

Nursing care beds

.bock[®]///

- domiflex 2
- domiflex 2 wash



Dear valued customer,

with your decision to purchase a nursing care bed from Hermann Bock GmbH, you are receiving a long-lasting care product with superior functionality at the highest safety level. Our electrically operated nursing care beds guarantee optimal lying comfort and allow professional care at the same time. This product was designed with a focus on the elderly, whose confidence must be reinforced and whose life needs protection. With this health care product, we meet these requirements.

We urge you to prevent potential malfunctions and the risk of accidents by complying strictly with the safety and operating instructions and by carrying out the necessary maintenance.

A handwritten signature in black ink, reading "Klaus Bock". The script is fluid and cursive, with the first letters of each word being capitalized and prominent.

Klaus Bock

A handwritten signature in black ink, reading "S. Kettelhoit". The script is fluid and cursive, with the first letters of each word being capitalized and prominent.

Dr. Stefan Kettelhoit

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1 Preface and general instructions

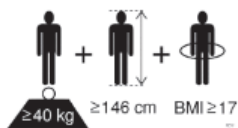
The various bed systems from Hermann Bock meet special requirements for the use in care and treatment facilities as well as for home care. Reliable functionality and a long product life make each bed particularly valuable. Our beds need little maintenance with proper operation and care. Each bed from Hermann Bock must pass quality testing in a final inspection before it is shipped anywhere. The beds are manufactured according to the current standards for medically used beds and tested accordingly.

The beds comply with the EN 60601-2-52 standard. The electrical building components comply with safety standard EN 60601-1 for medical devices. Nursing care beds are medical devices and are to be assigned to Class 1.

These standards divide the beds in five different areas of use:

1. Intensive care in a hospital; intensive care bed
2. Short-term care in a hospital or other medical facility
Furnishings, patient bed in hospital
3. Long-term care in medical environment; stationary nursing care bed
4. Care at home, pure so-called "HomeCare bed"
5. Home-care nursing service

1.1 Intended purpose



The nursing care bed is suitable for persons (adults) in need of care who are at least 146 cm tall. The person's weight may not exceed 155 kg and must be over 40 kg. The body mass index (BMI = weight of the person (kg) / body height of the person (m)²) must be greater than or equal to 17.

The nursing care bed may be used in homes for the elderly or nursing homes and rehabilitation facilities. It is used to alleviate a disability and/or to facilitate the lives of people who are in need of care or to make the work of their caregivers easier. Furthermore, the nursing care bed was also designed as a convenient solution for the home care of frail and elderly people as well as for home care of people with disabilities. Accordingly, the nursing care beds are designed to be used for the application areas 3 to 5. Any other use is considered improper and is excluded from a possible liability claim.

The Trendelenburg function may be used exclusively under supervision of medical professionals. The beds, which are determined for environment type 4, are equipped with a hand control which is unable to operate the Trendelenburg function.

The nursing care bed is not suitable for use in hospitals. It is also not designed to transport patients. The beds can only be moved within the patient's room - even during patient positioning - for cleaning or better access to the patient, for example.

The bed is suitable for the re-use. Please observe the instructions for cleaning, care and disinfection in these assembly and operation manual. Special attention must also be paid to the information regarding the inspections.

A special transport and storage system has been developed for the transport of this nursing care bed, which is also described in this assembly and operation manual.

Attention: The beds come with no special connection options for a potential equalisation. Electrical medical devices connected to the patient intravascular or intracardiac may not be used. The operator of the medical products has to ensure that the combination of the equipment meets the requirements of EN 60601-1:2006.

This user manual contains safety instructions. All persons working with the beds must be acquainted with the contents of these instructions. Improper operation can result in personal injuries.

1.2 Definition of person groups

Operator

Operators (e.g. medical supply stores, specialist dealers, facilities and cost units) include all physical or juridical persons, who use the beds or have the beds used for medical purposes. The briefing on the use of the product shall generally be conducted by the operator.

User

Users are persons whose training, experience or briefing on the product allows them to operate the nursing care bed or carry out works on it. The user is able to recognize possible hazards and/or to avoid them and to assess the health condition of the patient.

Patient/resident

Person with one or more disabilities, one or more activity restrictions, one or more participation restrictions or a combination thereof.

Qualified personnel

Employees of the operator are referred to as qualified personnel. They are entitled to deliver the nursing care bed, assemble, dismantle and transport it, on the basis of their training or instructions. Besides knowing how to operate, mount and demount the nursing care bed, these persons must be instructed according to the guidelines concerning the cleaning and disinfection of the nursing care bed.

1.3 Safety instructions

The intended use/operation of all moving parts is as important for the safety of the person in need of care as well as for the relatives and the caregivers/nursing staff to avoid potentially dangerous situations. This requires the correct installation and operation of the bed. The individual physique of the person in need of care as well as type and the extent of their disability must be taken into account by all means when operating the bed.

Avoid dangers, accidental motor adjustments and incorrect operation by using the disabling function. When the operator, e.g. the caregivers or the care providing relative leaves the room, the entire operating functions of the bed should be disabled via the hand control. This is achieved by operating the key of the hand control. First, lower the lying surface to the lowest position and activate the lock function with a twist of the key (located in the key lock on the backside). Remove the key and check the function of the hand control for safety reasons. Make sure that it is indeed locked.

These recommendations apply particularly:

- if the person in need of care cannot operate the hand control safely due to certain disabilities;
- if the person in need of care or the caregivers could be at risk due to those accidental adjustments;
- if the side rails are in a raised position and there could be danger of trapping and crushing,
- if children are unsupervised in the room with the bed.

Always make sure that the hand control (when not in use) is securely hooked in the support hook at the bed and cannot drop.

As a general rule, the bed should be operated by instructed nursing staff/caregivers, relatives or in attendance of instructed persons.

When adjusting the lying surface, it is particularly important to ensure that no limbs are placed within the adjustment range of the side rails. If the side rails are adjusted, pay attention to the correct lying position of the person in need of care.

Prior to making any electrical adjustment, it should, as a general rule, be made sure that no limbs are positioned in the adjustment range between the chassis and the head or foot part, especially that there are no persons/animals in the area between the floor and the raised lying surface. Danger of being crushed is particularly high in these areas.

The permitted person's weight depends on the total weight of the equipment that has been mounted to the bed (mattresses and other electronic medical devices). For safe working load, please refer to the type plate on the lying surface frame of the bed.

1.4 Service life / warranty

This nursing care bed was developed, designed and manufactured for safe operation over a long period of time. With proper operation and maintenance, this nursing care bed has an expected service life of 7 to 10 years. The service life depends on operating conditions and frequency.

Attention: Unauthorised technical changes to the product voids all warranty claims.

This product is not approved for the North American market, particularly not for the United States of America (USA). Distribution and use of the nursing care bed in these markets, including through third parties, is prohibited by the manufacturer.

1.5 Requirements for the installation location

The company Hermann Bock GmbH is not liable for damages which might arise from the daily usage on the floor.

To avoid floor indentations, floor should correspond to the recommendations of the FEB - Fachverband der Hersteller elastischer Bodenbeläge e. V. (Association of Elastic Floor Coverings Manufacturers). To do this, the technical information FEB No. 3 can be referenced.

Hazard note by Bock

Simultaneous use of electrical appliances particularly in the vicinity of the operational bed may result in small electromagnetic interactions of these electric devices, e.g. static noise in the radio. In such rare events, increase the distance of the devices. Do not use the same socket or temporarily switch off the interference source and/or the disturbing or disturbed device. If the bed should be operated with electrical medical equipment (contrary to its intended use), the functions of the bed must first be disabled via the integrated locking function in the hand control for the duration of the application.

1.6 Type plate

Each nursing care bed is marked with an individual type plate. Either there is only one sticker on your nursing care bed (Fig. 1, previous nursing care bed models) or there are two separate type plates (Fig. 2, current nursing care bed models) on your nursing care bed.

Type plate for previous nursing care bed models

(1)

Model: xxx

(2)

Date of manufacturing: xx.xx.xxxx

(3)

Serial no. xxxxxxxx-xxx

(4)

xxx V ~ xx HZ max. x A



(5)

Duty cycle xx % (x min ON / xx min OFF)

(6)

Motor protection class IPX4







(7)

 = xxx kg  = xxx kg


(8)


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(9)








Made in Germany


- (1) Model designation
- (2) Manufacture date: Day, month and year
- (3) Serial number: Order number - running number
- (4) Mains voltage, mains frequency and power input
- (5) Duty cycle
- (6) Drive protection class
- (7) Maximum patient weight / safe working load
- (8) Manufacturer
- (9) Symbols (located on the right side)


 Conformity mark according to the medical device directive


 Protection of electrical equipment against splashing water


 Medical application part type B


 Use only in dry rooms

 Protection class II (double insulation, insulated for protection)

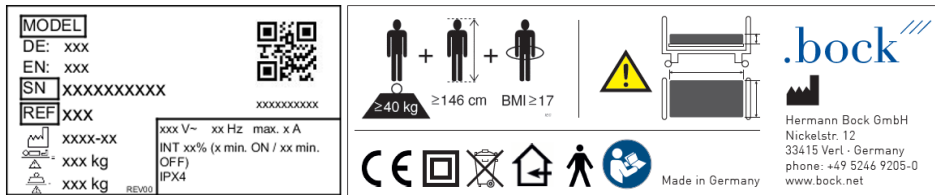
 Within the European Union, this product must be disposed via the separated municipal waste. Product may not be disposed of as household waste.

 Symbol for maximum patient weight

 Symbol for safe working load

 Symbol for observance of the user manual

Type plate for current nursing care bed models



Model	Model designation in German (DE) and English (EN)
-------	---

SN Serial number

REF	Item numbers
-----	--------------

xxx V~	xx Hz	max. x A
INT xx% (x min. ON / xx min. OFF)		
IPX4		

Mains voltage, mains frequency, power input,

Duty cycle (INT)

Drive protection class

Date of manufacture (year-month)
$$\frac{\text{O} \square \text{J}}{\uparrow} =$$

Patient weight

Safe working load

Machine readable serial number

The diagram illustrates the three criteria for defining a child as obese. It consists of three human figures. The first figure is on a scale with the text $\geq 40 \text{ kg}$ below it. The second figure has a vertical double-headed arrow next to it with the text $\geq 146 \text{ cm}$ to its right. The third figure has an oval around its waist with the text $\text{BMI} \geq 17$ to its right. Plus signs are placed between the figures to indicate that all three criteria must be met.

Patient population




Follow the instructions appropriate for mattress size and thickness

CE

Conformity mark according to the medical device directive



Protection class II (double insulation, insulated for protection)



Within the European Union, this product must be disposed via the separated municipal waste. Product may not be disposed of as household waste.

Use only in dry rooms

Medical application part type B

Symbol for observance of the user manual



Address of the manufacturer



2 General description of the functions

Construction design and function

Corrosion protection

The Hermann Bock GmbH nursing care beds are developed and constructed in such a way that they can function long and safely. For this reason, all materials that may corrode are protected accordingly. All metal parts are equipped with a surface protection. The steel parts are either galvanised or stove-enamelled with a PES powder coating and the aluminium profiles are anodised.

The lying surface with 4 function areas

The lying surface consists as standard of a slatted comfort frame (can alternatively be fitted with aluminium slats or special suspension systems) and is divided into four functional areas: Backrest, solid seat, upper and lower leg rest.

The comprehensive lying surface frame is welded from a steel tube. The steel tubes are stove-enamelled with a PES-powder coating. The electric variable height adjustment of the lying surface is carried out with protective low-voltage DC motors (29 to 35V), and controlled with the smooth keys of the hand controller. The backrest can be adjusted electrically. The leg part consists of a foot support that is divided into two parts. With a touch of a button on the hand control, each individual position can be adjusted continuously. In case of power failure, the back and/or leg part can manually be lowered through disconnecting the motor mountings (locking pin).

The chassis

The height adjustment of the bed takes place through two height-adjustable manual controls. The surface of the tubular steel structure is stove-enamelled with a PES-powder coating.

The side rail

Each nursing care bed can be equipped on both sides with two side rails at a special safety height. The side rails can be lifted and lowered through a rail. The sliding pieces run particularly smoothly and quietly with an impact damper, and each end is fitted with a functional cap. The side rail can be easily operated through an ergonomically designed release button.

The operation of the continuous side rail

The release button for the adjustment of the continuous side guard rail is located on the upper side rail beam in the guide rail (Fig. 1).

If the side rails are to be lowered, grasp the provided gripping groove of the upper side guard rail, **lift the side rail slightly** and press the release button on one side of the head or foot part (Fig. 2). The side rail opens at the corresponding place and can be easily lowered downwards as far as it will go. The side rail is now diagonal. To lower the other side as well, carry out the previously described steps on the opposite end. The side rail is now in the lowered position.



Fig. 1



Fig. 2

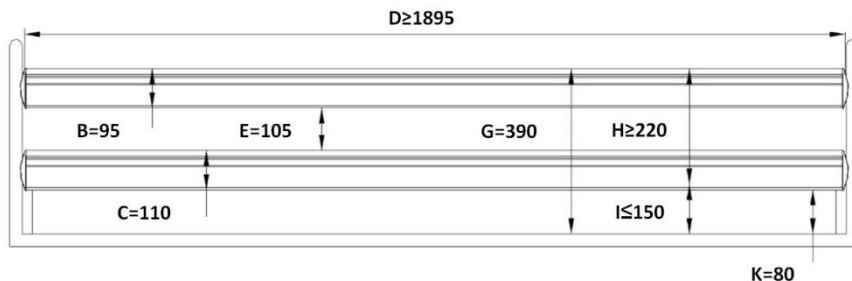
Please observe:

Be sure to raise the side rail slightly, and only then press the release button! Failure to do so will result in damage to the release.

If the side rails are to be brought into the upper position as protection against falling out, grasp the upper side guard rail in the middle of the gripping groove and pull the side rail upwards until it audibly engages at both ends. The side rail is now in a pulled-up position.

The side rails first and foremost serve as a fall prevention. In the case of very emaciated persons in need of care, this protection is no longer sufficiently provided by the side rails and additional protective measures must be taken, e.g. by adding a sliding side rail padding (accessory). The distances of the continuous side rails must be less than 12 cm. When using the continuous side rails, they may not remain in a diagonal position.

Fig. 1: Continuous wood / steel side protection, divided into two parts



All dimensions in mm.

Legend

- A: Distance between the head part and the side rail
- B: Height 1 of side rail
- C: Height 2 of side rail
- D: Width 1 of the side rail
- E: Distance between the elements within the side rail
- F: Distance between the divided side rails
- G: Distance between the lying surface and the upper edge of the side rail
- H: Height of the top edge of the side rail above the mattress without compression
- I: Thickness of the mattress for the intended use
- J: Width 2 of the side rail
- K: Smallest dimension between side rail and lying surface (or the panel, if any)
- L: Distance between the foot part and the side rail

Item numbers

Designation	item no.
Continuous wooden side rail, divided into two parts	
Wooden side rail (two bars)	91901
Continuous steel side protection, divided into two parts	
Steel side guard (two bars)	91908

Hazard note by Bock

Use only original Bock side rails, which are available as accessories for every nursing care beds. Use only technically flawless and non-damaged side rails with the permissible gap dimensions. Make sure that the side rails are engaged securely.

Before installation of the side rail and each new use, inspect all mechanical parts on the bed frame, and all parts of the side rails, and all parts which secure the side rails, for any possible damages.

The operation of the side rail should be done with great care. Fingers can be quickly pinched between the longitudinal pieces.

3 Electric parts

3.1 The drive unit

The drive unit consists of individual drives for the electrical adjustment of the back and leg rest part. The level adjustment is divided via two individual drives, which are attached to the manual controls elements. The motors and the hand control are connected to the inner control box. In the plug-in power supply, the input voltage is converted into a protective low voltage of maximum 35 VDC direct current. The motors and the hand control function with this non-hazardous low protective voltage. The cables are double-insulated and the mains plug has a primary fuse.

Internal emergency lowering is carried out by loosening the locking pin on the motor mountings. Furthermore, power adjustment allows for constant speed of the functions. Therefore, the safety functions comply with protection class II and the moisture barrier protection type IPX4.

The maximum duty cycle is specified on the (type plate) of the bed. For example, 10% duty cycle (2 min. ON / 18 min. OFF) means that any electronic adjustment can be performed for a max. of 2 minutes within a timeframe of 20 minutes (protection against overheating).

If the maximum setting time of two minutes is exceeded by two minutes (e.g. someone plays continuously with the hand control), which could lead to overheating of the drives, the thermal fuse immediately shuts off the power supply to the bed. After a cooling down time of approx. one hour, the power will be automatically supplied again.

3.2 Caution: Electric drive

The electrically operated nursing care bed enables the person in need of care to support the recovery process psychologically and physically and at the same time relieve pain through its various functions. Electrically operated beds that are medical products need special care in regards to constant safety checks. This includes safety-conscious handling of the bed, daily inspection of electrical equipment and proper maintenance and cleaning.

To prevent damages to the cables, wiring should be conducted outside of the area in which damages could be caused. Furthermore, avoid touching the sharp parts. To prevent injury through an electric shock, avoid the possibilities of too high contact voltages. These circumstances may especially be the case if the power cable is damaged, if inadmissible and excessive leakage currents exist, or if liquid was spilled into the motor housing, e.g. during improper cleaning. This damage can cause malfunction of the control, which could result in unwanted movements of single bed elements, posing a risk of injury for the operator and the person in need of care.

3.3 Drives

Hermann Bock GmbH equips nursing care beds with drive systems from DewertOkin GmbH.

Each drive consists always of four main components.

- Housing
- Motor
- Gear
- Spindle with nut

The housing principle of the individual drive guarantees the permanent function of all drive components. Through a detailed interior structure, the construction of the housing interior creates an essential prerequisite for the precise integration of the drive technology, as well as a trouble-free assembly/disassembly.

3.4 The external switch mode power supply SMPS

The plug-in part of the external switch mode power supply (SMPS) is an electronic transformer, which warms up only to a minimum degree under load and it is equipped with electronic performance monitoring. The result is a constant voltage up to the maximum load (no loss of speed) and a high level of protection against overloading. The external transformer ensures safety right from the socket because it converts the voltage directly into the 29V safety low-voltage which is used to actuate the bed. It is connected via plug coupling to the mains supply line feeder cable and can be replaced separately if defective.

The plug-in part of the external switch mode power supply complies with the European directives for electrical household appliances. In standby mode, it also has a low energy consumption of maximum 0.5 Watt and can be used internationally with variable input voltages from 100 V to 240 V. Electromagnetic alternating fields are not measureable on the SMPS adapter.



The external switch mode power supply

3.5 The control



The domiflex 2 / domiflex 2 wash is equipped with a controller from DewertOkin GmbH. Four drives can be connected to the controller (sockets 2,3,4 and 5), socket 1 is used to connect the hand control. Further information on colour coding can be found in chapter 4 "Assembly and operation".

Hazard note by Bock

All drive components must not be opened!

Troubleshooting or exchanging single electrical components may be performed only by special qualified and authorized personnel.

Hazard note by Bock

The motors meet the water protection standard IPX4. Do not squeeze/crush the cables. Adjustment of moving parts may only be used for the intended use. Hermann Bock GmbH assumes no liability for unauthorized technical changes.

Hazard note by Bock

Do not try to fix failures on the electrical equipment itself. It could be fatal! Either call the customer service of Hermann Bock GmbH or an authorised/licensed electrician who conducts the troubleshooting in compliance with all relevant VDE regulations and safety regulations.

3.6 The hand control






















The hand control is equipped with a built-in locking device, which allows the caregivers to lock the hand switch via a key completely or partially for its operation.

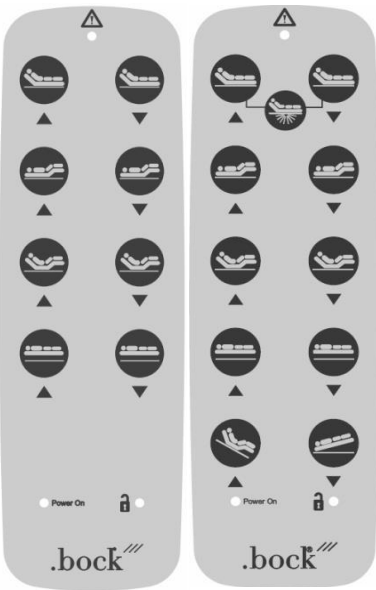
The lockable hand control, first-fault protected

The basic functions can be controlled via the hand control at the touch of a finger on the eight (standard hand control) or ten (hand control with special functions) operating keys. The individual keys are marked with corresponding symbols. The servomotors run until as long as a corresponding key is pressed and held. A coiled cable allows the necessary freedom of movement while operating.

With the rear-mounted suspension unit, the hand control can be attached to the side rail - particularly when cleaning and during the maintenance of the bed. Thus, a possible disruptive position of the hand control can be avoided by simply attaching it to any preferred spot on the bed.

Function keys

		Back part upwards
		Back part downwards
		Lower leg part upwards
		Lower leg part downwards
		Autocontour upwards
		Autocontour downwards
		Lying surface upwards
		Lying surface downwards
		Comfort sitting position up-wards *
		Head-lowering position (Trendelenburg)
		Floor lighting Press keys "Back part up-wards" and "Back part down-wards" at the same time



Standard
hand control

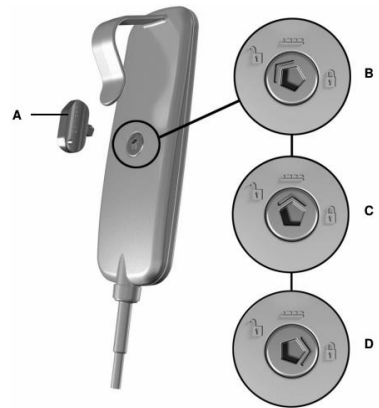
Hand control with
special functions

* Comfort sitting position just goes up. All adjusted positions must be lowered separately.

3.7 Hand control - lock functions

The hand control comes with an integrated disabling function that can be activated and deactivated with the corresponding key. To disable the entire electrical function, insert the key in the key lock on the backside and turn the lock function on or off with a corresponding twist of the key.

- A: Socket key
- B: Hand control enabled
- C: Comfort sitting position and Head-lowering position (Trendelenburg) blocked*
- D: Hand control locked



* Special design

Hazard note by Bock

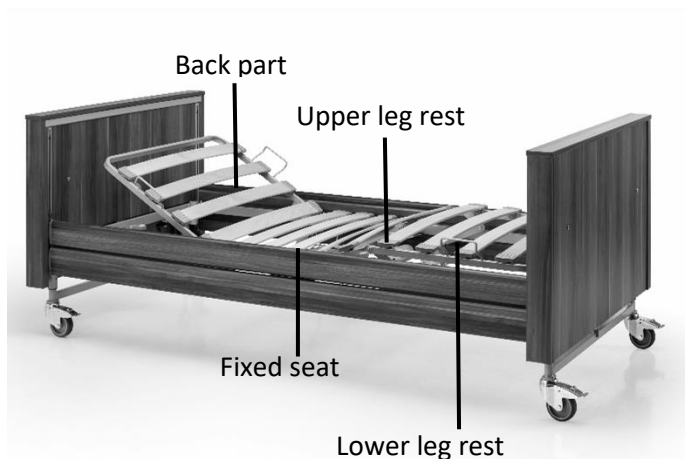
Do not exceed the maximum duty cycle of 2 minutes. Observe a subsequent break of at least 18 minutes by all means.

4 Assembly and operation

4.1 Technical data

Technical data	domiflex 2	domiflex 2 wash
Lying surface dimension: cm	90 x 200	90x200
Outer dimension: cm	103 x 213	103 x 213
safe working load: kg	190	190
max. Weight of person: kg	155	155
Height adjustment: cm	39 - 80	39 - 80
Length of backrest (with mattress compensation): cm	66 (78)	66 (78)
max. Angle of incidence to horizontal:		
- back part	70°	70°
- Lower leg part	18.5°	18.5°
Trendelenburg position	15°	15°
Side rail height from lying surface: cm	39	39
Selection options for side rails:		
- Continuous wood side rail	•	n. possible
- Continuous steel side rail	•	•
Lifter bottom space clearance: cm	> 15	> 15
Sound level: dB(A)	< 65	< 65
Weights:		
Total incl. continuous Wood side rail: kg	79.5	n. possible
Total incl. continuous Steel side rail: kg	83.3	83.3
Lying surface back part: kg	17.6	17.6
Lying surface foot part: kg	14.1	14.1
Control actuating device including motor (end piece): kg	17.9	17.9
Continuous wood side rail: kg/set	12	n. possible
Continuous steel side rail: kg/set	15.8	15.8
Electric data		
Input voltage: V	100-240	100-240
Frequency: Hz	50/60	50/60
max. Power consumption: A	2,0 – 1,2	2,0 – 1,2

All parts and data are subject to a constant further development and therefore may differ from the mentioned data.



4.2 Model series domiflex 2

Domiflex model series 2, consisting of models domiflex 2 and domiflex 2 wash were specifically designed for the requirements of daily use of the product as part of home care. The above mentioned models provide high comfort to frail people, patients who need care and people with disabilities. These models offer high lying comfort and support through easy operation as well as optimal care. The model series domiflex 2:

- > is not suitable for use in hospitals.
- > is not suitable for patient transport. The beds must be only moved for cleaning purposes inside the patient's room or to allow access to the patient.
- > is suitable for persons in the need of care who are at least twelve years old and 146 cm tall.
- > under certain circumstances can be used (if necessary) for medical purposes with other electric medical equipment (e.g. suction devices, ultrasonic humidifier, food systems, anti-bedsore systems, oxygen concentrators and similar devices). In this event, disable all bed functions for the duration of the application via the integrated disabling function.

Attention: The bed has no special connection options for a potential equalisation. Electrical medical devices connected to the patient intravascular or intracardiac may not be used. The operator of the medical products has to ensure that the combination of the equipment meets the requirements of EN 60601-1:2006.

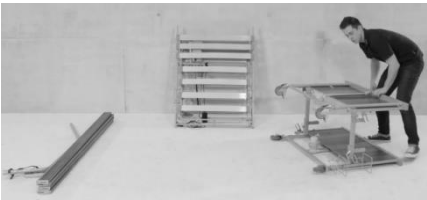
Model series domiflex 2 is ready for use

Remove all packaging from the bed and place the bed on a free and flat surface.



Remove the side rail and the divided lying surface from the transport bracket and put aside.

Tilt the end pieces with the connected transport bracket on an end piece. To protect the surface, lay a blanket or cardboard underneath.



Loosen the tool-



free



Stressed

Released

Remove the upper end panel as well as the transport brackets.



Place the end panel with the blue marking on the motor flat on the floor. Now the lying surface head section frame is placed on the mounting latches (you can easily recognize the head section by the round holders for the lifting pole).

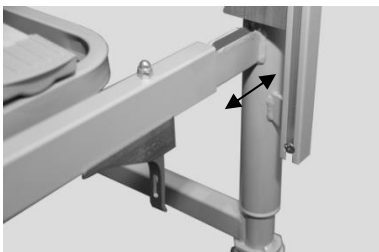
Create a solid connection by fastening the *push-and-ready* handle.

Insert the frame of the lying surface foot part onto the already assembled frame of lying surface head part.

Create a solid connection by fastening the *push-and-ready* handle.

Plug the connectors of the drive motors into the sockets of the control box (observe the colour coding). Then turn the mounted lying surface with the head end piece so that the head end piece is in a vertical position.

Push the mountings at the foot end piece into the lying surface. Do not push as far as it will go, allow 5 cm protrusion.



Place the continuous wood or steel side rails on the head end piece on the mountings.

Mount the side rails in the diagonal position of the side rail mounts as shown in the Fig.. Note the marking of the side rails, as they only fit on the corresponding positions at the top or bottom. Next, slide the upper side guard rail on the mounting of the foot end piece and connect in a longitudinal direction. Mount the other side guard rails in the same way.



Push the foot end panel into the lying surface as far as it will go and fasten the *push-and-ready* handle.



The plug connector of the drive motors and the hand control are colour coded. Insert them into the corresponding socket of the control unit. Next, tighten the strain relief cap again. The blue marked plug connector must be located on the end piece of the head part.



Hazard note by Bock

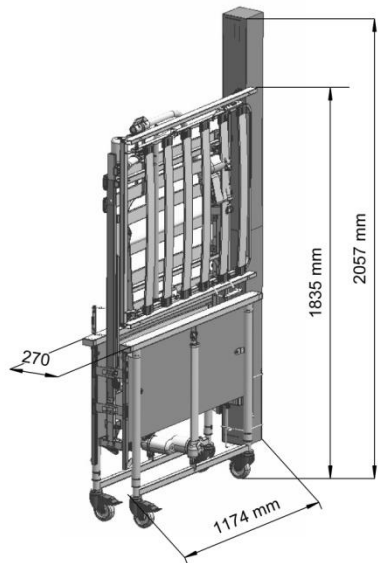
Check all screw and push-and-ready connections again before operating the bed. Is the clamping effect of the 6 eccentric clamps sufficient? If not, the lock nut possibly could use a bit more fastening!

Hazard note by Bock

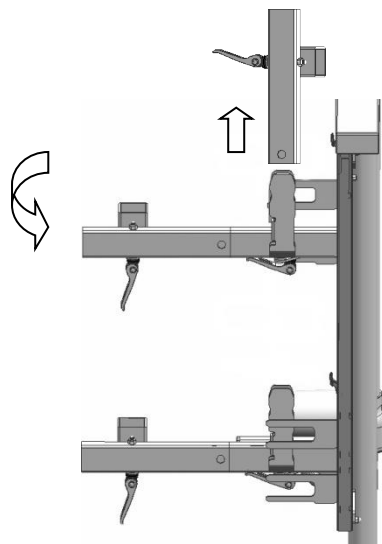
Do not squeeze/crush the cables. Adjustment of moving parts may only be used for the intended use. Hermann Bock GmbH assumes no liability for unauthorized technical changes.

4.3 Transport system

Versions:
Standard = 3 nursing care beds on one pallet.
Transport system to be changed to the VAN or Wash version.

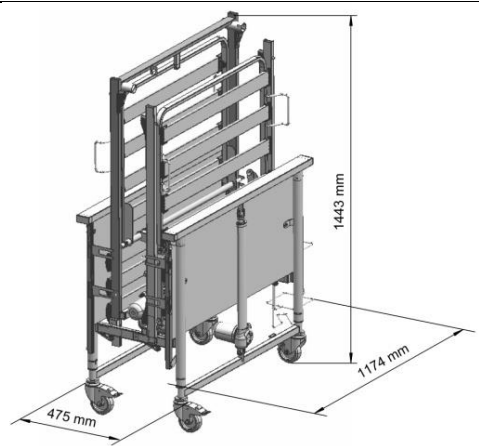


To change the standard transport bracket to the VAN or Wash version, loosen the lower horizontal push-and-ready handle and pull the end pieces on both sides approx. 2 cm from the connector. Remove the attached foot and head part frames and one end piece. Next, pull the “long connectors” from the brackets to the top and insert them horizontally in the “short connectors”. Make sure that the welded connections point towards the side on which the wire basket for the side rail is located. Attach the previously removed end piece back to the connector and establish a solid connection with the push-and-ready handles. First, attach the foot part frame and then the head part frame to the transport bracket. The sprung



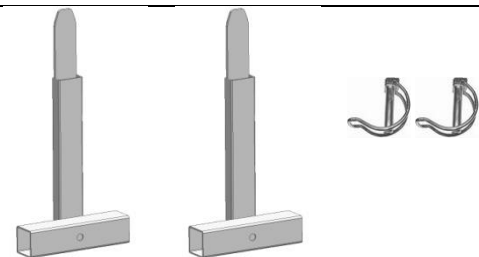
wooden slats must show in the cross direction to the end pieces and the head and foot support must be placed with the bended end upwards.

Version: VAN or Wash
Depending on the available height, transport the lifting pole and the side rail separately from the bed.



Version: Eco =
3 nursing care beds on one pallet.
NOT repositionable.

Can only be used for transport on pallets with appropriate strapping.



4.4 Emergency lowering - back part (standard)

In case of power or drive system failure, you can lower the elevated back part manually.

Must be carried out always by two people!



One person lifts the back part slightly (to take pressure off) and holds it in this position. As next step, the second person removes the locking pin from the motor.



The motor is now separated from the back part and can be swivelled downwards.

Once the second person has left the danger zone, the first person can lower gently the back part.



Hold the back part by all means until it is fully lowered.



Hazard note by Bock

Emergency lowering may be only carried out in an emergency by people who safely master this operation.

Absolutely disconnect the bed from the mains as long as the motors have not been mounted again.

4.5 **Disassembly**

Pull out the mains plug before disassembly. Disassembly of domiflex 2 takes place in reverse order of the assembly (see manual).

4.6 **Change of location**

If the bed must be moved to another location, please follow these safety instructions:

- Bring the lying surface to the lowest position.
- Before proceeding, pull out the mains plug and attach with the suspension device at the side rail or the end piece, to secure the power cable against falling and being crushed through over-travel. Make sure that the cable is not dragged over the floor.
- Before inserted the mains plug again, inspect the power cable visually for mechanical damage (dents and kinks, abrasions and bare wires).
- Place the power cable in a way that it will not be rolled over or strained during the operation of the bed or could be damaged when inserting the mains plug again.

4.7 **Transport, storage and operating conditions**

	Transport and storage	Operation
Temperature	0°C to +40°C	10°C to +40°C
Relative humidity	20% to 80%	20% to 70%
Air pressure	800hPa to 1060hPA	

4.8 **Function notes**

To keep the bed in one location, you must block the brakes on castors of the chassis. To accomplish this, use your foot to move the locking lever on the chassis downwards.

If necessary, pull the integrated side rails up until they lock into place. When using mattresses of different thickness, the minimum height of 22 cm, measured from the top edge of the side rail above the mattress without compression, may not be underrun (additionally, a third side rail attachment guard must be used, which is available as an accessory).

4.9 Disposal

Each of the components made of plastic, metal and wood are recyclable and can be disposed/recycled in compliance with the relevant legal provisions. Please note that electric adjustable nursing care beds or nursing beds are considered commercially used electronic scrap according to the WEEE-EC directive 2012/19/EC (b2b). All replaced electrical and electronic components of the electrical adjustment system must be disposed properly in accordance with the requirements of the Waste Electrical and Electronic Equipment Act (in short ElektroG): When disposing components, the operator has to make sure that none of the replaced and disposed components are infectious or contaminated.

4.10 Troubleshooting

This overview helps you to detect and correct malfunctions on your own and explains, what kind of malfunctions require the consultation of suitably qualified service personnel.

Malfunction	Potential causes	Remedy
The drive units cannot be controlled via the hand control	Power cable is not connected	Insert power cable
	No voltage in the socket	Check the socket or the fuse box
	Plug connector of the hand control not fixed firmly	Check the plug-in connection on the motor
	Hand control or drive unit defective	Notify the operator or Bock customer service
	Disabling function or control box in the hand control activated	Disabling function or control box in the hand control deactivated
When buttons are pressed, the drive units stop after a short time	There is an obstruction in the adjustment range	Remove obstruction
	The safe working load has been exceeded	Reduce the load
The drives stop after a longer adjustment time	The adjustment time or safe working load has been exceeded and the polyswitch in the transformer of the control unit has responded to increased heat	Allow the drive system to cool down sufficiently for at least one minute
Opposite functions when operating the hand control	Motor connector switched internally	Notify the operator or Bock customer service
Individual drive units run in one direction only	Hand control, drive unit or controller defective	Notify the operator or Bock customer service
Drive units stop and bed remains in a tilted position	Constant operation of adjustment functions	Move lying surface in bottom or top position as this will straighten it again horizontally. Activate disabling function in hand control

5 Accessories

Hermann Bock GmbH offers practical and mobility-promoting accessories to ensure that each nursing care bed is tailored even more precisely to the individual needs of the person in need of care. The installation is done in a quick and easy manner using the fixing points on the bed that have already been prepared for this purpose. It goes without saying that every element of our additional equipment offer meets the special quality and safety standards of Bock. In addition to the standard accessories included in basic equipment, the customer can also choose from our variety of accessories, which is available for each bed model. These optional accessories vary depending on the bed model and are fitted to its special functions and location of use. The range stretches from technical elements over mattresses up to the occasional extra bed. A wide range of wooden finishes and a variety of colours allow for the harmonious integration of each nursing care bed with any kind of furniture.

5.1 Special dimensions

Special dimensions are an essential part of the production Hermann Bock GmbH. Optimal lying comfort for persons in need of care who have a particular physique can only be achieved by means of custom-built models. With its customized models, Hermann Bock GmbH enables customers to have their nursing care bed tailored to fit the individually physical requirements of the person in need of care. For body heights up from 180 cm, Hermann Bock GmbH recommends the use of a bed extension that allows an extension of the lying surface to a length of up to 220 cm. This enables even tall people to lie comfortably while maintaining the same level of functionality.

Hazard note by Bock

When using accessories on the bed or medically necessary devices as infusion stands in close proximity to the bed, ensure particularly that there are no risks of crushing or shearing for the caregiver when adjusting the back and leg rests.

The representative of the service hotline of Hermann Bock are looking forward to informing you about the best retrofitting solution for your bed. Hotline no. 0180 5262500 (14 cents/min. for calls from landline phones, 42 cents/min. for calls from mobile phones).

A wide product range of auxiliary furniture complements the various bed models up to the complete interior design of your home. This combination creates a care and living comfort resulting in perfect harmony.

5.2 Assembly – bed extension

The delivery for a lying surface extension consists of the following parts:

- 2 adapter unit for the left and right foot part
- 1 extension piece for the foot part
- 1 set side rails

How to perform assembly in the simplest way:

1. Remove the mattress from lying surface.
2. Loosen the foot end piece and pull slightly from the lying surface.
3. Dismantle the side rails.
4. Remove the foot end piece.
5. Plug adapter units into the frame of the lying surface at the foot end and fasten with the push-and-ready handle.
6. Hang extension piece in the lower leg bracket.
7. Do not slide the foot end piece further than the centre of the frame of the lying surface.
8. IMPORTANT: Make sure to read the labels attached on the top and bottom of the side rails so these may not be confused with each other.
9. Then hook the side rails into the pre-assembled metal guides and arrange them.
10. Push the end piece into the lying surface as far as it will go and fasten the push-and-ready handle.

Hazard note by Bock

Check all screw and push-and-ready connections again before operating the bed.

Is the clamping effect of the 6 eccentric clamps sufficient? If not, the lock nut possibly could use a bit more fastening!

5.3 Assembly – accessories

The following standard equipment can be combined with the bed models domiflex 2 and domiflex 2 wash:

Side rail attachment for height increase

Delivery includes: Fully assembled side rail attachment

- Open the plastic lock, attach the side rail extension, position it in the middle and close the lock.



Please make sure that the release button of the side rail attachment faces outwards.

Important note: The Bock side rail attachment is designed for use with all Bock wood side rail variants. Bock assumes no liability for damages arising from the use in combination with third-party products.

Lifting pole with triangle handle, 6.5 kg

The safe working load of the lifting pole is max. 75 kg.

Delivery includes:

1 piece lifting pole with hook-up loop

1 piece triangle

- Place the lifting pole with triangle handle in the provided hook-up loop at the head part and adjust it accordingly.
- Make sure to only use mattress with a required mattress height as described by the company Bock. You can find this information in section 5.4.



ATTENTION: The lifting pole with a triangle handle must not swivel outside of the lying surface.

When used in line with its intended purpose, the service life of the triangle handle is approx. 5 years. If a lifting pole with triangle handle installed to the bed, it must be tested during each safety technical control, but must be replaced no later than after 5 years.

The handle can be infinitely adjusted within a range of 350mm. This allows an adjustment range between triangle handle and mattress of at least 550mm to 850mm, depending on the mattress thickness.

The total height of the nursing care bed incl. the lifting pole is 167.5 cm (205.5 cm with a care height of 80 cm).

Side rail guard pad, 1.4 kg

Delivery includes:

- 1 piece reference,
- 1 piece padding

- Open zipper of the cover and pull the padding from the top over the side rail.
- Pull the foam padding from the inside of the bed into the fabric and close the zipper and/or the hook and loop fastener.



Tray, 4.0 kg

Delivery includes: 1 piece tray

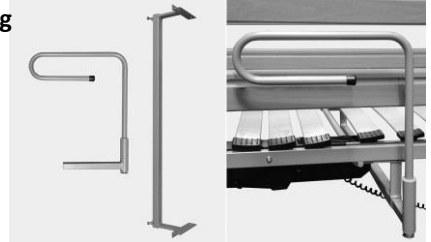
- The tray is applied to the side rail and prevented from getting out of place using two spacer pieces.



Assist handle with cross-bar for actuator beds, 3.0 kg

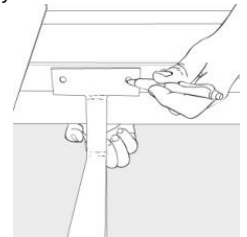
Delivery includes:

- 1 piece assist handle,
- 1 piece support cross bar,
- 4 pieces screws 4 mm.

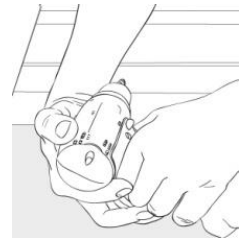


Left: Scope of delivery, right: completely mounted assist handle

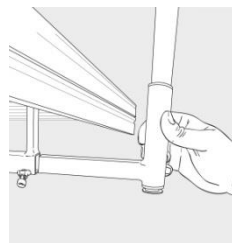
Hold the support cross bar to the frame of the lying surface and mark with a pen the drill holes on the frame.



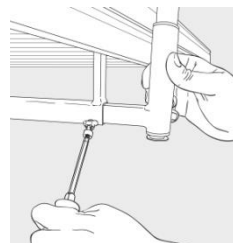
Drill holes into the previously marked spots (3.5 mm) of the lying surface frame.



Use the provided screws to fasten the cross-bar to the lying surface frame.



Push the assist handle into the support cross-bar, adjust it to the desired position and fasten it tightly.



5.4 Mattresses

In general, foam and latex mattresses are suitable for the Hermann Bock nursing care beds. A volumetric weight of at least 35 kg/m³ is required along with the dimensions of 90 x 190 cm, 100 x 190 cm, 90 x 200 cm and 100 x 200 cm.

The height of the mattress used may not exceed:

- with aluminium and spring wood lying surfaces no more than 15 cm
- Lying surfaces of spring systems may not exceed a height of 12 cm.

As a general rule, the mattress height must not be less than 10 cm.

For higher mattresses, an additional attachment guard device must be used, which is available as an accessory. When using foam mattresses, we recommended the use of a cut foam mattress to allow a better combination with the lying surface.

6 Cleaning, maintenance and disinfection

The individual bed elements consist of high quality materials. The surface of the steel tubes is covered with a durable PES-powder coating. All surfaces of the wooden parts are surface-sealed with an ecologically coating that is low on harmful substances. All bed elements are easy to clean and cared for using wipe and spray disinfection means according to the applicable cleaning requirements with respect to the various areas of application. Observing the following care instructions will retain the usability and visual appearance of your nursing care bed for a long time to come.

6.1 Cleaning and care

Steel tubes and vanished metal parts:

Please use a wet wipe and a regular mild household detergent for the cleaning and care of these surfaces.

Wooden-, decorative-, and plastic elements:

All standard furniture cleaners and cleaning detergents can be used. Using a wet wipe without detergent additives for the cleaning of the plastic elements should generally be sufficient. For care of the plastic surfaces use a product that is specifically suitable for plastics.

Drive:

To prevent the intrusion of moisture into the motor housing, we recommended using only a damp rag to clean outside housing.

Spring systems ripolux neo:

Use a damp rag without adding any detergents, or, if deemed necessary, a detergent that is exclusively suitable for plastics and clean the spring elements made of plastics. In case of heavy contamination, remove the spring elements from the supporting elements and the supporting elements from the frame of the lying surface. The dismounted plastics elements can be rinsed or spray-washed with hot water to get them clean. For the disinfection, the components should be sprayed with a detergent suitable for plastics. Most of the moisture drips off the plastic surface by slightly shaking it, while the rest will dry on its own within a very short time. Remount the elements after they have completely dried. If required, you can also remove each of the individual lying surface elements completely from the frame to clean them.

6.2 Disinfection

Disinfect the nursing care bed with a wipe disinfectant. Please adhere to the tested and recognised procedures of the Robert Koch Institute (RKI). You can use commercially available cleaning and disinfecting agents approved by the RKI. In order to maintain the material resistance of the plastic elements such as the motor housing and decorative elements,

only mild and gentle agents should be used for disinfection. Concentrated acids, aromatic and chlorinated hydrocarbons as well as detergents containing highly concentrated alcohols, ether, ester and ketone may damage the material and should therefore be avoided. The list of disinfectants and disinfection methods tested and approved by the Robert Koch Institute can be found on the Internet at www.rki.de.

6.3 Avoidance of hazards

In order to avoid dangers in connection with cleaning and disinfection, you must first observe the following regulations in connection with the electrical components of your nursing care bed. Non-observance of these guidelines may result in considerable damage of the electrical lines and the drive.

1. Pull the mains plug and position it in such a way that contact with excessive amounts of water or detergents can be excluded.
2. Check all plug-connections for correct position according to the instructions.
3. Check the cables and electrical component parts for damage. Should you detect any damage, do not perform any cleaning operations but first have the defects repaired by the manufacturer or an authorised/ licensed electrician.
4. Before starting the operation, check the mains plug for residual moisture and dry or blow out the device, if necessary.
5. On any suspicion of the intrusion of moisture into the electrical components, disconnect the mains plug immediately and do not re-establish the connection. Put the bed out of operation immediately, attach an appropriate visible label and contact the manufacturer/supplier.

6.4 Cleaning in washing plants

Cleaning in cleaning facilities is only possible with the model domiflex 2. A separate brochure is available for this purpose (Art. No. 890.02160).

Hazard note by Bock

Use of abrasive cleansers and/or detergents containing grinding particles, cleaning pads or stainless steel cleaners for the cleaning is absolutely not recommended. Neither use organic solvents such as halogenated/aromatic hydrocarbons and ketones nor detergents containing acid or alkaline.

Under no circumstances must the bed be sprayed with a water hose or high-pressure cleaner, as liquid penetrates into the electrical components, and as a result malfunctions and dangers could occur.

Clean and disinfect the bed before using it again. Also, at the same time, perform a visual inspection to check for any mechanical damages. You will find detailed information on this in the inspection list.

7 Guidance and manufacturer's declaration

Guidance and manufacturer's declaration

– Electromagnetic emission

The *medizinisches Bett* is intended for use in the electromagnetic environment specified below.

The customer or the user of the *medizinisches Bett* should assure that it is used in such an environment.

Emission test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11 (partly)	Group 1	The medical used bed uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The <i>medizinisches Bett</i> is suitable for use in all establishments other than domestic and those directly connected to the public-voltage power supply network that supplies buildings used for domestic purpose.
RF emissions CISPR 11 (partly)	Class B	
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

– Electromagnetic immunity

The *medizinisches Bett* is intended for use in the electromagnetic environment specified below.

The customer or the user of the *medizinisches Bett* should assure that it is used in such an environment.


Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic transient/burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines ± 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV differential mode ± 2 kV common mode	± 1 kV differential mode ± 2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5 % U_T (>95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles < 5 % U_T (>95 % dip in U_T) for 5 sec	< 5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles < 5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the <i>medizinisches Bett</i> requires continued operation during power mains interruptions, it is recommended that the <i>medizinisches Bett</i> be powered from an uninterruptible power supply or a battery.
Power 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 commercial or hospital environment.

Note: U_T is the a. c. mains voltage prior to application of the test level.

– Electromagnetic immunity

The *medizinisches Bett* is intended for use in the electromagnetic environment specified below.

The customer or the user of the *medizinisches Bett* should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 V 150kHz-80MHz 3 V/m 80MHz-2500MHz	3 V 150kHz-80MHz 3 V/m 80MHz-2500MHz	<p>Portable and mobile RF communications equipment should be used no closer to any part of the EQUIPMENT <i>medizinisches Bett</i>, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance:</p> $d = \left[\frac{3.5}{3} \right] \sqrt{P} \quad 150 \text{ kHz to } 80 \text{ MHz}$ $d = \left[\frac{3.5}{3} \right] \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = \left[\frac{2}{3} \right] \sqrt{P} \quad 800 \text{ MHz to } 2,5 \text{ GHz}$ <p>where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 

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

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the *medizinisches Bett* is used exceeds the applicable RF compliance level above, the *medizinisches Bett* should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the *medizinisches Bett*.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the *medizinisches Bett*

The *medizinisches Bett* is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled.

The customer or the user of the *medizinisches Bett* can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the *medizinisches Bett* as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = \left[\frac{3.5}{3} \right] \sqrt{P}$	80 MHz to 800 MHz $d = \left[\frac{3.5}{3} \right] \sqrt{P}$	800 MHz to 2,5 GHz $d = \left[\frac{2}{3} \right] \sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,37	0,37	0,74
1	1,17	1,17	2,33
10	3,69	3,69	7,38
100	11,67	11,67	23,33

For transmitters rated at a maximum output power not listed above the recommended separation distance d in metres (m) can be estimated 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 transmitter manufacturer.

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

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

8 Regular inspections with service

Regular inspections facilitate the maintaining of the highest possible safety level, and are considered to be an important safety precaution. Medical devices must be inspected regularly in terms of safety according to the stipulated regulations of the manufacturer and the generally accepted rules of technology. The safety-related protection measures are subject to different requirements and demands. This also applies to the potential wear and tear in the daily use. To prevent such risks, constant and consistent compliance with the deadlines for regular functional testing is absolutely necessary. The manufacturer has no influence on the operator's adherence with respect to the observance of these regulations concerning electric beds. Bock facilitates the observance of the necessary precautionary measures to be taken by means of their time-saving services.

The execution of the inspection, assessment and documentation must be performed only by or under supervision of professional persons such as electricians or electro-technically instructed persons who have a thorough knowledge of the relevant provisions and are able to recognize possible impacts and hazards.

In the event that no person on the part of the user is eligible for the regular inspections or is commissioned, the Bock service offers you the assumption of the regular inspections with simultaneous control and observance of the corresponding intervals for a fee.

The company Hermann Bock GmbH specifies an inspection interval which stipulates that a safety-technical inspection is to be executed at least once annually, and with each re-use of the bed.

For support purposes, Hermann Bock GmbH will provide you with the inspection list in the assembly and operation manual for carrying out all the necessary tests. Please copy the checklist as a form for your inspection. The checklist serves as evidence report of the performed inspection and must be kept on file.

The inspection list can also be downloaded from the Internet: www.bock.net.

Attention: Unauthorised technical changes to the product voids all warranty claims.



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Our SALES PARTNERS

Our business partners pursue the same strategy as we do: quality, innovation and above-average standards that are internationally recognized. You can rely on our business partners as you can rely on us.

Please note that only our authorised personnel and our sales partners can provide training, supply of spare parts, repairs, inspections and other service. Otherwise, all warranty claims will be void.

A listing of our current distributors can be found under www.bock.net/contact/distribution-partners