harvesthealthcare

General User/Safety Guide

# ASCENT PRO 200

Version V.1
Subject to technical modifications
01.07.2019

CE

Dear Customer,

Thank you for purchasing this Harvest Healthcare product. Our products are manufactured and tested according to stringent quality criteria. Correct use of the device is imperative in order to ensure its proper and safe functioning. Please read the content of this operating manual before starting to use the product.

Please observe the safety instructions in particular.

Please note that there might be minor differences between the images shown in this manual and the actually supplied device.

Subject to technical modifications and error.

Should you have any questions or require more information about your device, please contact us by phone or e-mail.

Our friendly Customer Service team will be glad to help you.

BEKA Hospitec GmbH is the manufacturer of the product.
They are certified according to DIN EN ISO 13485 by TÜV SÜD Product Service GmbH.
Therefore, the development, manufacturing, quality assurance and service of our entire product range is subject to high quality standards.

CE

# Table of Contents

# 1. Introduction

Dear Customer,

Please observe the following:

1. Please read the provided operating manuals carefully and thoroughly.
2. Use the device only for the intended application.
3. The device may only be operated by trained staff.
4. Servicing, maintenance operations and safety checks may only be performed by trained or qualified individuals on this equipment.
5. Assembly operations, extensions, modifications, or repairs may only be performed by trained or qualified individuals on this equipment.

   In case of technical interventions, such as extensions and fittings to our devices, which are not carried out by trained or qualified individuals on this equipment, all warranty rights on the modifications as well as on the device or on the device functions, which are related to the modification, shall expire.

## Liability and warranty

The manufacturer of the device is only responsible for the safety and the reliability of the device if:

1. The installation has been carried out by authorised staff
2. The space concerned complies with the current VDE-regulations
3. The following conditions are met:
   - The device is only used as per the intended purpose
   - The functional tests are performed periodically

## 2. Symbols and pictograms used in this manual

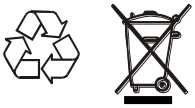
Please observe the accompanying documents/operating manual.

Warning Hazardous Area.

Applied part “Type B” to DIN EN 60601-1.

Do not push/pull the motor.

Do not push/pull the sling bow.



Special waste, not household waste.
The device and the packaging materials never must be disposed of in the domestic waste stream.

CE-label in accordance with the EC-Directive on Medical Devices.

Solely intended for indoor use.

Protection class II.

## 2.1 Type plate


This image shows the type plate.

The type plate is located at the column support of the stand-up and raising aid

The shown serial number (**SN**) 1518160082 is just an example.

In case of queries, please mention the serial number printed on the type plate of your NORA (Ascent Pro 200).

***Note***: Because of legal regulations, it might be required that the article number and the serial number should be computer-readable as well and therefore they might be printed

# 3.Unpacking and Assembling

## 3.1Required Tools

To remove the packaging materials, you will need:

Cutter knife 

## 3.2 Removing the Cardboard

Cut the strap with the cutter knife and remove the strap.

***Note: Do not cut in the cardboard, as this could damage the surface of the Ascent Pro 200***

Lift the cardboard up to remove it and put it aside.

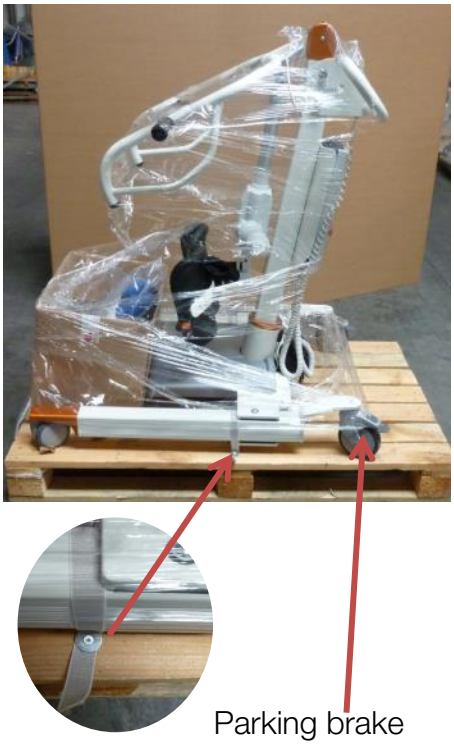
## 3.3 Releasing the Ascent Pro 200 from the Pallet

Both sides of the Ascent Pro 200 are strapped to the pallet.

Remove the screws and the straps.

Please take care not to damage the Ascent Pro 200 when unscrewing the screws.

Please make sure that the parking brakes of the castors are disengaged.




After removal of all fixations and disengaging the parking brakes of the castors you can roll the Ascent Pro 200 from the pallet.

Remove the foil bag. Please take care not to damage the surface of the Ascent Pro with the tools.

The accessories for your Ascent Pro are included in the supplied cardboard box.

## 4. Installation

Dear Customer,

The Ascent Pro 200 is supplied ready for use.

- Any electrical installations are to be carried out by specialist companies only, in accordance with the currently European standards.
- The manufacturer of the device is only responsible for the safety and the reliability of the device.
- Before you start to use our products, your electrical installation must be checked confirm it is safe and compatible to allow the charger unit to be connected to the mains supply.
- In other countries, other requirements might be applicable.
- If unsure contact a qualified electrician to install the wall charging and check the installation is safe to use.

## 4.1 Electrical Connection of the Ascent Pro 200

The Ascent Pro 200 is equipped with a 24V-battery system. A power connection, which is compliant to European regulations, is required for the charger cable as well as the wall charging unit. In operation, the Ascent Pro 200 is mains-independent.

## 4.2 Start-up and Operation (electrical motor/battery unit)

The Ascent Pro 200 is equipped with a 24V-electrical motor. This motor is self-locking and therefore protected against lowering of the sling boom in case of malfunction or failure. The battery of the Ascent Pro 200 must be completely charged before starting to use the device.

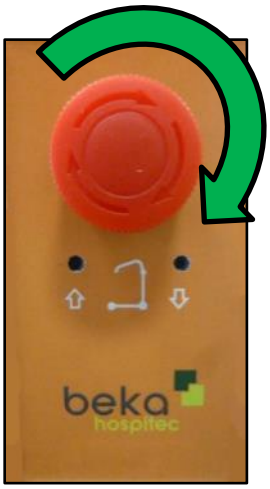
Please check that the emergency stop switch is released (unlatched). To unlatch, turn the emergency stop switch clockwise until it has released.

**NOTE:**

**The battery must be completely charged prior to the first use of the Ascent Pro 200**

**(charging time approx. 4 hours).**

**Please check that the emergency stop switch is released prior to moving the sling boom.**




The emergency stop switch is released by turning the button to the right (i.e. clockwise).

# 5. Operating the Ascent Pro 200

## 5.1 Fields of application

The Ascent Pro 200 has been designed for raising and transferring patients and residents. The patient is raised from a sitting position. The Ascent Pro 200 is to be used exclusively for the indoor transport of residents on level floorings.

### 5.2 Duration of Transfer

The Ascent Pro 200 is designed for a short-term use and any contact with injured skin must be avoided.

*Note*:

No side effects associated with appropriate transfer procedures are known.

Please observe the contra-indications mentioned in Paragraph 5.3.

### 5.3 Contra-indications

The Ascent Pro 200 must not be used for the following persons:

- **Double leg amputees; the patient must be able to weight bear**
- **Stroke patients**
- **Epilepsy patients**

**WARNING:**

Residents suffering from:

- Osteoporosis
- Spine disorders/spinal damage
- Osteogenesis imperfecta
- Mental confusion
- Epileptic attacks

may only be moved or handled using the Ascent Pro 200 in consultation with the attending physician.

Please observe the safety instructions listed in the following paragraph.

# 6. Safety instructions

Please read the following safety instructions prior to using the Ascent Pro 200. All notes, specifications and warnings mentioned on the device as well as in the present operating manual must be respected and observed.

The manufacturer BEKA Hospitec GmbH shall ***not*** accept any liability for any damages, failures or faults caused by improper operation or handling.

## Operating Manual

- Please read the operating manual and the safety instructions before starting to use the Ascent Pro 200. Keep the operating manual near the device for future reference.
- The Ascent Pro 200 may only be used for the specified purpose.
- In case of unusual noises, damages or malfunctions, the Ascent Pro 200 must no longer be used.
- The product may only be used and operated by trained staff.
- Check prior to each use that all visible parts are intact. The Ascent Pro 200 must not be used if any parts are damaged.
- The product must be disinfected after each use.
- Avoid slippery surfaces and thresholds.
- Do not move the Ascent Pro 200 over sloping or uneven floors.
- The Ascent Pro 200 is exclusively fit for indoor use.
- Prior to each use of the device and its accessories, the user must check the functional safety and the good condition of the device and its accessories (e.g. visual check, functioning, etc.).
- Supervision by the caregiver is required throughout the treatment.
- Make sure that the sling form and size match the resident's body.
- Check prior to lifting and then throughout the transfer that all clips are correctly and properly attached.
- Only trained staff are authorised to use slings.
- Please respect and observe the weight specifications for each sling.
- Check prior to each lifting operation whether the help of a second assistant is required.
- Each lifting or transport procedure must be adequately planned in order to ensure optimal protection for the caregiver and the resident.
- Please check before and during the height adjustment procedure that your feet are not located in the area of the castors neither in the resident's area.
- Do not stand between the Ascent Pro and an obstacle during the transport procedure.
- During the movement of Ascent Pro, the carrier frame must be closed.
- Check that no one grabs in a hazardous areas (boom, carrier frame) especially during the adjustment procedure - **risk of crush injury.**
- Make sure that the patient seizes the handles provided to that effect with both hands during the transfer or transport.
- Do not lift the resident higher than is necessary.
- Engage the brakes, castors of the wheel chair or the bed to provide a safe lifting surface for the resident.

- Harvest Healthcare recommends that the brakes are applied when the device is parked. We advise the operator to carry out a risk assessment before operating this equipment. Unlocked castors can allow the device to centralise itself more effectively when in use. The risk assessment must include the understanding that unlocked castors run a higher risk of unintended movement of the device during patient handling. Note: It is carer responsibility to carry out risk assessment before moving the patient.
- Keep the transport of the patient as short as possible.
- Do not push/pull the motor to operate the Ascent Pro 200 and do not expose the Ascent Pro 200 to lateral forces in any way whatsoever.
- Never leave the patient standing in the Ascent Pro 200 without supervision.

- Make sure that the patient cannot tilt forward or sidewards when he/she is being lifted.
- The Ascent Pro 200 is not authorised for use in potentially explosive atmospheres.
- Never exceed the duty cycle or the maximum load.
- Make sure that the battery is charged in a well-ventilated room.
- When the battery is charging, the Ascent Pro 200 must not be used.
- Please use the calf strap to support the patient's legs prior to lifting.
- Check the applied sling for visible damage prior to using it.

**Ventilation**

Never cover up, oversticker or change the slots and holes of the device.

**Maintenance**

Make sure that the maintenance/inspection of the product is regularly executed in combination with a safety check. The intervals for the advised safety check are fixed in section 13.

**After-Sales Service**

Should the Ascent Pro 200 be defective and the problem cannot be resolved by means of one of the measures described in section 14, please contact the Harvest healthcare customer service team.

harvesthealthcare

**t** +44 (0)1709 377172 **f** +44 (0)1709 377173
**e** sales@harvesthealthcare.co.uk
**www.harvesthealthcare.co.uk**

**Cleaning**

Do not use any abrasive or corrosive cleaner to clean the Ascent Pro 200.

The caregivers must protect their skin and eyes against concentrated disinfecting and cleaning products.

**The instruction manual of the applied disinfecting product must be observed.**

Instructions for cleaning and disinfection can be found in section 11.

## Repairs

Repairs to components of the Ascent Pro 200 are only authorised by trained expert personnel. Please contact servicing@harvesthealthcare.co.uk.
Opening the device or other accessories by persons who are not authorised by Harvest Healthcare will lead to the expiration of all guarantee, warranty and liability claims.

## Safety checks

We recommend a “safety check” (SC) on the Ascent Pro 200 at intervals of 12 months. The intervals are fixed in section 13.

In order to preserve the value of the device, we recommend an annual maintenance of the Ascent Pro 200.

## Duty of care

Please check the proper state and the functional safety of the system prior to use. Never insert foreign bodies in the device.

## Accessories

Use only original accessories for the Ascent Pro 200.

**WARNING:**

Any unauthorised repairs, reconstructions and modifications/alterations are not permitted for safety reasons and shall exclude all liability of the manufacturer for the resulting damages.

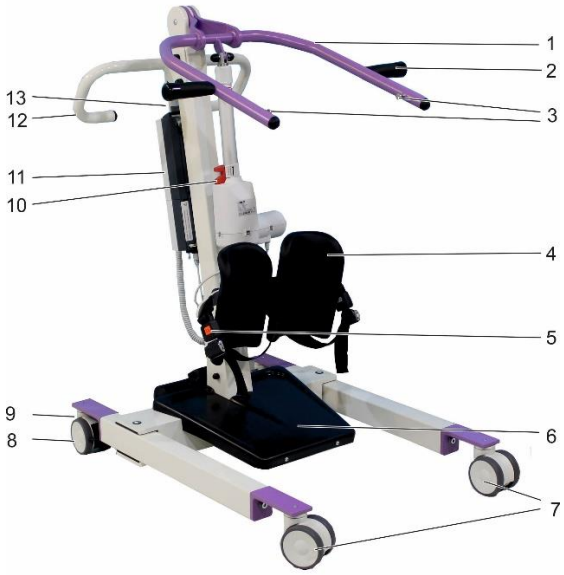
For damages resulting from the use of spare parts or accessories, which are not authorised by the manufacturer, any further liability of the manufacturer shall be excluded.

- **Applied part**

The Ascent Pro 200 is equipped with “B”-Type applied parts.

All exposed, touchable, conductive parts are thereby considered to be an applied part.

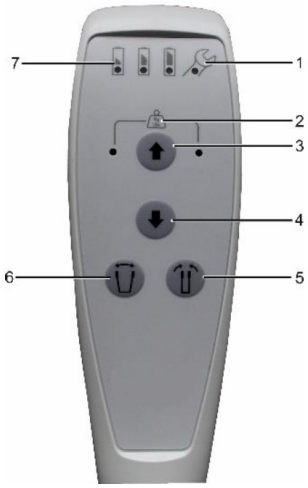
## 7. Operating Elements of Ascent Pro 200




| No. | Description | No. | Description |
|---|---|---|---|
| 1 | Lifting boom | 8 | Rear castors/Parking brake |
| 2 | Patient handles | 9 | Chassis leg |
| 3 | Sling attachment points | 10 | Emergency lowering system |
| 4 | Knee pads | 11 | Control unit with battery |
| 5 | Safety belt for the legs | 12 | Handles |
| 6 | Footplate | 13 | Handset |
| 7 | Front castors | | |

### 7.1 Handset

(Also refer to chapter 9)




| No. | description | No. | description |
|---|---|---|---|
| 1 | Service/safety check due | 5 | Leg chassis close |
| 2 | Lifting boom overload warning | 6 | Leg chassis open |
| 3 | Up command | 7 | Battery charge status |
| 4 | Down command | | |

## 7.2 Explanation of the LED-indications on the Handset

Green LED: battery full, no charging required (100-50%)

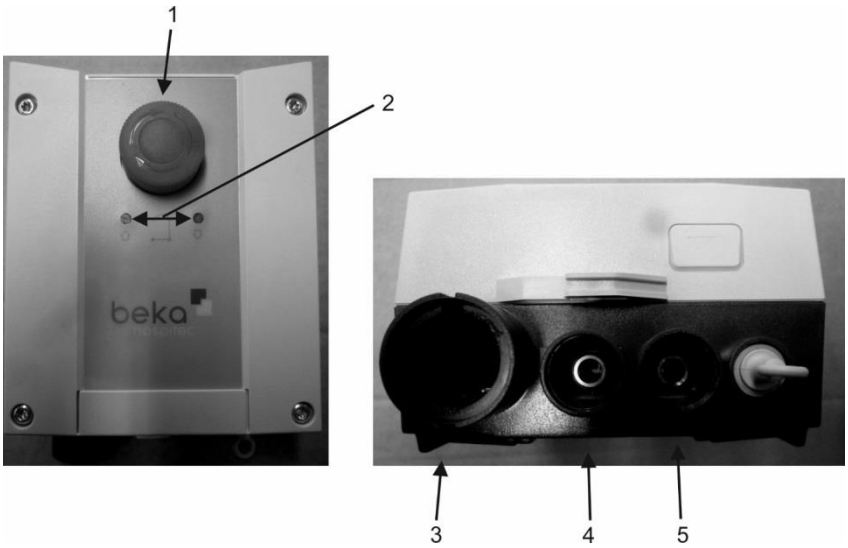
Yellow LED: battery requires charging (50-25%)

Red LED: battery requires charging (less than 25%) When you push a button, an audible signal will be emitted.


Service indication (orange LED flashes).
Equipment requires a service.

Orange LED, overload, maximum weight of 200 kg exceeded

## 7.3 Connections and Functions of the Control Unit




| No. | Description | No. | Description |
|---|---|---|---|
| 1 | Emergency stop switch | 3 | Handset connection |
| 2 | Electrical emergency lowering system in case of failure of the handset | 4 | Lifting motor connection |
| | | 5 | Leg spread chassis motor connection |

Explanation of the LED-indications


Green LED The LED is on when the control unit is supplied with voltage through the power cable.


Yellow LED The LED is on when the battery is charging.

Note: The battery can only be charged if the emergency stop switch is not actuated

## 7.4 24V-Battery Unit

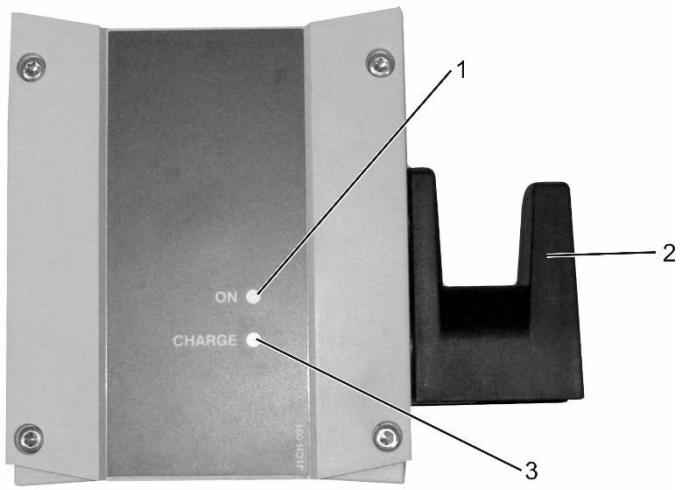
The Ascent Pro 200 is equipped with a 24V-battery.

Please proceed as described in section 16.5 to remove the battery.

## 7.5 External Charging Unit/Wall Charging Unit

The external charging unit (wall charging unit) is a switch-mode charger and is supplied ready assembled (on a mounting rail). It can be installed on any suitable wall. The required power cable is included in the delivery.

The charging time for the battery units is approximately 4 hours.




| No | Description | No | Description |
|---|---|---|---|
| 1 | Mains Operation Indicator (green LED) | 3 | Charging Indicator (yellow LED) |
| 2 | Mains Holder (optional) | | |

Explanation of the LED-indications


Green LED The LED is on when the control unit is supplied with voltage through the power cable.


Yellow LED The LED is on when the battery is charging.

# 8. Sling Operating Manual

**Important note:**

The normal service life of Harvest slings is approximately 36 months from the date of production (marked on the sling). The specified service life is only applicable when the Harvest slings are cleaned, maintained and inspected in accordance with the instructions contained in the following documentation.

## 8.1 Prior to use

The slings must be checked before and after each use and, if necessary, be washed in accordance with the manual. This is prescribed in particular to reduce the risk of infections in the event that the same equipment is used for other residents or patients.

Prior to each use a thorough check of the sling including the straps and the fastening clips is required. If the sling or the straps are frayed, cut or damaged, or the clips are damaged, the sling must no longer be used.

Please make sure that a sling of the correct size is used for the resident.

Prior to lifting the patient or the resident, the situation must be assessed by a qualified employee or a therapist. Harvest Healthcare recommend a risk assessment is carried out each time before using this equipment on a new patient or resident.

To use the Ascent Pro 200, the patient or resident must have the ability to stand on their own.

## 8.2 During Use

Check that the sling attachment points on the Ascent Pro 200 match the sling clips. Loop slings must not be used on this equipment.

Check that the sling is not twisted when attaching the sling. Always check that the sling clips are correctly attached prior to and during the lifting procedure and that they are tensioned while supporting the patient's weight. Check that the sling is not too tight and that the patient's arms are outside the sling.

Please take extreme care when using the sling and encourage the patient to hold on tight to the handles of the boom.

**Note: Safe Attachment of the Clips in the Support**

**Always check that the clips are secured and located in the right position before your start lifting your patient.**

**Note:** Clips on slings may be different in design and appearance. Check with Harvest Healthcare for compatibility before using this equipment.

## 8.3 After Use

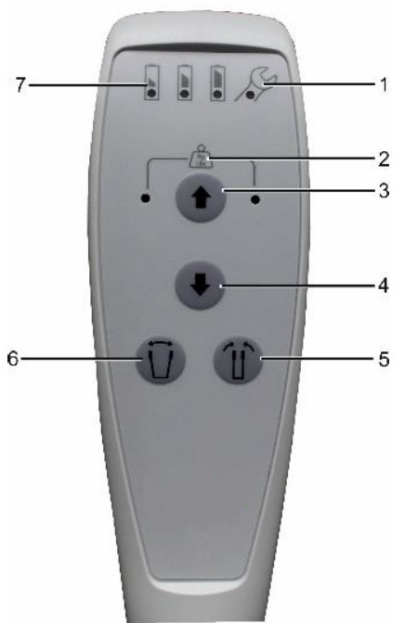
For washing the slings are classified as an accessory of the Ascent Pro 200 and therefore as a medical device. The slings must be cleaned and disinfected in accordance with the manufacturer's instructions.

During the washing process, no mechanical pressure must be applied, such as a dry press or iron. This could damage the sling parts and impair the operation and the safety of the sling or even destroy the sling.

The sling straps and the slings must be checked and, if required, cleaned after each use. The washing temperatures must not exceed the temperature specified on the sling. Please use common household detergents only. Do not iron hot. The plastic clips must be checked for possible damages after each wash.

## 9. Handset

The different functions of the Ascent Pro 200 can be achieved by using the handset. The lifting boom can be raised or lowered and the carrier frame can be spread or closed. When the maximum weight is reached, a LED (MAX) illuminates and the control unit is switched off. In addition to that, the handset indicates the charging state of the battery. If the service LED flashes, the set operating time is reached and a service is required. Please have your Ascent Pro 200 checked.
Please leave a short delay between operating each function to allow the handset to reset.




| No. | Description | No. | Description |
|---|---|---|---|
| 1 | Service/safety check due | 5 | Leg chassis close |
| 2 | Lifting boom overload warning | 6 | Leg chassis open |
| 3 | Up command | 7 | Battery charge status |
| 4 | Down command | | |

## 10. Operating the Ascent Pro 200

The lifting boom of the Ascent Pro 200 is raised or lowered by means of the handset, which is included in the delivery. The directions of motion are indicated by symbols on the handset.

The rear castors are equipped with parking brakes.

When lifting a patient/resident, the parking brakes of the castors must be engaged to avoid any uncontrolled movement of the Ascent Pro 200. This can be over-ruled by the operator in line with their full risk assessment.

### Travel path

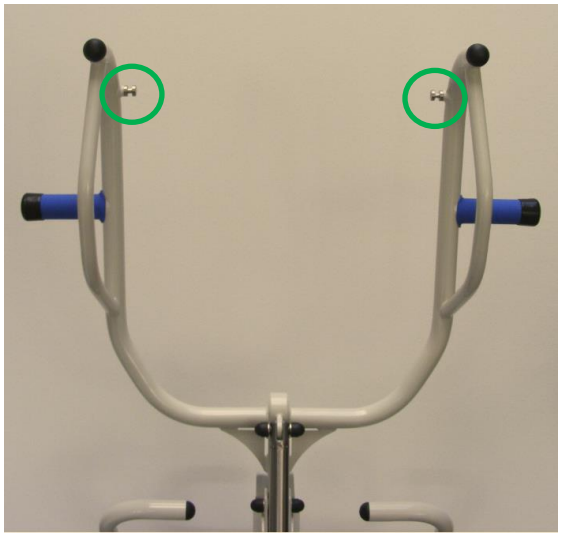
Please make sure that the travel path of the Ascent Pro 200 is not restricted by objects. Remember that the maximum height is limited to 1781 mm. Please take extreme care when using this equipment.

When moving the Ascent Pro 200, the chassis legs should be closed.

Avoid slippery surfaces and thresholds.

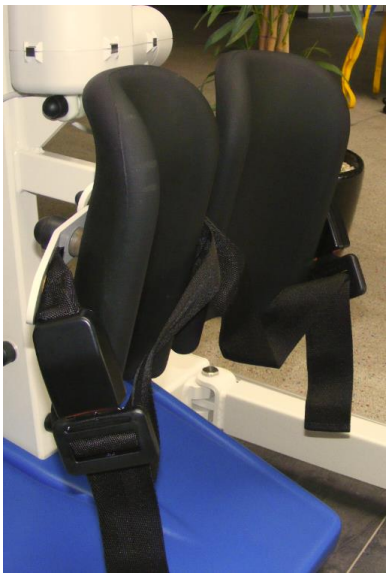
## 10.1 Sling bow

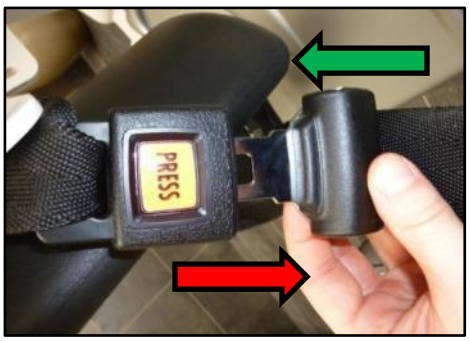
The sling bow of the Ascent Pro 200 has two sling attachment points.

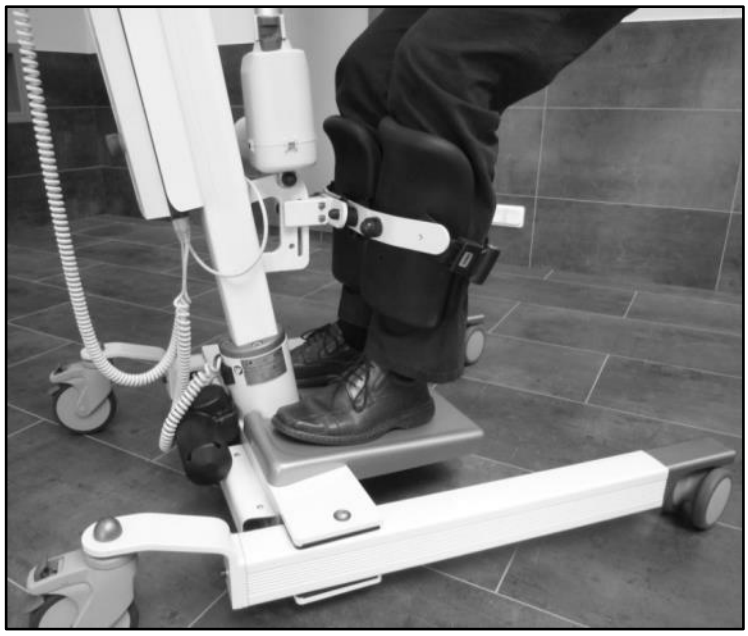


## 10.2 Kneepads

The integrated knee pads are individually adaptable to the patient. The leg safety belts (individually adjustable) are equipped with quick-release fasteners (cf. the safety belt in motor vehicles, PRESS to open). When lifting the patient, the leg safety belts must be closed.



## 10.3 Raising the patient from a chair or the bed (sitting position)

Please proceed in the following way to raise a patient from a chair or the bed (patient in sitting position):

1. To raise the patient from the bed, set the patient upright in the bed and turn him/her so that their feet touch the ground and the patient has a stable sitting position.
2. Please use the correct stand-aid sling size for the patient and check that the patient's arms are located outside the sling.
3. Spread the legs of the carrier frame and lower the lifting boom completely.
4. Position the Ascent Pro 200 in front of the patient and adjust it so that the patient's legs are in knee pads and form a right angle with the thighs. The patient's feet must be located in the middle of the footplate.
5. Lock the castors of the Ascent Pro 200 and check the brakes are engaged on the bed.
6. Tighten and fasten two leg safety belts.
7. Raise the lifting boom to the required height. Attach the sling to the sling attachment points of the lifting boom.
8. Suspend the sling in the sling attachment points. Please check that the sling is correctly attached (also refer to section 8.2 Safe Suspension of the Clips in the Holder).
9. You can now raise the patient/resident.
10. Please make sure that the patient seizes the handles provided with both hands during the transfer or transportation.
11. Disengage the parking brakes prior to the transportation.

## 10.4 Raising the patient from a wheelchair

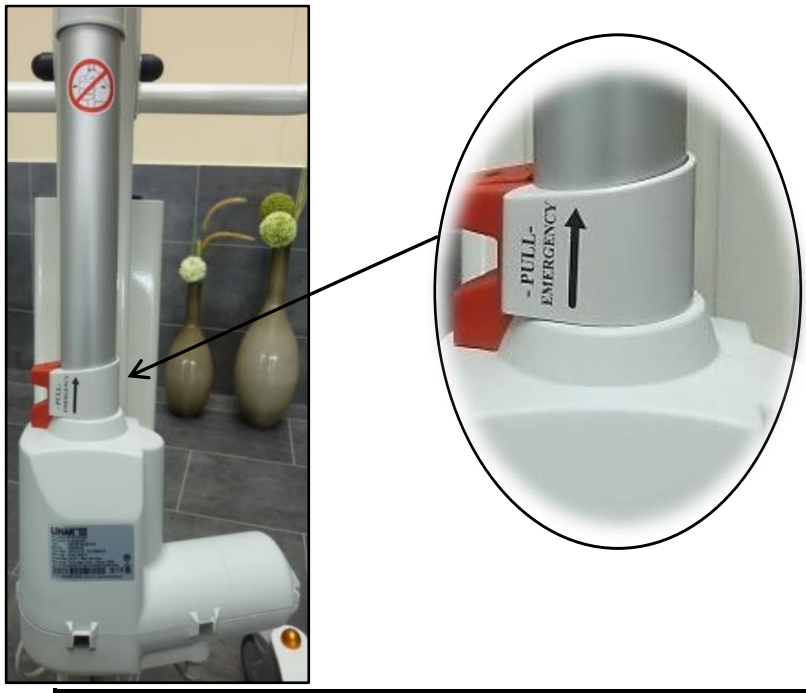
Please proceed in the following way to raise a patient from a wheelchair:

1. Engage the parking brakes of the wheelchair.
2. Please use the correct stand-aid sling size for the patient and check that the patient's arms are located outside the sling.
3. Spread the legs of the carrier frame and lower the lifting boom completely.
4. Position the Ascent Pro 200 in front of the patient and adjust it so that the patient's legs are in knee pads and form a right angle with the thighs. The patient's feet must be located in the middle of the footplate.
5. Lock the castors of the Ascent Pro 200 and check the brakes are engaged on the wheel chair.
6. Tighten and fasten two leg safety belts.
7. Raise the lifting boom to the required height. Attach the sling to the sling attachment points of the lifting boom.
8. Suspend the sling in the sling attachment points. Please check that the sling is correctly attached (also refer to section Safe Suspension of the Clips in the Holder).
9. You can now raise the patient/resident.
10. Please make sure that the patient seizes the handles provided with both hands during the transfer or transportation.
11. Disengage the parking brakes prior to the transport.

## 10.5 Manual Emergency Lowering System

**Activating the Emergency Lowering System:**

1. **Slowly pull the red safety lock upwards in the direction of the arrow (PULL-EMERGENCY label).**
2. **The lifting boom will now lower slowly.**
3. **When the person in the hoist is safely lowered release the red safety lock.**




**NOTE:**

**The emergency lowering system is only operational when a load or weight is applied on to the lifting boom.**

**NOTE:**

**As soon as the patient is standing autonomously upright stop pressing the raise function button on the handset.**

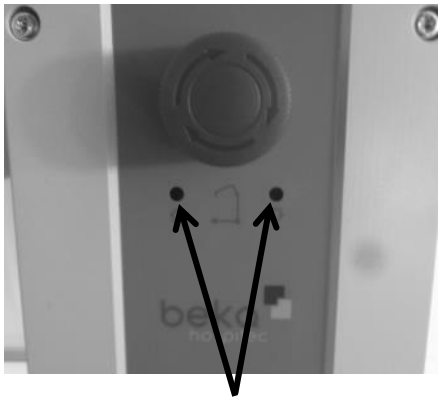
**NOTE:**

**The emergency lowering mechanism must not be treated with oil, grease or any other lubricant, as this could cause the emergency lowering mechanism to run too smoothly.**

**In case of a failure of the emergency lowering system, a reset by the manufacturer or Harvest Heathcare is required.**

## 10.6 Electrical Emergency Lowering System

Should your handset be defective or present with a malfunction, and provided that the battery still has sufficient voltage, you can raise or lower the lifting boom by means of the buttons located on the control unit.



Buttons of the control unit

Insert a ballpoint or a similar object into the holes to activate the buttons.

The lifting boom is raised or lowered.

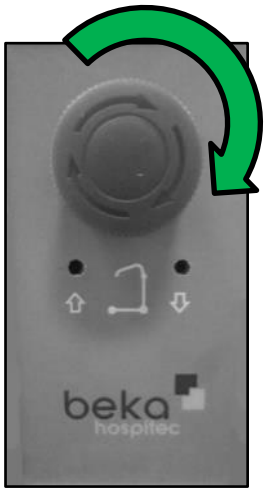
## 10.7 Emergency stop switch

When the emergency stop switch is pressed, the electrical motors are immediately disconnected from the power supply and are immediately stopped. The emergency stop switch should be used in case of immediate danger to the resident or the caregivers.

The emergency stop switch can also be used to reduce discharging of the battery in case of intermediate storage.

By pressing the emergency stop switch, you can lock the Ascent Pro 200, thus making any unauthorised use of the Ascent Pro 200 more difficult.

Turn the button in the direction of the arrow to unlock.

## 10.8 Motor Safety Measures

The control of the electrical motor is equipped with an overload protection, which is automatically switched off in case of overload. The motor will be operational again after a short waiting time. The cooling-off time of the motor can be up to 18 minutes depending on the ambient temperature.

**NOTE:**

**Opening the motor will result in expiration of the warranty.**

**The intermittent operation of the motor is not a defect, and is for your own safety.**

## 10.9 Impact and Jamming Protection (hoist motor)

The electrical motor (hoist motor) features an integrated impact and jamming protection (freewheeling). This feature avoids jamming, pinching and/or crushing dangers when the sling bow of the Ascent Pro 200 strikes or encounters an obstacle. The motor runs free until the obstacle is removed or the Ascent Pro 200 is removed from the obstacle.

After the obstacle has been removed, the sling boom may start lowering autonomously. Therefore, you must immediately release the button on the handset as soon as you notice that an obstacle has been encountered.

## 10.10 Contact Persons for Technical Information

For technical information and in case of questions regarding the use of your Ascent Pro 200, please contact Harvest Healthcare:

harvesthealthcare®

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**e** sales@harvesthealthcare.co.uk
**www.harvesthealthcare.co.uk**

# 11. Cleaning/Disinfection

## 11.1 Cleaning

Clean the Ascent Pro 200 with a soft, lint-free cloth. For thorough cleaning, use a cloth moistened with a mild soap solution. You can use a cloth moistened with an isopropyl alcohol solution for the disinfection.

To avoid damage to the Ascent Pro 200, **NO** abrasive cleaners or solvents must be used to clean the control unit.

**Caution:**

**Make sure that during the cleaning the system is not operational**

**WARNING:**

**After each treatment, the Ascent Pro 200 must be completely disinfected with a disinfectant to avoid cross-contamination.**

**Caution:**

**Use disinfectants only when the Ascent Pro 200 is not in use. Strictly respect and observe the manufacturer's instructions for the used disinfectant. Avoid direct contact with the concentrated product. If necessary, use gloves and safety glasses to protect your skin and eyes.**

The Ascent Pro 200 can be cleaned with a damp cloth and a normal cleaning agent for plastics. For the disinfection of the surface, an isopropyl alcohol solution or a customary disinfection aerosol (spray) can be used.

### 11.2 Disinfection

You must carefully disinfect after each Ascent Pro 200 use to avoid the risk of infection.

**Caution:**
Disinfect the Ascent Pro 200 only when the patient/resident has left the Ascent Pro 200. Strictly respect and observe the manufacturer's instructions for the used disinfectant. Avoid direct contact with the concentrated product. If necessary, use gloves and safety glasses to protect your skin and eyes.

### 11.3 Sterilization

The Ascent Pro 200 is **not** suitable for sterilization.

## 3. Waste Disposal

### 12.1 Disposal of the packaging material

The expected service life of the Ascent Pro 200 is approxmately 8 years. Please recycle the packaging materials of the Ascent Pro 200 in accordance with the locally applicable regulations and laws.

### 12.2 Disposal of the Product

At the end of the product's service life contact your supplier, who will recycle the Ascent Pro 200 in accordance with the locally applicable regulations and laws.

For an environmentally-sound disposal, the company BEKA Hospitec GmbH will provide more information in their capacity as manufacturer. Please clean and disinfect the Ascent Pro 200 prior to its disposal as well.

## 13. Advised Inspections & Checks

In order to ensure safe use of the Ascent Pro 200 and the protection of the users and the patients/ residents, Harvest Healthcare recommends an annual safety check.

We recommend a simultaneous maintenance of the device in order to conserve its full value.

The execution of the safety checks and maintenance must be documented and proven on request. Please use your inventory register to this effect.

The checks may only be conducted by the manufacturer or by specialists authorised by the manufacturer.

**Daily/prior to each use: Cleaning, disinfecting.**

**Weekly checks:** **Visual checks of all components, power cables and electrical connections, functional test, clean castors if necessary.**

**Annual checks:** **Safety check and maintenance.**

**Caution:**

**Do not conduct any cleaning, maintenance or test activities when the Ascent Pro 200 is in use. This could cause danger to the user and the patient/ resident.**

### 13.1 Prior to each use

**To ensure a safe and failure-free operation, the following checks must be carried out prior to each use:**

- **Visual check of the Ascent Pro 200 (external damage and wear and tear).**
- **Check that no screws are missing or loose.**
- **Check the overall condition of the Ascent Pro 200.**
- **Check the lifting boom functions correctly.**
- **Check the handset activates all the functions (up/down, spreading)**
- **Check the emergency lowering system.**
- **Check the castors run smoothly.**
- **Check the sling for damage.**
- **Check the battery charging state.**

### 13.2 Maintenance and Care of the 24-Volt Battery

The battery and the control box must not be opened by the customer.

Repairs may only be carried out by trained competent persons.
Never allow the battery to become discharged. If the battery becomes discharged it may not be recoverable. If the battery does become discharged you must charge it immediately.

The battery life is dependent on how the battery is maintained - discharging the battery each time before charging will drastically reduce the lifespan of the battery.
Replacement battery packs can be obtained from Harvest Healthcare.

**CHARGE THE BATTERY WHEN NOT IN USE**

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# 14. Troubleshooting and After-Sales

## Service 14.1 Help for Troubleshooting

| Problem | Remedy |
|---|---|
| The travel adjustment and the spreading of the carrier frame of the Ascent Pro 200 do not function. | a) Check if the emergency stop switch is released or pressed.<br>b) Check that the cables of the control box are correctly plugged in<br>c) Check the battery's charging state.<br>d) Remove the battery and check the contacts for damage.<br>e) If using the on-board charging option take the hoist off charge. |
| The Ascent Pro 200 remains in the top end position. | a) Check if the emergency stop switch is released or pressed.<br>b) Check the battery's charging state.<br>c) Use the electrical emergency lowering feature (see 10.6) to lower the patient/ resident.<br>d) Use the mechanical emergency lowering feature (see 10.5) to lower the patient/ resident.<br>e) Push the "down" button on the handset and simultaneously press down the bow. Contact the after-sales service.<br>f) If using the on-board charging option take the hoist off charge. |
| The carrier frame motor does not run. | a) Check if the emergency stop switch is released or pressed.<br>b) Check that the control box is correctly plugged in.<br>c) Check the battery's charging state (replace with fully charged battery).<br>d) If using the on board charging option is the hoist on charge. |
| Heavy going, sluggish operation of the drive despite fully charged battery. | a) Battery low. Charge the battery.<br>b) The maximum load is exceeded (max. patient weight).<br>c) The battery has reached the end of its lifetime. Replace the battery. |
| The control box emits a "beep" signal when operated. | Battery low. Charge the battery. |
| The handset does not work. | a) Check if the emergency stop switch is released or pressed<br>b) Check the connector at the cable of the handset.<br>c) Check the battery's charging state (replace with fully charged battery).<br>d) If using the on-board charging option take the hoist off charge. |
| The up and down buttons of the handset do not respond. | a) Check if the emergency stop switch is released or pressed.<br>b) Check the battery's charging state (replace with fully charged battery).<br>c) Check that the cables of the control box are correctly plugged in.<br>d) If using the on-board charging option take the hoist off charge. |
| The castors produce loud noises. | Clean or replace the castors. |
| The Ascent Pro 200 produces unusual noises. | Inform the after-sales service. |
| The Ascent Pro 200 is damaged. | Inform the after-sales service. |
| The orange Service LED on the handset flashes. | Safety check required, inform the after-sales service. |

| Problems with the Charging Unit | Remedy |
|---|---|
| The charging unit does not work. | a) Remove the battery pack and check the contacts for damage.<br>b) Check the mains plug. |
| The charging unit is connected to the power outlet, but the operating display is not lit. | a) Check that the charging unit is connected to a power outlet.<br>b) Check that the power outlet is supplied with power.<br>c) Check the power outlet fuse.<br>d) Remove the battery and check for damage. |
| **Problems with the Battery** | **Remedy** |
| The battery is placed correctly, but the indicator lights are not lit. | Inform the customer service. |
| The indicator light does not go out after multiple hours of charging. | The battery must be replaced. Inform the customer service. |
| The battery installed in the charging unit indicates that it is fully charged. However, when placed in the Ascent Pro 200, just a few lifting cycles are possible. | The battery must be replaced. Inform the customer service. |
| When the handset is actuated, an acoustic signal is emitted and the indicator light (red) is on. | Check the battery's charging state. |

## 14.2 After-Sales Service

If your Ascent Pro 200 does not function properly and you cannot eliminate the error by means of the remedies listed in chapter 14, please contact Harvest Healthcare Customer Service.

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# 15. Appendix

## 15.1 Technical Data

| **Dimensions and weights** | |
|---|---|
| - Length: | 102.7 cm |
| - Internal width of the closed carrier frame: | 62.0 cm |
| - External width of the closed carrier frame: | 70.0 cm |
| - Internal width of the spread carrier frame: | 89.7 cm |
| - External width of the spread carrier frame: | 104.4 cm |
| - External width at the handle: | 73.0 cm |
| - Min. height: | 116.8 cm |
| -Max. height: | 178.1 cm |
| - Turning circle | 120,0 cm |
| - Weight without packaging: | Approximately 51 kg |
| - Safe Working Load (SWL): | Maximum 200 kg |
| **Electrical data** | |
| - Power Supply | 24 Volt Battery |
| - Max. Power Consumption: | 10A = 240VA |
| - Applied part: | Type B |
| - Duration of treatment: | 10%, 2 minute continuous operation, 18 minute pause |
| Protection Class: | IPX 4 |
| | |
| **Operation** | |
| - Temperature range: | 10° C to 40° C |
| - Relative humidity: | 30% to 75%, non-condensing |
| - Atmospheric pressure: | 800 – 1060 hPA |
| **Storage and transport** | |
| - Temperature range (stand-up and raising aid): | -40° C to 70° C |
| - Temperature range (battery): | -15° C to 40° C |
| - Relative humidity: | 10% to 80%, non-condensing |
| - Atmospheric pressure: | 500 – 1100 hPA |

## External wall charger:

| | |
|---|---|
| - Power Supply | 100V – 240 V ~ (AC) /50 /60 Hz |
| - Power Output: | 24 V (DC) |
| - Current consumption: | I in max. 400 mA |
| - Fuse: | T1,25 A / 250V |
| - Protection class: | IPX 5 |

## Battery:

| | |
|---|---|
| - Battery type | Lead acid battery |
| - Power Output: | 24 V (DC) |
| - Capacity: | 2,9 Ah |
| - Output current: | I out max 10A |
| - Protection class: | IPX 5 |

## Manufacturer

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## Distributor

CE

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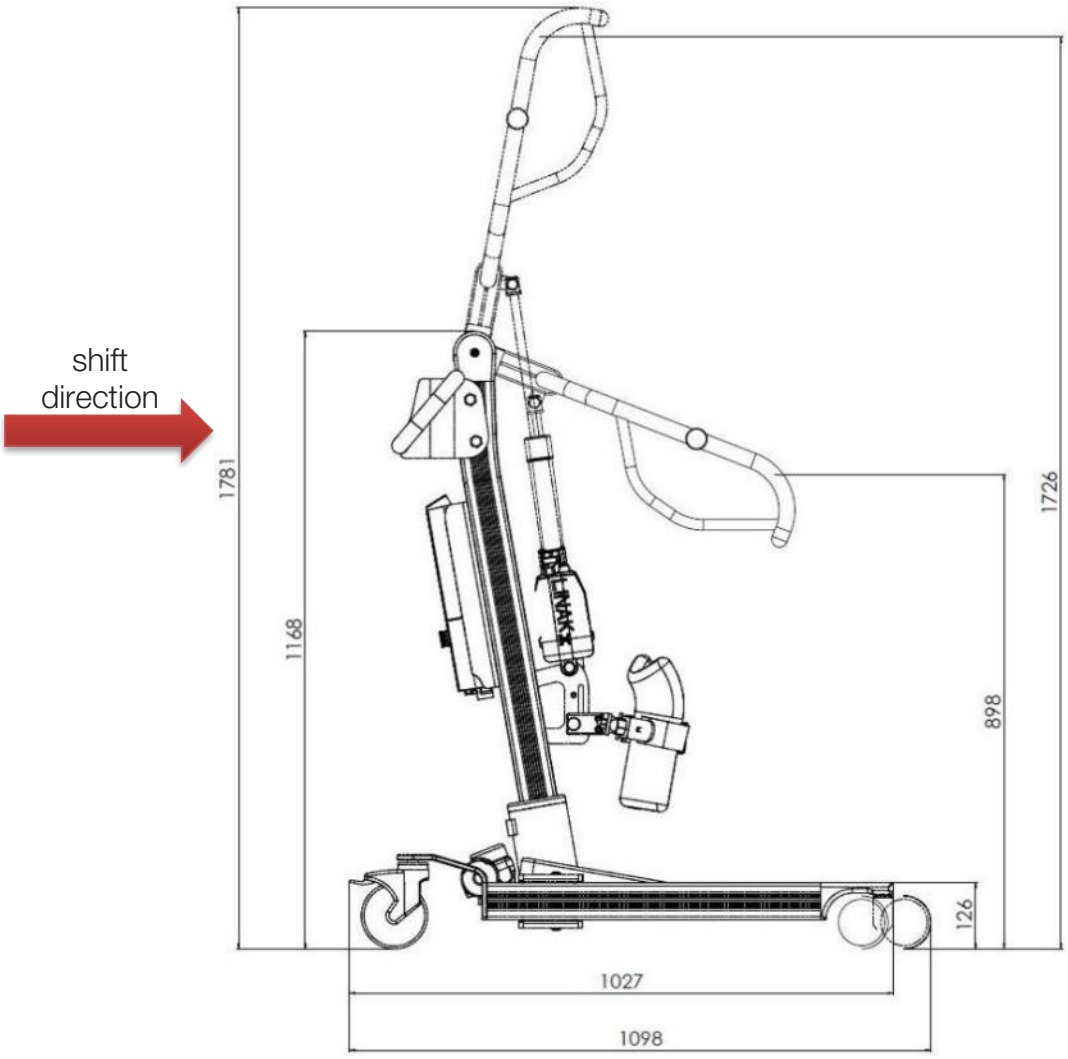
e sales@harvesthealthcare.co.uk
www.harvesthealthcare.co.uk

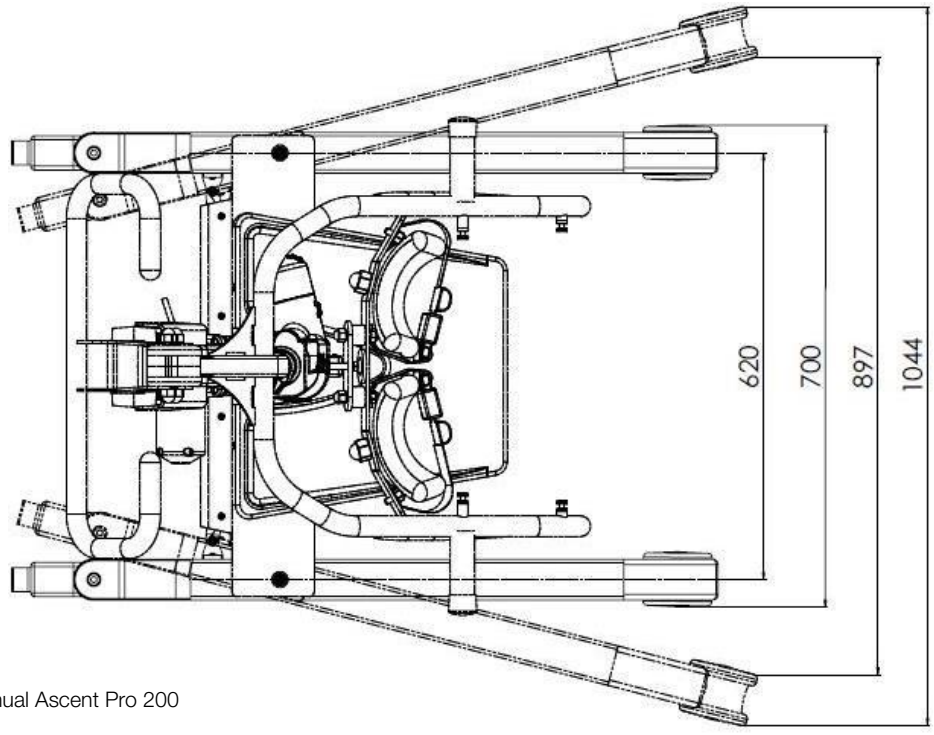
## 15.2 Accessories of Ascent Pro 200

| Description | Art. n° | Note |
|---|---|---|
| Wall Charging Station | ELE022 | |
| Spare Battery | HLA018 | |

**Please note: The Ascent Stand-Aid slings (HSL510) with clip fastening can be ordered seperately.**

## 15.3 Dimensions of the Ascent Pro 200 (All dimensions in mm)



## 15.4 Declaration of conformity

# EG–Konformitätserklärung / *EC-Declaration of Conformity*

Der Hersteller / *The manufacturer*

**BEKA Hospitec GmbH**
**Am Rübenmorgen 3**
**D-35582 Wetzlar-Dutenhofen**

erklärt in alleiniger Verantwortung gemäß EG-Richtlinie für Medizinprodukte 93/42/EWG Annex VII, dass die folgenden Produkte
*declares under sole responsibility according to the EU Medical Device Directive 93/42/EEC, Annex VII that the following products*

| | | |
|---|---|---|
| NORA Classic | Artikel Nr.<br>P/N. | 921070000/<br>921070008/<br>921070018 |
| NORA Alu | Artikel Nr.<br>P/N. | 921071000/<br>921071008/<br>921071018 |
| NORA Alu Eco | Artikel Nr.<br>P/N. | 921075000 |

den grundlegenden Anforderungen entsprechen und die Voraussetzungen für die CE-Kennzeichnung erfüllen.
*comply with the essential requirements and fulfill the provisions of CE marking.*

Die Bauart der Produkte entspricht Klasse I des Medizinproduktegesetz (MPG), Regel 12.
*The products correspond with Class I Medical Device Directive (MDD), Rule 12.*

Zur Beurteilung wurden folgende Normen / Richtlinien herangezogen:
*The following standards / directives apply:*

| | | |
|---|---|---|
| **EG-Richtlinie 93/42/EWG/<br>Directive 93/42/EEC** | | **DIN EN ISO 14971:2013** |
| **DIN EN 10535:2007** | | **DIN EN 60601-1:2013** |
| **DIN EN 12182:2012** | | **DIN EN 60601-1-2:2016** |

Diese Erklärung trifft auf alle Produkte zu, die nach Ausstellung dieser Erklärung produziert wurden, bis sie durch eine andere Erklärung ersetzt wird.
*This declaration applies to all CE marked devices manufactured from the date of its issuance on until it is either superseded by another declaration or withdrawn.*

**Technische Änderungen vorbehalten / *Technical changes reserved.***

Wetzlar, den 17.07.2017

Robert Deschler
Geschäftsführer

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SWIFT-BIC: COBADEFF515

## 15.6 Electromagnetic Compatibility

Electrical medical equipment is subject to special precautionary measures with regard to EMC and must be installed and operated in accordance with the EMC instructions included in the accompanying documents.

For the devices and systems from BEKA Hospitec GmbH, no special measures must be observed.

Portable and mobile HF-communications equipment can interfere with electrical medical equipment.

<table>
<tr><th colspan="3">Guidance and manufacturer's declaration - electromagnetic immunity (Table 201)</th></tr>
<tr><td colspan="3">The Ascent Pro 200 has been designed for use in the hereafter listed ELECTROMAGNETIC ENVIRONMENTS. The customer or the user of the Ascent Pro 200 must ensure that the appliance is used in such environment.</td></tr>
<tr><th>Emission measurements</th><th>Compliance</th><th>Electromagnetic environment - guidance</th></tr>
<tr><td>High-frequency (HF) emissions to<br>CISPR 11</td><td>Group 1</td><td>The Ascent Pro 200 uses HF radiation exclusively for internal functions. Therefore, the HF radiation of the device is very low and any interference with adjacent electrical equipment is unlikely.</td></tr>
<tr><td>High-frequency (HF) emissions to<br>CISPR 11</td><td>Class B</td><td rowspan="3">The Ascent Pro 200 is intended for use in any type of facility including living quarters and those that are directly connected to a public mains network that supplies residential buildings and buildings used for domestic purposes.</td></tr>
<tr><td>Harmonics to<br>IEC 61000-3-2</td><td>Class A</td></tr>
<tr><td>Voltage fluctuations/<br>flicker to<br>IEC 61000-3-3</td><td>Compliant</td></tr>
</table>

| Guidance and manufacturer's declaration - electromagnetic immunity (Table 202) | | | |
|---|---|---|---|
| The Ascent Pro 200 has been designed for use in the hereafter listed ELECTROMAGNETIC ENVIRONMENTS. The customer or the user of the Ascent Pro 200 must ensure that the appliance is used in such environment. | | | |
| Immunity testing | IEC 60601- Test level | Compliance level | Electromagnetic environment guidance |
| Discharging of static electricity (ESD) to IEC 61000-4-2 | ± 6kV contact discharge<br>± 8kV air discharge | ± 6kV contact discharge<br>± 8kV air discharge | The floor must be in wood, concrete or ceramic tiles. In case of floors in synthetic material, the relevant air humidity must be at least 30%. |
| Rapid transient interference pulses/burst IEC 61000-4-4 | ± 2 kV for power supply cables<br><br>± 1 kV for input/ output cables | ± 2 kV for power supply cables<br><br>not applicable to input/ output cables | The quality of the supply voltage should match that of a typical business or hospital environment. |
| Overvoltage IEC 61000-4-5 | ±/1 kV cable against cable<br><br>±/2 kV cable against ground connection | ±/1 kV cable against cable<br><br>±/2 kV cable against ground connection | The quality of the supply voltage should match that of a typical business or hospital environment environment. |
| Voltage drops, short interruptions and voltage fluctuations in the power supply input cables IEC 61000-4-11 | <5 % $U_T$ (>95 % drop of $U_T$) for 0.5 period<br><br><40 % $U_T$ (>60 % drop of $U_T$) for 5 periods<br><br><70 % $U_T$ (>30 % drop of $U_T$) for 25 periods<br><br><5 % $U_T$ (>95 % drop of $U_T$) for 5 s | <5 % $U_T$ (>95 % drop of $U_T$) for 0.5 period<br><br><40 % $U_T$ (>60 % drop of $U_T$) for 5 periods<br><br><70 % $U_T$ (>30 % drop of $U_T$) for 25 periods<br><br><5 % $U_T$ (>95 % drop of $U_T$) for 5s | The quality of the supply voltage should match that of a typical business or hospital environment environment. |
| Current frequency (50/60 Hz) Magnetic field IEC 61000-4-8 | 3 A/m | 3 A/m | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical business or hospital environment. |
| CAUTION $U_T$ is the mains AC voltage before the application of the test level. | | | |

**Guidance and manufacturer's declaration - electromagnetic immunity (Table 204)**

The Ascent Pro 200 has been designed for use in the hereafter listed electromagnetic environments. The customer or the user of the Ascent Pro 200 must ensure that the appliance is used in such environment.

| Immunity testing | IEC 60601-Test level | Compliance level | Electromagnetic environment guidance |
|---|---|---|---|
| Conducted HF<br>IEC 61000-4-6 | 3 Vrms<br>150 kHz up to<br>80 MHz | 10 Vrms | Portable and mobile HF communications equipment should be used no closer to any part of the Ascent Pro 200 including cables, than the recommended separation distance calculated in accordance with the equation applicable to the frequency of the transmitter.<br><br>**Recommended separation distance**<br>$d=0.35\sqrt{P}$<br><br>$d=1.2\sqrt{P}$ 80 MHz up to 800 MHz<br><br>$d=2.3\sqrt{P}$ 800 MHz up to 2.5 GHz<br><br>With *P* as the rated output of the transmitter in Watt (W) in accordance with the manufacturer's specifications and *d* as the recommended separation distance in meter (m).<br><br>The field strength of fixed HF-transmitters as determined by an electromagnetic field survey, [a] – should be less than the COMPLIANCE LEVEL in each frequency range. [b]<br><br>In the vicinity of equipment marked with the following symbol, interference may occur:  |
| Radiation HF<br>IEC 61000-4-3 | 3 V/m<br>80 MHz up to<br>2.5 GHz | 3 V/m | |

**NOTE 1:** At 80 MHz and 800 MHz, the higher frequency range applies.

**NOTE 2:** This manual could possibly not apply to all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a] The field strength of fixed transmitters, such as base stations of mobile phones and land mobile radios, amateur radio stations, AM and FM radios as well as radio and television broadcast media cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey is recommended. If the field strength measured in the environment where the Ascent Pro 200 is to be used, exceeds the applicable HF compliance level, special care should be taken that a normal operation of the Ascent Pro 200 can be guaranteed. In case anomalies are identified, additional measures could be required, such as a different alignment or a change of the location of the Ascent Pro 200.

[b] In the frequency range from 150 kHz to 80 MHz, the field strength must be less than 10 V/m.

Recommended distance between portable and mobile communications equipment and the Ascent Pro 200. (Table 206)

The Ascent Pro 200 is intended for use in an electromagnetic environment with controlled HF interferences. The customer or the user of the Ascent Pro 200 can avoid electromagnetic interference by respecting and observing the minimum distance between portable and mobile HF telecommunication devices (transmitters) and the Ascent Pro 200 depending on the rated output of the communication device as given below.

| Rated output of the transmitter W | Separation distance depending on the transmitting frequency in m | | |
|---|---|---|---|
| | 150 kHz to 800 MHz $d=0.35\sqrt{P}$ | 80 MHz to 800 MHz $d=1.2\sqrt{P}$ | 800 MHz to 2.5 GHz $d=2.3\sqrt{P}$ |
| 0.01 | 0.04 | 0.12 | 0.23 |
| 0.1 | 0.11 | 0.38 | 0.73 |
| 1 | 0.35 | 1.2 | 2.3 |
| 10 | 1.1 | 3.8 | 7.3 |
| 100 | 3.5 | 12 | 23 |

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in meters (m) can be determined using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the specifications given by the transmitter manufacturer.

**NOTE 1:** At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

**NOTE 2:** These guidelines could not apply to all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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**Serial No:**

**DOCUMENT REFERENCE:** HLA006 Manual V.1- July 2019

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