum 0.15 m/s
Power supply	220-230 V, 1 phase; 380-400 V, 3 phase, 50 Hz
Motor	up to 3 kW and more
Frequency converter	Soft start - soft stop comes as a standard
Travel height	up to 13 metres
Landings	up to 6
Platform dimensions	1070 x 1485 or 1150 x 1485 or 1100 x 1400 (length x width, mm)
Shaft dimensions	1460 x 1540 or 1540 x 1540 or 1500 x 1540 (length x width, mm)
Door clearance	940 x 2000 (width x height, mm)
Gate	940 x 1300 (width x height, mm)
Door configuration	Right or left swing, up to 3 doors per landing Door frame required dimensions 1375 x 2207 (length x width, mm)
Shaft walls	Aluminium profiles with glass or steel panels
Color	RAL 9006 (light grey aluminium) as a standard
Noise level	Less than 70 dB
Control system	22..27.6 V, multi-processing data line
Technical safety equipment	Safety edge around the the platform, emergency STOP buttons, electronic speed control, overload detector, opeing control of doors and locks, electronic control of engine performance, screw load sensor
Compatibility with European Standards	EN81-41: 2010

TECHNICAL SPECIFICATIONS



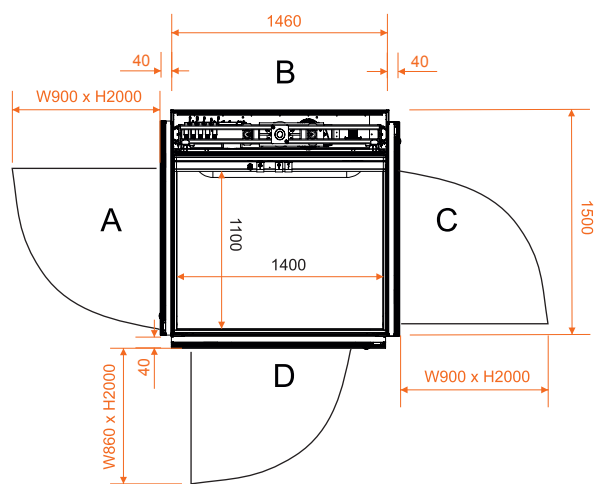
STANDARD PLATFORM LIFT 1070 X 1485

System	Screw-driven
Rated load	400 kg
Speed	0,15 m/sec (9 metres/min)
Platform dimensions	1070 x 1485 mm
Shaft dimensions	1460 x 1540 mm
Structural opening	1500 x 1580 mm
Required opening for the door	W (platform width) x H (decided door height) + 250 mm
Pit	50 mm
Power supply	380V, 3 phase or 230V, 1 phase



STANDARD PLATFORM LIFT 1150 X 1485

System	Screw-driven
Rated load	400 kg
Speed	0,15 m/sec (9 metres/min)
Platform dimensions	1150 x 1485 mm
Shaft dimensions	1540 x 1540 mm
Structural opening	1580 x 1580 mm
Required opening for the door	W (platform width) x H (decided door height) + 250 mm
Pit	50 mm
Power supply	380V, 3 phase or 230V, 1 phase



STANDARD PLATFORM LIFT 1100 X 1400

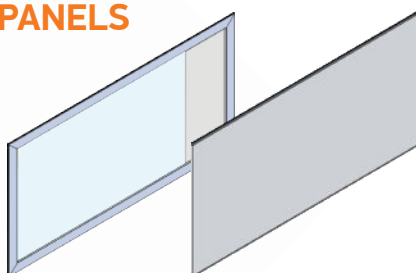
System	Screw-driven
Rated load	400 kg
Speed	0,15 m/sec (9 metres/min)
Platform dimensions	1100 x 1400 mm
Shaft dimensions	1460 x 1500 mm
Structural opening	1500 x 1540 mm
Required opening for the door	W (platform width) x H (decided door height) + 250 mm
Pit	50 mm
Power supply	380V, 3 phase or 230V, 1 phase

CUSTOMISATION

COLOUR CUSTOMISATION

The whole lift can be painted in almost any colour to suit your taste and environment. You can choose from hundreds of RAL palette colours available.

PANELS

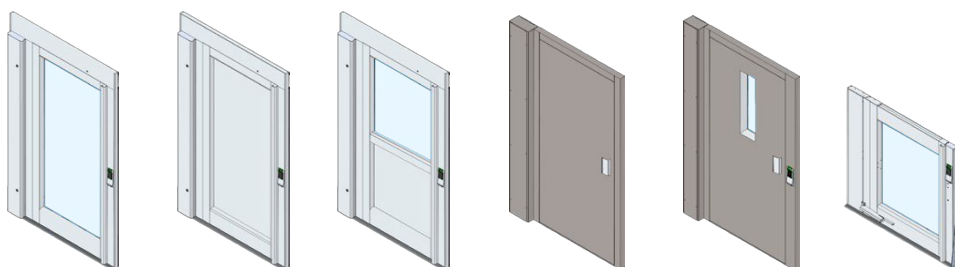


Platform lift shaft can be assembled using multi-layered sandwich panels and laminated glass panels.

ADDITIONAL OPTIONS

- Jump seat
- Ramp
- Electrical outlets for recharging wheelchairs and other equipment
- Phone line
- Voice announcer, musical theme
- Extra lighting options
- Two-way wired or wireless speakerphone on the platform
- Additional floor indicators
- Automatic door openers
- Electronic contact and non-contact keys LED lighting

DIFFERENT DOOR TYPES



Door type	Aluminum with glass (standard)	Aluminum	Impost	Fire proof EI60	Fire proof EW60 – with a small window	Gates
Clear door opening size mm, (WxH)	940x2000*	940x2000*	940x2000*	900x2000*	900x2000*	940x1300
Glass size mm, (WxH)	774x1705	-	774x926	-	100x600	774x926
Door finish	Anodized aluminium	Anodized aluminium	Anodized aluminium	Painted steel	Painted steel	Anodized aluminium
Frame/RAL colour	Anodized aluminium	Anodized aluminium	Anodized aluminium	RAL 9006	RAL 9006	Anodized aluminium
Inbuilt door closer	STD	STD	STD	STD	STD	STD
Automatic door opener	External as option	External as option	External as option	External as option	External as option	External as option
Door handle	Integrated in the door leaf	Integrated in the door leaf	Integrated in the door leaf	Placed external	Placed external	Integrated in the door leaf

* Door height of between 1800 to 2300 mm available as an extra option.



WE ARE CONSTANTLY THINKING ABOUT TOMORROW, BECAUSE WE KNOW THAT THE SUCCESS BELONGS TO THOSE WHO BEST PREDICTS THE NEEDS OF CUSTOMERS. WE LOVE CHALLENGES. WE ARE READY TO FULFILL CUSTOMER ORDERS FASTER THAN OTHERS AND FULFILL ORDERS THAT OTHER COMPANIES DO NOT DARE TO TAKE.



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