

## EMB120 home lift

### User manual

2026.03.02 V1

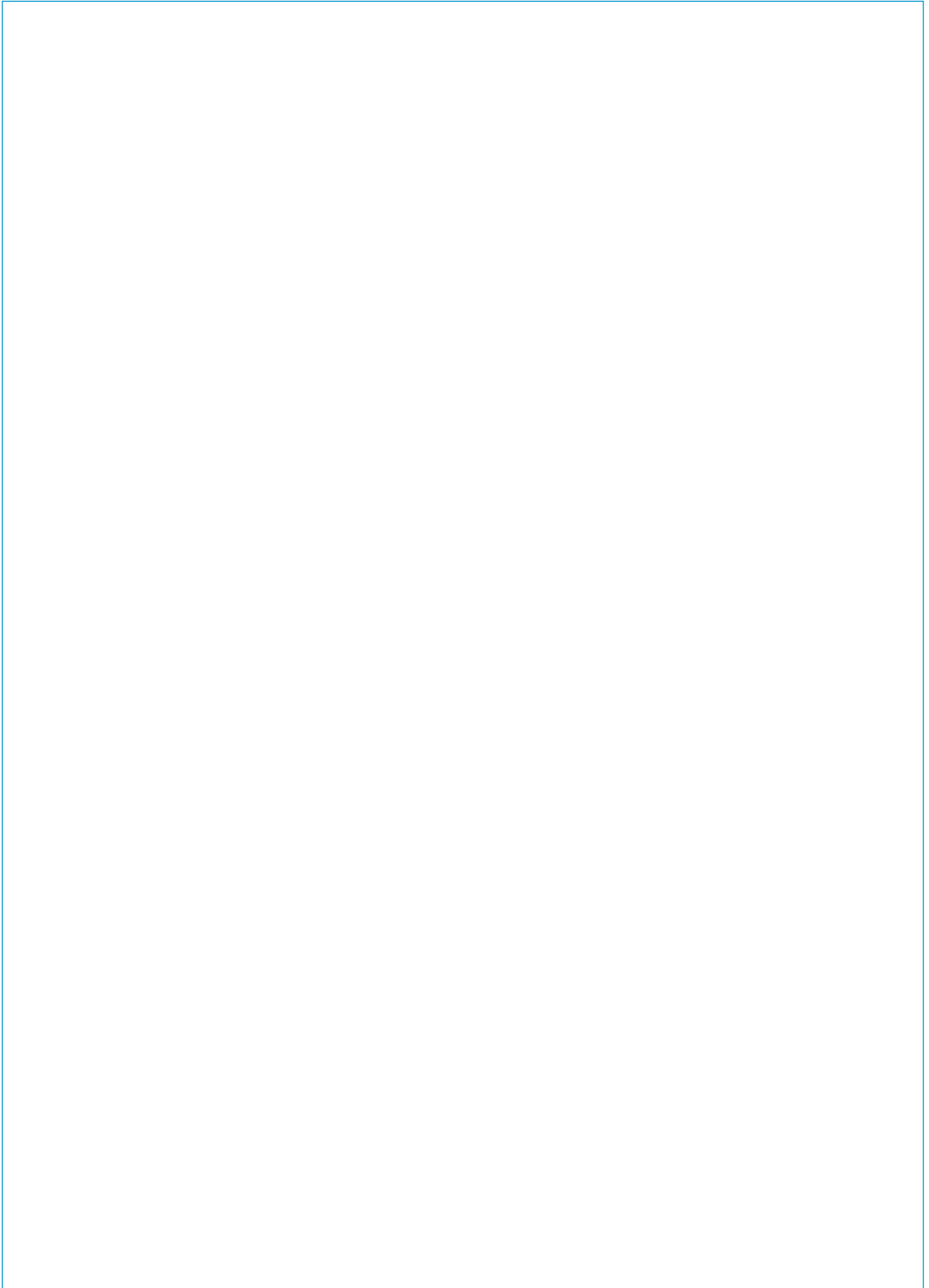


## List of corrections

Version	Date	Notes
V 1.0	2026.03.02	First release

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## 1. Introduction

Thank you for choosing the Barduva Home Lift EMB120. We guarantee that this lift will make your life easier, safer and more convenient. Barduva Home Lift EMB120 is intended for home use and complies with the Machinery Directive 2006/42/EC and parts of the standard EN81-41:2000. To ensure long-term satisfaction with our lift, please follow the recommendations presented below:

- Correct use affects safety and the correct and long-lasting operation of the lift.
- In case of failure, open the troubleshooting section. Do not attempt to repair the lift yourself. Contact the maintenance company for help.
- The lift must be regularly maintained. Maintenance period 1 year. This will ensure safety and extend the life of the lift.
- For lift maintenance, it is recommended to sign a contract with an authorized service, which will ensure the best trained specialists and the best maintenance.
- Do not use the lift in case of fire.
- If you have any additional questions, consult an authorized dealer, whose contact details can be found in this manual.

## 2. Safe operation

The EMB120 lift is equipped with a number of safety and emergency devices that ensure a completely safe use of the lift, but it is also important that the lift operates in accordance with the recommendations of this manual in order to avoid accidents:

1. The lift is motorized and has moving parts. Only persons who are familiar with lift operation, travel, and braking are allowed to operate the lift.
2. The lift is not intended for entertainment. Children under the age of 14 must not be allowed to play in the lift or with lift. And management is possible only under the supervision of adults.
3. Children must not be left near the lift without adult supervision both at the lower stop and at the upper stop. Although the lift is equipped with sensitive surfaces and light curtains, there is still a small chance of being under the descending lift or entering the opening at the second stop before it closes. It is the user's responsibility to make sure that the situation does not arise.
4. The owner of the lift is obliged to ensure regular maintenance of the lift.
5. After installing the lift, the persons responsible for the installation must check and fill in the list of inspection works.

### 3. Lift description



1	Door (or Gate)	7	Electric door lock
2	LED lighting	8	Handles
3	Safety bottom	9	Top cover
4	COP (Car operating panel)	10	Electric compartment cover
5	Guide rails	11	Drop seat (not shown)
6	Safety light curtain (for gate)	12	Back panel

## 4. Lift technical data

Drive	Belt with electro- motor reducer
Rated speed	≤ 0,15 m/s
Rated load	250 kg
Maximum lifting height	3000 mm, 2 stops
Doors	Full height, half height, left or right (manually operated)
Operation	Constant pressure of operation button
Lift cabin calling	Remote control, 2 pcs.
Power supply	220-240V, single phase, 6 A.
Emergency lowering	Battery operated, the lift descends to the bottom stop
Emergency features	Key switch Emergency alarm Emergency stop button Emergency lighting
Safety features	Load sensitive shaft lid (with lock- preventing removal) Safety bottom Overload sensor; Overspeed governor; Balance sensor; Belt sensor Safety brake Door lock Safety light curtain (with gate as standard)
Lighting	LED
Structure	Building -supported, resting on 1 <sup>st</sup> and 2 <sup>nd</sup> floors, ceiling of the building.
Compliance	Machine directive 2006/42/EC, parts of EN81-41:2010
Optional equipment	Auto dialer GSM 4G module Drop seat Additional remote controlers RAL Safety light curtain

## 5. Lift operation

### 5.1 Travelling



Display

Emergency STOP button

Emergency alarm

Direction up button

Direction down button

Key

1. When entering the lift, the lights turn on automatically.
2. Close the door and make sure that no obstructions pass through the light curtain in the case of gates or when light curtains are selected as an option. In this case, the lift will not move, an audible alarm and visual information on the display will warn of light curtain field violation.
3. If the nominal weight exceeds 250 kg, the lift will also not move until the load is reduced. An audible alarm and visual information on the display will warn of overload.
4. Press the button to move in the desired direction. The lift only works when the direction button is permanently pressed. After releasing the button, the lift stops.
5. Keep the button pressed until the lift stops by itself.
6. After releasing the direction button, the direction of movement can be changed.

## 5.2 Calling the lift

Two remote control buttons can be used. The remotes can be used to call the lift cabin or send it to another floor. Before using the remote control, make sure that no one is on the lift platform and that they are not performing control actions from the platform.



Press the call button and hold it until the lift platform arrives and stops on the desired floor.

Note: it is allowable to stop the lift at any point of movement.

If the lift meets an obstacle, it will stop. If this happens, release the call button, press the reverse button and return the lift to its initial position. Remove the obstacle and you can perform the desired lift call/send.

## 6. Safety elements

The lift is equipped with several safety elements to ensure safe and convenient operation and control of the lift.

Safety devices stop the movement of the lift when the permissible lifting weight is exceeded, when an obstacle appears, or when a malfunction occurs.

Therefore, it is important to know what safety devices are and how they work.

### 6.1 Safety bottom

There is a sensitive surface at the bottom of the lift platform, which, if touched, during movement, will stop the lift immediately. In this case, the lift will only be able to move in the opposite direction. Once the obstacle is removed, the lift can continue moving in any direction.

### 6.2 Door lock and open door sensor

The door is equipped with a lock, which must ensure that the door will not open during movement. There is also a „door closed“ sensor that prevents the platform from moving without the door being fully closed.

It is important to note that the door lock remains locked in the event of a power failure. In this case, the door can only be opened by using a special emergency door key.

The gate also have safety light curtains, that create a zone in the plane of the door and stop the movement of the lift platform, if this zone is violated. In this case, an audible alarm and visual information on the display will be brought out.

### 6.3 Other safety sensors

- The balance sensors stop the movement of the lift after detecting an unevenness in the tension of the belts.
- The overload sensor is designed to prevent the lift platform from moving when overloaded. When the overload sensor is triggered, the light indication on the control panel inside the lift will light up.
- Loose belt sensors will prevent the lift from moving.
- The limit position sensors stop the lift if the normal position sensors fail. In this case, the lift will no longer work until a specialist inspects it.
- The emergency STOP switch. The emergency stop switch is installed on the control board, can be activated by the user from inside of the cabin and immediately stops the movement of the lift. This button can be used only in exceptional cases, for example to stop the lift if

the lift passed the stopping point. When the button is activated, it locks and stays in the locked position. It is turned off by turning the button head on its axis.

## 6.4 Safety brake

If the brake fails, the emergency brake will stop the lift. The safety brake stops the lift when the maximum allowed speed of the platform movement is exceeded. When the emergency brake is activated, the lift remains with the emergency brake on. Only released by moving in the opposite direction. Releasing the emergency brake of the lift is allowed only after the reasons for the situation have been assessed by a technical specialist.

## 6.5 Emergency lowering function

In case of power failure during the lift movement, the lift is equipped with an emergency battery power supply, which turns on automatically.

The lift can descend to the bottom stop using the emergency power supply and the conventional control method.

Attention: the lift that is not in use cannot be disconnected from the power supply, because in this case the lift will switch to battery power, which will discharge the batteries over a longer period of time and the lift may not work in the event of an emergency.

## 6.6 Emergency evacuation procedure

6.6.1 the main power supply goes out, the platform lighting should come on soon.

6.6.2 If the emergency STOP button has been activated, it must be released by turning around the axis until it bounces back to its original position

6.6.3 The battery back up power supply will activate automatically and will only allow descent. Descent only happens when the down button is pressed.

6.6.4 After landing, the door lock should unlock and passengers can get out.

6.6.5. If the door does not unlock, the door can be unlocked manually using a special emergency door release key.

## 6.7 Cleaning of a lift

Only soapy water is allowed to clean a plexigal glass. Do not use products containing ammonium, alcohol, solvents, acetone and special glass cleaners - they can damage the glass.

Vacuum the floor.

Try to keep dust and dirt particles out of the guide rails' openings.

## 7. Problems troubleshooting

Problem	Possible reasons	Solution
1. Lift is not working	a. The light curtain area is disturbed	Remove objects or hands from the safety light curtain zone.
	b. The control panel does not work	Turn on the control panel by turning the panel key to the "On" position.
	c. Emergency STOP switch is pressed.	The emergency button is deactivated by turning the button cap clockwise until the button cap springs back.
	d. The door latch was not fully closed	Try closing the door again.
	e. No electricity supply	A power failure is indicated by a light indication. In this case, emergency battery power must be activated. However, if the platform is at the bottom stop, the elevator will still not move up.
	f. Lift has passed its limit stop zones	It is necessary to contact the supervising company.
2. Lift does not respond to remote control	a. The batteries of the remote control have died	Replace the remote control batteries
	b. Lift receiver does not receive a signal from the remote control	Use the remote control closer to the lift.
3. Lift does not go down to the bottom stop, but can only go up	a. There is an obstacle in the lift way	Remove the obstacle
	b. Power failure	Wait until the power is restored
	c. When descending, the rated speed is exceeded and the emergency brake had activated	Contact the maintenance company
4. The cabin door does not open	a. The lift platform has stopped in a non-stop zone	Use the call buttons or the remote control until the platform reaches the stop zone.
	b. The door touches the threshold	Use the control buttons to try to make the elevator go higher.

## 8. Warranty

The EMB120 home lift comes with a 24-months warranty against manufacturing defects or material failure.

The warranty period begins four weeks from the date of dispatch of the product from the manufacturer or from the date the installed lift is put into use, whichever occurs first.

Dismantling and moving the lift will void the warranty unless is done by the original owner and by an authorized representative.

The warranty does not cover accidental, intentional or cosmetic damage or damage caused by the end user's failure to follow safety or user instructions, reasonable wear and tear, or failure to follow a routine maintenance schedule.

All installation and maintenance work must be performed by an authorized representative or service technician.

Any attempt to repair the product yourself will void the warranty.

This warranty does not cover battery failure. Note: turning off the main switch in the lift car ceiling or the circuit breaker or disconnecting from the the wall outlet will activate the battery backup system. This drains the battery and prevents access to the backup battery system (in the event of emergency).

## 9. EMB120 CHECK LIST

### Control inspection list after EMB120 installation

Assembly place:		S/N:
Country:		Post code:
City:	Street:	No:

### 9.1 Lifting gear

MECHANISM	MARK	NOTE
Motor condition	<input type="checkbox"/>	
Motor brake functionality	<input type="checkbox"/>	
Belt fixation and condition	<input type="checkbox"/>	
Battery	<input type="checkbox"/>	

### 9.2 Cabin

MECHANISM	MARK	NOTE
Control buttons	<input type="checkbox"/>	
Emergency alarm	<input type="checkbox"/>	
Emergency Stop	<input type="checkbox"/>	
Display	<input type="checkbox"/>	
COP Key	<input type="checkbox"/>	
Cabin and emergency light	<input type="checkbox"/>	
Door/Gate lock	<input type="checkbox"/>	
Door/Gate contact	<input type="checkbox"/>	
Safety bottom (under cabin)	<input type="checkbox"/>	
Electric compartment cover	<input type="checkbox"/>	
Drive unit top cover	<input type="checkbox"/>	

### 9.3 Guide Rails

MECHANISM	MARK	NOTE
Guide rails condition	<input type="checkbox"/>	
Fasteners	<input type="checkbox"/>	
Cable caterpillar	<input type="checkbox"/>	
OSG strips	<input type="checkbox"/>	
Limit plates*	<input type="checkbox"/>	

### 9.4 Floor Insert

MECHANISM	MARK	NOTE
Floor insert	<input type="checkbox"/>	
Floor insert flange	<input type="checkbox"/>	
Shaft lid	<input type="checkbox"/>	
Shaft lid lock	<input type="checkbox"/>	

### 9.5 General

MECHANISM	MARK	NOTE
Overload sensivity	<input type="checkbox"/>	
Balance sensor	<input type="checkbox"/>	
Loose belt sensors	<input type="checkbox"/>	
Shaft lid load sensors	<input type="checkbox"/>	
Cabin aligned/no wobble	<input type="checkbox"/>	
Remote control	<input type="checkbox"/>	
Emergency lowering	<input type="checkbox"/>	

### 9.6 Optional Equipment

MECHANISM	MARK	NOTE
Safety light curtain	<input type="checkbox"/>	
Auto dialer	<input type="checkbox"/>	
GSM 4G module	<input type="checkbox"/>	
Drop seat	<input type="checkbox"/>	

## 10. Electrical schematic diagram



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