

GK Novum 2000

version 6.6



Operating manual
11.2/2017

CE



Congratulations on your decision to purchase a GK Lifter. You have acquired an Austrian quality product which will considerably ease the strain involved in patient care.

Due to their advanced ergonomic design, GK Lifters are simple and straightforward to use. In spite of that, we would ask you to study the instructions carefully before operating the lifter. The detailed information contained in this manual will facilitate your practical work.

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■ Safety precautions

- In accordance with MDD regulations, this product may only be operated by personnel trained to use it in an appropriate manner.
- Only personnel instructed in the use of this equipment are authorised to use it.
- Thoroughly clean the lifter after each use in order to prevent potential spread of germs.
- Whenever a patient is on the lifter, the safety harness must be fastened around his/her upper body in such a way that a fall of the patient off the lifter is prevented (see chapter "Functions - Safety harness"). It may be taken off only during bathing (see chapter "Procedures - Bathing") and for leaving the lifter.

Note: The safety belt must be ordered separately, since it is not included in the scope of delivery by default.

- While rolling the grab bar must be in down position (see chapter "Functions - Swivel grab bar").
- Push the lifter only in a gentle manner. Ensure a safe and risk-free transfer for the resident.
- When lowering the lifter, make sure that there are no objects close by which might block the downward movement. This could result in injuries to the carers or the resident or in damage to the lifter.
- Do not place any objects on the lifter since they might fall off it in consequence of movements or vibrations.

Caution: *To ensure safe and proper use of the equipment, the safety precautions and instructions contained in this manual must be observed. Repairs or modifications to the equipment by unauthorised personnel void all warranties.*

■ Procedures

Transfer from bed

By lowering the stretcher to the level of the mattress it is possible to turn a patient onto the lifter.

1. Attach the safety harness to the mounting points provided.
2. Lower the stretcher to the mattress level.
3. Lock the castors.
4. Turn the patient onto the stretcher.
5. By adjusting the tilt angle of the stretcher's side section, bring the resident's back into the desired position.

Caution: Before raising the stretcher ensure that the adjusting strut is locked into position.

6. Fasten safety harness around the resident's upper body.
7. Close the swivel grab bar.
8. Raise the stretcher enough for pulling away from the bed.
9. Unlock the castors.
10. Gently pull the lifter from the bed and bring the stretcher to a comfortable and safe height for moving.

Caution: During transfer it is advisable for the resident's hands to rest on his/her stomach or on the level section of the closed grab bar.

Transfer to bed

1. Lower the stretcher to the mattress level.
2. Lock the castors.
3. Open the safety harness.
4. Open the swivel grab bar.
5. Align the tilt angle of the side sections horizontally so that the stretcher's whole surface is parallel to the bed.
6. Turn the resident onto the bed.
7. Raise the stretcher enough for pulling away from the bed.
8. Unlock the castors and pull the lifter away from the bed.

Bathing

While being bathed, the resident always stays on the lifter.

1. Fill the bathtub with water and lower it completely.
2. Raise the stretcher and gently move it over the bathtub.
3. Lock the castors.
4. Raise the bathtub to the desired working height.
5. Lower the stretcher into the water.
6. Open the safety harness.
7. Open the swivel grab bar.
8. Bathing
9. After bathing, drain the water from the bathtub.
10. Shower and dry the resident.
11. Fasten the safety harness around the resident's upper body.
12. Close the swivel grab bar.
13. Lower the bathtub completely.
14. Raise the stretcher above the bathtub's edge's height.
15. Unlock the castors and gently pull the lifter away from the bathtub.
16. Lower the stretcher to a comfortable and safe height for moving.

Caution: While the lifter and the bath tub are being raised or lowered, make sure that the resident's hands rest on his/her stomach or the level section of the closed grab bar (danger of becoming trapped).

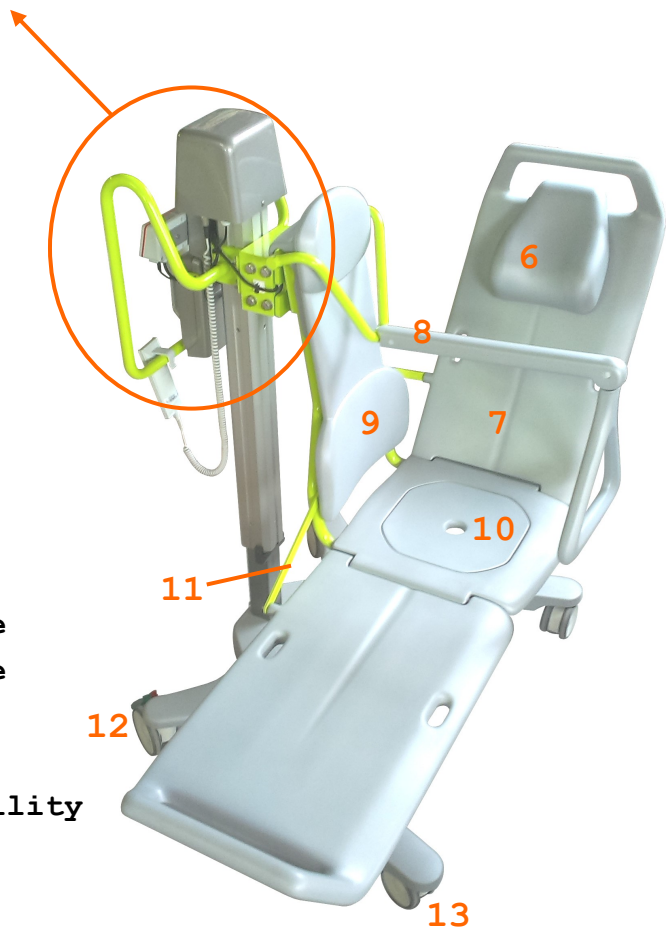
Note: A resident's state of health may require the safety harness to remain fastened also throughout the bathing procedure.

■ Components

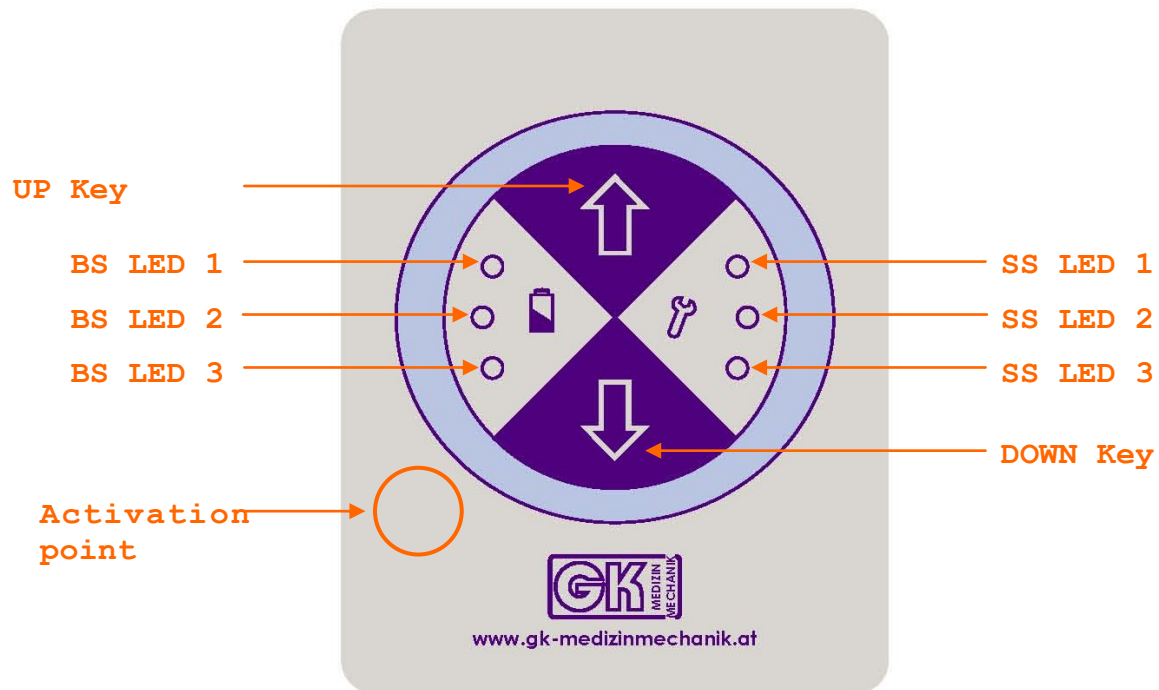


1. Control panel
2. Scale attachment (optional)
3. Steering handle
4. Battery pack
5. Hand control unit

6. Head support
7. Adjustable stretcher
8. Swivel grab bar
9. Back rest
10. Cover for central section
11. Adjusting strut
- 12A. Castor Ø 125 mm with brake
- 12B. Castor Ø 125 mm with brake and directional stability
13. Castor Ø 100 mm without brake or directional stability



■ Control panel overview



BS -> Battery Status

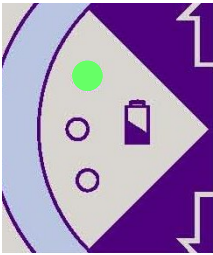
SS -> Service Status

Control panel

The control panel allows the carer to...

- ...raise and lower the lifter
- ...monitor the battery level
- ...monitor the service status
- ...spot a fault in the equipment

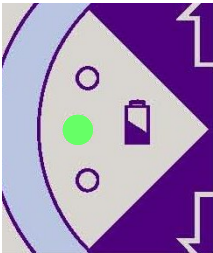
Monitoring battery level



Battery Status LED 1 on

Battery level "full"

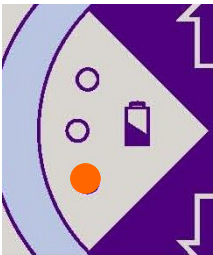
-> Several more lifting cycles are possible before recharging the battery pack.



Battery Status LED 2 on

Battery level "medium"

-> Only a few more lifts are possible before recharging the battery pack.



Battery Status LED 3 on

Battery level "low"

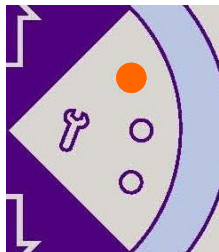
-> Recharge the battery pack before attempting more lifts.

If you attempt more lifts in spite of a "low" battery level and thus run down the battery pack even further, the electronic control unit will automatically stop lifting cycles at a certain point and emit an audio signal.

Note: Automatic shutdown prevents the battery pack from being run down completely and thus sustaining permanent damage.

Monitoring service status

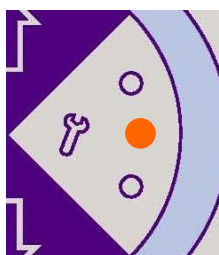
The Status LEDs serve to monitor the annual safety inspection and the maximum useful life of the motor.



Service Status LED 1 on

The most recent safety inspection was carried out at least 10 months ago!

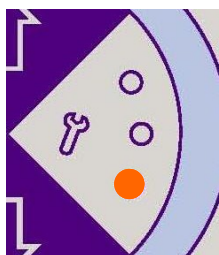
-> You should make an appointment for the mandatory safety inspection.



Service Status LED 2 on

The most recent safety inspection was carried out at least 12 months ago!

-> For safety reasons, the lifter must not be used before a safety inspection has been conducted.



Service Status LED 3 on

The motor has reached the end of its useful life!

-> For safety reasons, the lifter must not be used any longer before the motor has been replaced.

Note: The above instructions are to be viewed as recommendations.

Caution: Failure to conduct the annual safety inspection voids all warranties.

■ Functions

Lifter status "brand new"

The status "brand new" is indicated by altering flashing of SS LED 1, SS LED 2 and SS LED 3. On a brand new lifter, therefore, all other functions of the service status LEDs is deactivated. An initial start-up procedure is required.

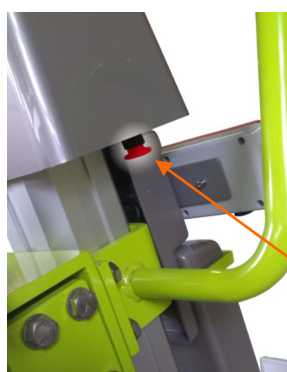
Normally the initial start-up procedure is done at the factory right before shipment. In the exceptional case that the lifter should have the status "brand new" after arrival at your place, please, contact your local reseller.

Standby mode

In this mode, the control panel is switched off, and energy consumption is reduced to a minimum. This safeguards a longer battery life. The lifter automatically switches to standby-mode if no operation has been activated for a certain length of time. To return to standard operation mode, press the UP/DOWN key on the control panel or the hand-control unit.

Note: If no UP/DOWN lift cycles have been activated for two minutes, the lifter automatically switches to standby-mode.

Emergency stop switch



The emergency stop switch cuts the electricity supply to the electronics and instantly stops the motor.

To activate the emergency stop switch, **press** the red button.

To reactivate the system, **turn** the button **clockwise**.

Emergency stop switch

Raising / Lowering



Holding down UP or DOWN button on the control panel or on the hand control unit raises or lowers the lifter until the respective button is released. Movement starts gently and gradually increases in speed (soft-start). Movement stops instantaneously.



The lifter automatically stops when it has reached the highest or lowest position.

Caution: *Before operating the lifter, make sure that there are no objects blocking the upward or downward movement.*

Safety harness



The safety harness is fitted through the two openings in the stretcher (see picture).

Adapt its length to requirements of the patient to be transferred and put it around him or her. Then fasten the harness and check whether it is not too loose.

Caution: Whenever a patient is on the lifter, the safety harness **must** be fastened.

Note: The safety belt must be ordered separately, since it is not included in the scope of delivery by default.

Scale attachment



The lift may be equipped with an optional scale attachment. Before operating the scale attachment, please consult the enclosed lifter scale manual.

Additional information: The scale unit may only be used on level ground. For sites in Germany and Austria this is satisfied if the floor meets the tolerances for screeded floors according to DIN 18202, table 3, row 4. For other countries, please refer to the relevant national standards.

In case your scale is officially calibrated then there is I) a circular bubble level mounted to the top of the chassis next to the pillar, II) a safety seal attached to the scale's display and III) a corresponding documentation included in the delivery. In this case you must ensure that the circular bubble level shows a horizontal alignment of the lifter when using the scale. (The calibration facility can be identified by means of the number printed on the safety seal.)

Swivel grab bar

The swivel grab bar must be in "open" position when a patient is being transferred to or from the stretcher.

For safety reasons, the swivel grab bar must be in "closed" position whenever a patient is being transported.

Be sure to close the grab bar gently.

Caution: *When closing the grab bar, make sure no body parts are trapped.*

During transfer, the patient can use the grab bar as a support, which increases his/her feeling of security.



Grab bar closed



Grab bar open

Hand control unit



The hand control unit has an UP and DOWN button, with an arrow pointing in respective direction.

The long helix cable allows the carer to raise and lower the lifter from any useful position.

The hand control unit can be clipped onto the steering handle of the lifter when not in use (see picture).

Castors

The lifter is equipped with four castors for horizontal movement. The two rear castors can be braked in order to stop the lifter from moving. One of these additionally is equipped with a directional stability lock.

To activate the castors' brakes or the directional stability lock, their respective pedals must be pressed down. To deactivate them again, the pedals must be pushed back up.

Caution: *During the transfer of patients from or to the lifter, both rear castors' brakes must be locked.*



Castor with brake
brake loose



Castor with brake
brake activated



Castor without
brake



Castor with brake and directional stability
not locked



Castor with brake and directional stability
directional stability
activated



Castor with brake and directional stability
brake and dir.stab.
activated

Head support



As shown in the picture, the head support can be positioned on either side of the stretcher. The head support serves to increase the comfort of the patient being transferred.

It may be removed when not in use, or for cleaning.

Note: *We would recommend removing the head support while the patient is being transferred to or from the lifter and only then putting it in the proper position.*

Cover for central section

The cover at the centre of the stretcher can be removed to facilitate cleaning the resident.



Charging station

The charging station is used for recharging the battery pack. It has to be plugged into the mains socket.

Charging the battery pack:

- Plug the charging station into the mains socket.
- Insert the battery pack into the charging unit.
- Close the bracket of the charging station to lock the battery pack into place.

LED indicators on the charging station:

- **green LED „POWER“** on: Ready for charge.
- **red LED „CHARGE“** on: Inserted battery pack is being charged.
- **red LED „CHARGE“ off:** The battery pack is fully charged; charging level is being maintained.

Battery pack

Your lifter is powered by a rechargeable battery pack. It houses two rechargeable 12 V lead acid batteries connected in series. This battery pack supplies a voltage of 24 V.

By monitoring the battery level on the control panel you know exactly when it is time to recharge the battery pack.

How to extend the life of your battery pack:

- > Never completely run down the battery pack.
- > Recharge it regularly (at least once a week).
- > Always make sure the battery pack is fully charged before removing it from the charging station.

Removing the battery pack from the mounting frame:

- > Lock the castors.
- > Holding the battery pack with one hand, open the clip with the other.
- > Now slide out the battery pack.



Battery pack

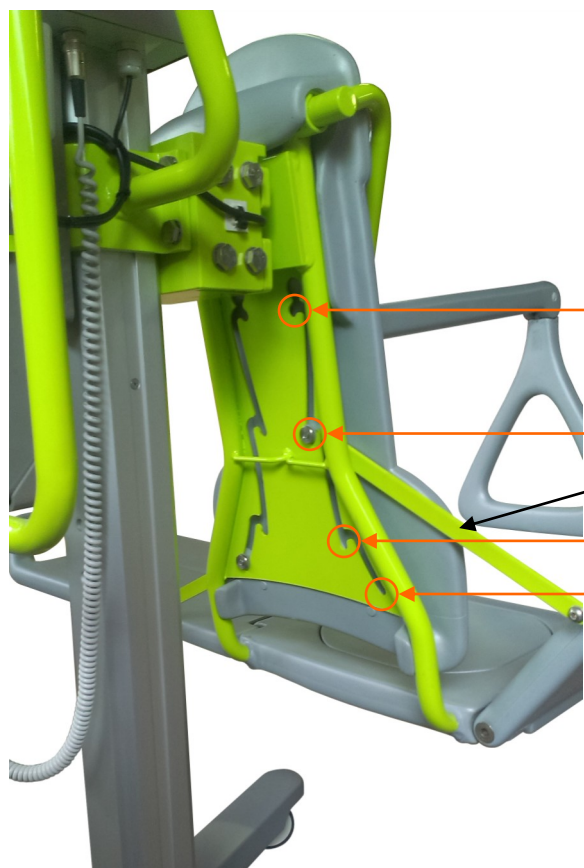
Mounting clip



Mounting frame

Note: We recommend plugging the battery pack into the charging station whenever the lifter is not in use.

Adjusting angle of the stretcher



By adjusting the angle of tilt of the stretcher, the patient can be made to feel more comfortable on the lifter.

Tilt adjustment by means of adjusting strut.

Locking position 4

Locking position 3

Adjusting strut

Locking position 2

Locking position 1

Caution: After each adjustment of the angle of tilt, make sure – by exerting pressure on the adjusted side – that the adjusting strut has fully engaged.



Locking position 1

-> This position is suitable for transferring patients to or from the lifter.



Locking position 2

-> This position is suitable for transporting patients.



Locking position 3

-> This position is suitable for transferring / bathing patients.



Locking position 4

-> This position is suitable for space-saving, longer-term lifter storage.

Note:

In the interest of clarity of instruction, the photos were taken with the back rest removed.

■ Cleaning & care

Caution: Never use pointed utensils or gritty scouring agents. In case of cleaning agents containing alcohol, these may only have an alcohol content of max. 5 %.

Should you be in doubt about the effects of various cleaning agents on the lifter, our local representative will be happy to advise.

Cleaning the lifter after each transfer:

Wipe lifter with a damp cloth after use. Should it still not be quite clean, use a sponge or a household cleaner.

Cleaning the lifter after bathing a patient:

The lifter must be cleaned after every bath.

1. Move the lifter over the tub.
2. Rinse the stretcher. It may be necessary to apply a cleaning agent before.
3. Rinse off cleaning agent and wipe the stretcher dry.

Cleaning the foam padding on the lifter:

The foam padding on the lifter is to be wiped clean. In our experience, household cleaners with low percentage (max. 5 %) of alcohol have proved suitable.

Generally, attention needs to be drawn to the fact that disinfection as well as cleansing should be the result of **wiping**, not of **soaking**. Cleaning agent contact times have a considerable impact on the lifespan of foam padding.

On account of the characteristics of the material, no sharp-edged or pointed devices must be used on the padding. This may result in damage to the surface zone and hence in cracks in the foam material.

Cleaning the charging station:

For cleaning the charging station use a dry cloth only. Do not splash water on the electrical equipment.

Washing the safety harness:

In general the safety harness should be cleaned in a normal way along with the foam padding. However, it can also be washed at regular intervals or in case of special need in compliance with the following instructions.



■ Maintenance

- Visual inspection of all moving parts must be carried out regularly.

■ Service

At least **once a year** a service or safety inspection in accordance with Medical Device Directive (MDD) is mandatory.

- Remember that GK service is unmatched in quality and also with regards to warranty issues. GK will only consider itself liable for safety-related matters if maintenance, repairs, modifications etc. are exclusively carried out by our service team or by agents authorized by us.

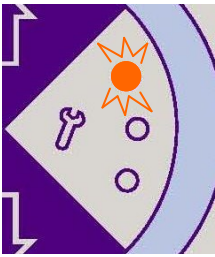
In the event of problems occurring, clear and detailed information about symptoms, type and serial number (see type plate) will help us to respond promptly.

■ Transport of the lifter

Following points are important if you transport the lifter:

- To protect from getting damaged, the lifter must be suitable packed.
- The lifter must be fixed, to prevent unintentional movement during transport.
- Temperature range -20 °C to +40 °C.
- The battery pack is not allowed to be in the mounting frame during transport

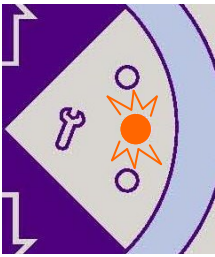
■ Troubleshooting



Service Status LED 1 flashes

Internal 3 V is flat! The safety inspection indicator is not working any longer!

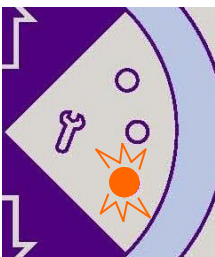
- > Check the inspection label for the date of the next safety inspection.
- > Contact a GK service agent to replace the internal 3 V battery.



Service Status LED 2 flashes

Position indicator out of order!

- > The lifter can still be used. Current-limiting device will automatically shut off when highest/lowest position is reached.
- > Contact a GK service agent to correct the defect.



Service Status LED 3 flashes

Current-limiting device has stopped the actuator!

- > Possible causes: Overload, low battery level, defective position indicator.
- > Reduce load, charge battery pack, make sure that SS LED 2 is not flashing.
- > In the event of repeated current-limiting stops, contact a GK service agent.

After charging the battery pack for an extended period of time in the charging station, low battery level is indicated.

- > Possible causes: defective charging station, defective battery pack.
- > Make sure the charging station is plugged into the mains.
- > Check whether charging voltage is set to 24 V.
- > Check the 20 A blade fuse inside the battery pack.
- > Contact a GK service agent if you fail to locate the cause of the problem.

Neither UP nor DOWN functions are working, and the control panel does not display any indicators.

- > Make sure the emergency stop switch is not engaged.
- > Make sure the battery pack is in the mounting frame and the 20 A blade fuse in the battery pack is in working order.
- > Contact a GK service agent if you fail to locate the cause of the problem.

■ Intended use

Mobile transfer system for lifting and transferring patients with restricted mobility (no age restrictions). The transfer system is mainly used in care institutes, to a lesser degree also on hospital wards. It is used in a professional environment by trained and competent personnel.

To establish the weight of patients with restricted mobility, the transfer system can be equipped with an optional scale attachment.

■ Standards & regulations

The lifter complies with the essential requirements pursuant to Appendix I of the Medical Device Directive 93/42/EEC.

In accordance with the classification regulations pursuant to Appendix IX of the Medical Device Directive 93/42/EEC, the lifter is a Class I medical device.

The product was produced in compliance with these standards:

- EN ISO 10535
- EN 60601-1 3rd Edition
- DIN EN ISO 10993



ISO 9001


Our production is subject to a quality management system according to ISO 9001.

■ Technical data

- Lifter **GK Novum 2000**:

- Capacity: 200 kg
- Weight: 70 kg
- Lifting height: 630 mm
- Lifting speed: 30 mm/sec
- Energy supply: 24 V / 2.9 Ah;
Two lead acid batteries
12 V / 2.9 Ah each

- Fuses: Battery fuse 20 A
Overload protection 8 A

- Duty cycle: 1 min. / 10 min. rest
- Protection class: IP 24
- Protection type: Type B 

- Transport and storage: -20 °C to +40 °C
- Operating temperature: +10 °C to +40 °C
- Dimensions
(height / width / depth): 122(-185) x 103(-194)
x 95 cm

- Charging station:

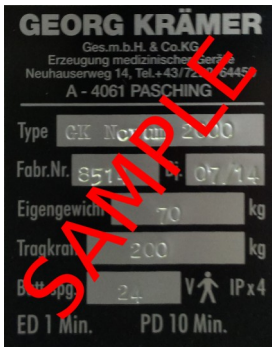
- Charging station: ALCT 6-24/1
- Supply voltage: 230 V / 50 Hz
- Charging power: 24 V, 700 mA
- Protection class: II
- Charging characteristics: IU
- Moisture proof: IP 40

Disposal of lifter at the end of its useful life

(Be sure to comply with local waste disposal regulations):

Metals	→	galvanized iron, anodized aluminium, cooper and PVC, high-grade steel
Plastics	→	epoxy with fiberglass, polyurethane
Battery	→	Lead with gel electrolyte (sulphuric acid)

■ Identification plate & CE mark



Identification plate

This plate give you some information about the Product, for instance type, production date, serial number,...



CE mark

The CE mark has been affixed as proof of its compliance with the legal requirements of Appendix I of the Medical Device Directive 93/42/EEC.



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